ANGLO-SAXON FOOD: PROCESSING & CONSUMPTION

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ABSTRACT

This synthesizing study brings together for the first time information from various primary and secondary sources in order to build up a composite picture of food processing and consumption during the Anglo-Saxon period. The period covered is the six centuries from the beginning of the fifth century to c.1100. The area covered is Anglo-Saxon England, with reference to the Celtic west. Occasionally reference is made to continental sites for archaeological evidence to verify points in the literary sources, when, by the accidents of (non) recovery, such evidence is unknown in the archaeological record here.

The primary source material is of two kinds: literary and archaeological. Material in Anglo-Saxon manuscripts in the vernacular has been supplemented on occasion by that in Latin manuscripts. There was no pre-selection of manuscripts, and references to food come from all types of writings: legal, religious, literary and medical. Place-name evidence is also used and reference is made to contemporary illustrations. Archaeological evidence is drawn in the main from the major animal bone assemblages, human skeletal material, and plant remains, as well as artefacts and structures. The problems of interpreting evidence from these sources are considered.

As 'Anglo-Saxon Food: Processing & Consumption' has not been treated as the main subject of any similar multidisciplinary research before, there is no history of research into the subject as such, but it has been necessary to draw on a range of secondary material. This includes classical and later medieval documents. Modern histories of the period and surveys of food in antiquity have been consulted, as have publications on specific foodstuffs, particular areas of processing and ethnographical works.

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ANGLO-SAXON FOOD: PROCESSING & CONSUMPTION

SECTION I

CHAPTER 1

INTRODUCTION

The intention of this synthesizing study is to bring together for the first time information from various primary and secondary sources in order to build up a composite picture of the processing and consumption of food during the Anglo-Saxon period. The period covered is the seven centuries from the beginning of the fifth century to c.1100, and an attempt is made to trace changes and development in food processing and diet over this time.

The area covered is limited to Anglo-Saxon England and the Celtic west of Britain - the latter is included so that use could be made of the detailed Ancient Laws and Institutes of Wales, although these were not recorded until the end of the period. In the matter of privileges in those laws for which earlier texts exist, those attributed to Hywel Dda (died 949 or 950), are not widely different from those recorded in the sixth and seventh centuries, and it is reasonable to assume other material is similarly conservative (Owen 1841, Preface ix). Occasionally, reference is made to continental sites for archaeological

evidence to verify points in the literary sources when, by the accidents of (non) recovery, such evidence is unknown in the archaeological record in England.

PRIMARY SOURCES

The primary source material is of two kinds: documentary and archaeological. Material in Anglo-Saxon manuscripts in the vernacular has been supplemented on occasion by that in Latin manuscripts. Bosworth & Toller's Anglo-Saxon Dictionary and Supplements were used as the basis for references to foodstuffs, processing or consumption, although the Toronto Microfiche Concordance of Old English and ensuing Dictionary of Old English (in progress) is superseding this. Manuscripts of all types were used: there was no attempt to select manuscripts on particular subjects which might have been thought more relevant. This was just as well, as references to food turn up in all types of Anglo-Saxon literature and records, including specialised references in medical recipes and charms. Religious writings contain many direct references to diet, fasting and gluttony. As feasting amounted to a lay ceremony, there are many references to it in Laws and Guild Statutes. Purely literary works also contain valuable references, particularly to feasting as an element of the noble life. However, most of these writings were not primarily about food, and the references are incidental to

the main subject, or they have a special emphasis which has to be taken into account.

Surviving manuscripts have been preserved by chance. Leofric, the first bishop of Exeter, gave his new cathedral about sixty books in the mid-eleventh century: most of these were dispersed, but the Exeter Book which remains is a most important source. Writing in 1549, after the Dissolution, John Bale recorded, 'Those who bought the monasteries kept the books to scour their candlesticks, some to rub their boots, some they sold to the grocers and soap-sellers, some they sent over the sea to the book-binders...at times whole ships full'. Collections made by antiquarians were not always safe from disaster: 114 volumes were lost in the Cotton Library fire of 1731 (Earle 1884, 28). Given this state of affairs it is reasonable to assume that there are bound to be lacunae in the documentary record, notwithstanding the fact that the occasional important source may yet be discovered - the very informative tenth-century O.E. will of Aethelgifu came to light in an outbuilding in 1939 (Rennell in Whitelock 1968, 2,3).

The documentary record is heavily weighted towards the end of the Anglo-Saxon period, with the majority of Anglo-Saxon manuscripts dating from about 1000 and the eleventh century, about twenty from the tenth century, and very few before this date (although

original texts, like the writings of Bede, of which only copies are extant, are known to have been written from the period of the conversion onwards) (Ker 1957, xv-xviii). Since circumstances changed over the seven centuries, it is unwise to use these sources to generalise about earlier conditions, particularly conditions in the fifth and sixth centuries (from which there are no O.E. written sources).

As for deficiencies in my method of using these sources, I have used printed versions of the manuscripts and accepted the readings of their editors and their judgement as to authenticity. In the case of Ancient Laws and Institutes of Wales (Owen 1841) I have accepted this editor's translation too, although The Law of Hywel Dda has been newly translated by D. Jenkins (1986). I have tried to exercise the necessary caution where manuscripts are translations from Mediterranean writers, and therefore do not refer to conditions in Britain, and with certain cartularies or laws which may be later than their purported dates.

Illustrations are valuable for showing animals, equipment and cooking methods which are not otherwise described, and these are not only in manuscripts, but on textiles, notably the Bayeux Tapestry. However, these illustrations are all found in late Anglo-Saxon manuscripts, and the Bayeux Tapestry is, of course, post-Conquest, so this material, like the literary evidence, is

of limited value for the early and mid-Anglo-Saxon periods. Lack of artistic perspective means we have to make judgements on the size of what is depicted. For example, the large bird-sized bees in Bodleian MS, Ashmole 1511, folio 75v, would not fit into their hive. Moreover, manuscript illustrations could be (and were) copied by Anglo-Saxon artists from continental sources.

Although many place-names are often not recorded for the first time until after the Conquest, if they are made up of O.E. elements it is reasonable to assume they were in use during the Anglo-Saxon period (Cameron 1985, 183, 96, 204). In dealing with evidence of this kind, I have accepted the linguistic derivations of the various authors.

Archaeological evidence is very valuable to supplement the evidence from the literature in the late period. But, unlike the literature, it provides evidence for the whole of the Anglo-Saxon period, and is the main source of data for the early period. However, again, as with the manuscripts, the recovery of evidence is a matter of chance. Soils preserve remains differentially, and recovery techniques themselves will bias a sample (O'Connor 1982). Unsieved samples are biased towards larger mammals; sieved samples increase the proportion of pig, sheep and goat remains, and water-sieved samples the proportion of fish, bird and small mammal bones (Maltby 1979). The most commonly

represented bone fragments are those that are formed of dense, compact bone, and where the epiphysis fuses early in the animal's life. The least well-represented bones are small bones and more fragile last fusing bones. The effect of this is to bias the age of a population towards 'youth' (Grant 1974).

Different methods of quantifying the numbers of animals involved and the relative proportions of species produce different results. It would be much easier to make valid comparisons between sites if the presentation of statistical material in bone reports was done in a uniform manner.

The inadequacies of my own method in dealing with this material are that I have used only the major bone assemblages. I have accepted the report writers' assessments of species, numbers, age of specimens, etc., without reworking the figures. I have also taken the end of December 1986 as the cut-off point for dealing with archaeological reports. I have tried to exercise extreme caution in interpreting animal bone remains. For example, the absence of particular bones may not be an indicator of food preferences. It may, in the case of the recovery of only a small number of fish bones, indicate, not that few fish were eaten, but that many fish were eaten, bones and all (Jones, undated paper). Absence of particular bones may not be an indicator of butchering techniques or preferences but of an industrial process. The

absence of cow ribs from one part of the Hamwih excavations may indicate the presence elsewhere of a leather industry, as they were often used instead of scudding knives to remove hair from more tender hides. Animal bones in graves may not represent food for the next life, but may have other, possibly totemic, significance (Meaney 1981).

Before the last decade or so, plant remains were rarely recorded unless they were in the form of wood or nuts/stones or charred/carbonised grain. Modern techniques now permit the recovery of more fragile remains, particularly from waterlogged layers. The range of plant material recovered on a site is directly linked to the type of preservation, and the methods of sampling may lead to bias (Green in Hall & Kenward 1982, 40ff.). Some of the problems of interpreting pollen from urban sites are dealt with by Grieg (op. cit., 47). I have accepted the identifications given by the writers of reports. Plant remains need to be treated with caution: unless they come from faecal layers or the area of the stomach cavity they cannot be proved to have been consumed, though reasonable assumptions can be made. Some plants remain problematic - weeds of habitation sites and cultivated ground may have been eaten in times of famine.

Plant remains reflect agricultural practices and help to build up a chronological picture of how diet developed, but it has to be

borne in mind that certain crops may result from local conditions, and not indicate general custom or preference. Chemical analysis of organic remains in archaeological contexts can give clues to the food consumed (Arrhenius 1985, 339). The thermal history of a cereal, i.e. how it was cooked, can be reconstructed by the technique of electron spin resonance (Robins 1988, 49). Animal bones, plant remains and chemical analyses help to answer the question, 'What did the Anglo-Saxon eat?', but only in quite exceptional circumstances 'How much of it did they eat?'.

Human skeletal material can provide useful information about diet which is not available from other sources. Here again, I have accepted the writers' diagnoses and interpretations as to pathology and the physical damage caused by dietary factors.

Excavated structures relate to the processing of food stuffs (Tamworth Mill, kitchens), and to the consumption of meals (halls).

SECONDARY SOURCES

'Anglo-Saxon Food: Processing and Consumption' has not been treated as the main subject of any similar multidisciplinary research before, and so I cannot deal with the history of

research into the subject as such, but there is a vast range of secondary material - ancient, medieval and modern.

1. Classical and later medieval documents.

(i) Treatises by Roman writers such as Varro and Columella may throw light on certain aspects of Anglo-Saxon practice.

(ii) Medieval, Tudor and later traditions may also reflect Anglo-Saxon conditions as in some ways these are unlikely to have changed rapidly in the interim. The great improvement in stock was an eighteenth- and nineteenth-century phenomenon, and the hybridisation of cereal breeds is more recent still. However, it is important to realise the changes and not to extrapolate from existing practices or livestock breeds without qualification. Later medieval works on the Monastic Rule can provide detailed information on diet, meal-times, etc., relevant to the lives of a certain proportion of the Anglo-Saxon population, to supplement such primary source material as the Old English Rule of Chrodegang.

2. Modern secondary writings:

(i) Histories of the Anglo-Saxon period. Antiquarians like Archbishop Parker and Sir Robert Cotton gathered libraries of

Anglo-Saxon manuscripts after the Dissolution. Various, particularly religious, institutions had retained Anglo-Saxon documents. As such important sources as laws, wills, charters, the Anglo-Saxon Chronicle, Bede's Ecclesiastical History, Aelfric's Glossary, Gerefa and Rectitudines Singularum Personarum were published by editors like Dugdale, Birch and Liebermann, they were used as a basis by historians like Turner and Kemble in the nineteenth century, Stenton and Whitelock in the twentieth. A further development has been the publication of translations, for example, English Historical Documents, Volumes I & II, and Early Charters published in the 'Studies in Early English History' series by Leicester University Press. More recent historical surveys have incorporated archaeological evidence.

(ii) Surveys of food in antiquity. These can be very wide in scope, as with the very useful Food in Antiquity by D. and P. Brothwell (1969). When limited geographically, as with Drummond Wilbraham's The Englishman's Food (1939), the Anglo-Saxon period tends to be dealt with briefly.

(iii) Publications on specific foodstuffs or particular areas of processing. Modern publications on the former are invaluable for background information to prevent the drawing of false inferences. Writings on food processing and cookery books are generally restricted to the post-Conquest period because of the

paucity of Anglo-Saxon records, and use has also been made of modern studies. Ethnographical parallels have been referred to when this has seemed helpful.

PRESENTATION OF MATERIAL

SECTION II. PROCESSING (Chapters 2-6)

Chapter 2 is concerned with the drying and milling of cereal crops, and bread making; Chapter 3 with dairying; Chapter 4 with butchery. Chapter 5 deals with preservation and storage, Chapter 6 with various cooking methods.

SECTION III. CONSUMPTION (Chapters 7-12)

The third section covers meals and mealtimes, fasting and feasting, and special regimens, concluding with chapters on food shortages and deficiency diseases, and the adulteration of food and the resultant damage caused by dietary elements.

SECTION IV. CONCLUSION (Chapter 13)

This attempts to bring together the main findings on the processing and consumption of food in Anglo-Saxon England. There

is also an account of the main changes over the period, where these can be traced. The chapter ends by looking at Anglo-Saxon attitudes to food, and the comparisons and contrasts between Anglo-Saxon and modern English diet and nutrition.

SECTION II

CHAPTER 2

DRYING, MILLING, BREAD MAKING

DRYING & THRESHING

Drying kilns were used through the Anglo-Saxon period to harden the grain and facilitate threshing (Tannahill 1973, 36; Monk 1977, 26, 260, 338). Kilns which could be substantial structures (Owen 1841, 79, 195, 261, 415, 721; Seebohm 1952, 66) are often clay ovens of elongated form with domed clay roofs, but these have also been interpreted as malting floors (Jones & Dimbleby 1981, 43, 115). There seems no reason why such kilns should not have had both functions, although, as they were not particularly efficient at drying grain, they may have indirectly speeded up the adoption of naked wheat varieties.

According to Gerefa, threshing was a winter occupation, and the Anglo-Saxon calendar illustrates threshing with flails and winnowing for December (Traill & Mann 1909, 181). The work was done on the odene which was thought to be the 'floor of a barn' since it translated Latin areae (Grube 1934, 145). But the implication in Gerefa is that the two were different: the reeve had to take care of things appropriate to the scipen odde to odene or the effects would be seen on berne (Page 1985, 223).

Page deals with the problems that the advice on odene cylne macian (to build a kiln on the barn floor) would give rise to, and comes to the conclusion that odene may represent something more complex than a threshing floor. The suggestion, given by Alfred's version of Augustine's Soliloquies, is that it was a place of work, as opposed to a storehouse (Whitelock 1955, 845; Seebohm 1952, 105).

Some structures with opposing doors, as at Chalton, have been interpreted as threshing barns - the draught on a windy day helping with the winnowing (Monk 1977, 257). Otherwise a geflit, translating the Latin vannus (fan), was used. Threshing was probably a humble occupation, which is why it is recorded of St. Eostorwine that he corn þaersc and þaet windwode (he threshed corn and winnowed it) (Herzefield 1900, March 7). Sieving was probably carried out after threshing (Monk 1977, 257).

MILLING

The process of milling underwent considerable refinement in the Anglo-Saxon period. The simplest method was to pound the grain in a hollow stone with a pestle: swylce berenhula punigendum bufan punere (as a pestle pounds upon barley hulls) (Grube 1934, 146). Saddle querns were also used - the upper stone being rubbed back and forth over the hollow lower stone. Perhaps

Alcuin was thinking of a saddle quern when he described teeth as 'the millstones of our food' (Turner 1828, III, 439). Saddle querns and upper rubber stones have been found in several Anglo-Saxon contexts including Southampton (Hope-Taylor 1977, 196; Monk 1977, 266). But they were never as popular as the more advanced handmills consisting of two circular stones - the upper moveable with a hole near its circumference for the handle by which it was rotated: swa mon corn ded (portige) mid pilstafe (as one does to the corn - grinds it up - with a pilstaff) (Grube 1934, 146). Such a mill needed less force to operate than a saddle quern. The moveable stone was a cwyrnstan (quern stone): se cwyrnstan þe tyrnd singallice and naenne faereld ne durhtihd (the quern stone that turns continually but does not accomplish any journey) (op.cit., 146).

A further development was a mechanically more efficient drive. A long staff replaced the handle of the upper quern stone, with its other end socketed above the stone, perhaps in a hollow in a roof beam. This staff could be turned to whirl the upper stone round. Further improvements included the use of several sockets on the quern in rotation to avoid uneven wear, and even the mounting of a quern on a table, to regulate the fineness of the flour (Thomas 1971, 120; Seebohm 1952, 85).

Quern stones were made of carefully chosen material.

Neidermendig lava seems to have been particularly favoured. Vesicular and hard, it was also light in weight (Crossley 1981, 1). On the early site of West Stow thirteen Sunken Feature Buildings contained fragments of Neidermendig lava querns (West 1982, 395). Fragments of rotary querns, often made from Neidermendig/Mayen lavas, have come from most middle and late Saxon sites, including Portchester (Cunliffe 1976, 227), Hamwih, Ramsbury (Haslam 1980, 6), Thetford, Chalton, Canterbury and Ipswich (Monk 1977, 226; West 1963, 241), York from the eighth century on (Kemp 1986, 10) and Cheddar (Rahtz 1979, 234). Native rock traded within the country was also used for querns throughout the period (West 1982, 64; Crossley 1981, 1; Monk 1977, 266; Cunliffe 1976, 227). The late Saxon site of St. Neots produced a number of fragments of Neidermendig lava querns, most from upper stones, and with a diameter of about 18", which seems to have been the standard size (Addyman 1973, 89). The tenth-century Graveney boat was carrying at least one quern blank of this material and size; it was usual to transport querns as blanks: cutting the central hole weakened the stone (Fenwick 1978, 131).

Grinding corn in a hand mill, even for a small family, might take a considerable time (Kuper 1977, 90; Trow Smith 1951, 66). It seems generally to have been women's work (Kylie 1911, 86). The laws of Aethelberht of Kent which date from the first decade of

the seventh century punish the rape of a king's maiden by a fine of fifty shillings. Gif hio grindende þeowa sio, xxv scillinga gebete. Sio þridde xii scillingas (If she be a grinding slave, 25 shillings compensation, the third class, 12 shillings) (Attenborough 1922, 5). This suggests that the grinding servants formed an important group and, while they did not have the status of a hand-maiden, they were above the 'third sort'.

Those who did not possess querns or with limited time might have opted for cracked grain. This, after soaking, might be more quickly reduced to fragments of kernel which could be boiled and served up with butter, milk or vegetables, but it seems likely that those who could, would eat at least some of their cereal food in the form of bread.

Oxen were evidently also used to provide the motive power for mills by the end of the period, since a pound was paid by Bury St Edmunds for mill oxen (Robertson 1939, 255).

The watermill may have come to England in the seventh century: dendrochronology indicates a late seventh-century date for the mill at Old Windsor (Wikander 1986, 6; Rahtz in Crossley 1981, 14; Thomas 1971, 124; Baillie 1981, 61-3; Wilson 1976, 276). At Tamworth, a mill which may have been part of Offa's palace complex was radiocarbon-dated to the eighth century (Wilson 1976,

276).

There is some eighth-century charter and place-name evidence for mills, and this becomes plentiful in the ninth century (Smith 1964, I, 251; Turner 1828, II, 571; Seebohm 1952, 105; Whitelock 1955, 474, 487). If the impetus for mill building came from Kent, then the knowledge spread very rapidly north and west to Mercia; an indication perhaps of the value of water mills to those who had large retinues to feed (Monk 1977, 269; Hodges 1982, 132). Tenth-century leases often refer to mills (Robertson 1939, 27, 88; Hart 1975, 83; Whitelock 1955, 533-4, 552).

By then most large communities had their own mills (Grube 1934, 147). The author of Gerefa gives instructions that the reeve was to supervise the construction of the mill in association with the fish weir. By Edward the Confessor's reign, mills had become such a hindrance to road and river traffic that he issued a decree limiting the sites at which they could be constructed (Monk 1977, 269). A tide mill, either afloat or worked by a reservoir filled at high water, inconvenienced ships in introitu portus de Douere (in the entrance to the port at Dover) according to the Domesday Survey (Commissioners 1819, 412). By Domesday some 6,000 water mills were established in England. Often there was more than one mill in a village. Hatfield, Herts., had four by the time of Domesday, but two-thirds of individual manors were without one

(CA Wilson 1973, 236). Partnerships in mills were frequent (Bennett & Elton 1899, II, 114). Ordinarily manorial mills were retained exclusively for the use of the lord and yielded no rental. Entries like that for Borhunte, Hants., where there was a mill paying 42 pence 7 alt. ad aula (and another for the hall) are quite common (op. cit., 115). There were relatively small numbers of mills in Devon and Cornwall (Loyn 1970, 357). Some could only be used in winter, and Marcle Hill in Herefordshire rendered only the sustenance of him who kept it, but two in Cambridgeshire, presumably at Grantchester, produced eight pounds in 1066 (Commissioners 1819, 412; Bennett & Elton 1899, 113). Seven mills in Battersea that yielded forty-two pounds, nine shillings, and eight pence or corn to that value, must have produced flour for a substantial number of London bakeries (Loyn 1970, 358).

The place of female slaves was taken by the male miller, such a one as Wine who was bequeathed in Aethelgifu's will of 980-90 (Whitelock 1968, 6). The molendinarius seems to be a bondsman of the lord's, permanently attached to the estates. By 1086 Bury St Edmunds had '75 p' (pistores) which perhaps means millers, but could be translated 'bakers' (Turner 1828, II, 369; Bennett & Elton 1899). Provided that a household had the means to pay for milled flour, and easy access to a mill, women would have been freed from an onerous aspect of food preparation.

The expansion of milling may have been associated with demographic decline - resulting in a shortage of slaves - or an increase in population - more mouths to be fed (Jones and Dimbleby 1981, 115). Or it might reflect investment to provide income: a church should not be like an mylne for lyðrum tolle (a mill for vile toll) (Skeat 1881, 253; Robertson 1939, 197, 255).

MEAL

Meolu/melu (meal) was the term given to corn, or other material, after grinding. Grube considers that the term was applied to ground grain from which sifeda (siftings/bran) had been sieved. He bases this interpretation on a passage from Alfred's translation of Boethius: swa swa mon meolo seft: ðaet meolo ðurgcrypð aelc ðyrel 7 þa syfeda weorðað asyndred (so men sift meal - the meal goes through the holes and the siftings are thrown away) (Grube 1934, 147). However, a reference to prittig mittan claenes melowes and sixtig mittan oðres melowes suggests ground corn in general (op. cit., 149), and substances other than corn were ground into meolu. Mealan stane seems to have been an alternative term for cwern (Cockayne 1851, III, 215). Unspecified meal was sometimes mentioned in rents (Loyn 1970, 304; Whitelock 1968, 8).

Meal could be ground more or less fine, and could be sieved then bolted through various grades of cloth to retain or exclude more or less of the bran, and also spiders and the flour moth (Lovell 1988, 1; Holmes 1952, 201; Bosworth & Toller, 1898, I, 53). Leechdoms refer to getemsud melu (finely sieved meal), and Cockayne explains temse as a fine hair sieve, a term still in use when he wrote (Cockayne 1851, III, 134). Hersyfe and taemesplian (hair sieves) are referred to in Gerefa. Appropriately the getemsud melu was to be made into a cake as food for a patient with a delicate stomach. Refined meal - the fine flour - was referred to as smedma or smedema. One recipe calls for hwaetenes meluwes smedman (fine flour of wheat meal) (op. cit., II, 226). hlaf smedman translates pania smili agineus (bread of very fine flour), and smedma glosses similia (the finest wheaten flour). Pollis (fine flour) is glossed by grytt (Grube 1934, 149). Finely divided flour was available in Anglo-Saxon contexts, but it seems probable that only the richer members of society would be able to use it as a matter of course.

Leechdoms are not necessarily representative of substances generally ground into meal, but they are the most prolific source of references. There are ten references to barley meal, plus one to smael beren meal (fine barley meal); six to wheat, plus one to smael hwaetan meolwe (fine wheat meal), and one to hwaetenes meluwes smedman (fine wheat flour); three to rye (as bran, meal,

and dust); and one reference each to oat meal and bean meal. All five - barley, wheat, rye, oats and beans - were field crops, and their use for flour is not suprising. Wyrm melo (worm meal) was hopefully purely medicinal, but with the mention of acmeluwes dust (acorn flour/powder) and haesles obbe alnes asift (sieved hazel or alder flour) we move into the realm of what might have been used to bulk out flour when more desirable materials were in short supply (Wilson & Foote 1970, 149; Ashley 1928, 58; Moberg 1973, 45ff.). The very poorest would have ground up more or less anything edible, including 'weed' seeds and bark, and eaten all of the resultant meal.

Ground grain is rarely recoverable from archaeological contexts. Evidence for flour comes from York where quantities of bran were recovered together with parasite ova, indicating that elements of that population probably ate 100% flour: that is, flour from which nothing had been removed by sieving (Hall 1981, 5ff.).

UNLEAVENED BREAD

By the addition of salt, water and possibly shortening, Anglo-Saxon populations could have made unleavened bread, which may have taken the form of hard, flat cakes, although it could have resembled flat breads - pitta, nan or chapati (Tannur in Fenton & Owen 1931, 179). Even when yeast is used but the flour

is from grain which has started to sprout, then the resulting loaf will be flat and heavy. Unleavened oaten bread hardened on stands in front of the fire may have been made in some areas (O'Danachair in Fenton & Owen 1981, 63-5). The large round was divided into feorth-daels, or farls.

Baking an unleavened loaf under a pot, rather than on a bakestone or griddle, would draw the dough upwards so that it would rise slightly, resulting in lighter bread (David 1977, 155). Generally, though, leavened bread is much lighter and easier to digest, particularly when cold, and is likely to have been generally preferred. Moreover, yeast is a good source of B vitamins and lysine, the limiting amino-acid in cereal proteins (McGee 1986, 290).

LEAVENED BREAD

Yeast was potentially available to the Anglo-Saxons from three sources. Wild yeasts are present in the air, and a mixture of meal and water left to stand will begin to ferment, and can be used as yeast (David 1977, 89; Renfrew 1985, 40). Once a household had fermented dough, a lump (sourdough) could be kept from one day's baking and used to ferment a fresh batch of meal some days later (McGee 1986, 313; David 1977, 293, 156).

However, the discovery that fermenting liquor from brewing produced lighter bread had evidently been made on the continent before the beginning of the Anglo-Saxon period (Stewart 1975, 45). Perhaps beorma (yeast), which is etymologically connected with breowan (to brew), referred to this kind of liquid yeast source (Grube 1934, 152). The Anglo-Saxons may also have used the sediment from bottom-fermenting yeasts - produced by the fermentation at a low temperature of light beers. This is born out by the fact that one O.E. term for yeast, daerst, is derived from dros (dregs) (op. cit., 152). This yeasty sediment was slow-acting, and resulted in heavy, damp, sour bread (David 1977, 98). Yeast could also have been dried. Coats of well-washed yeast, whisked up in fresh water, used to be spread on a large wooden platter or in a tub. While the yeast was drying, the platter or tub was inverted to protect the yeast from dust, but in such a way as to allow air to circulate. When each coat was dry, another was added until a layer 2-3" thick was achieved. This yeast would keep for several months. Or, as with yeast for brewing, a handful of birch twigs could be dipped in liquid yeast and hung up to dry until the next brewing/baking session when it could be put into wort/water to dissolve off the yeast (op. cit., 95).

It is possible that beorma, daerst, and haef (cf. the modern German brewing term hefe) derived originally from brewing;

daesma, which is found translating only fermentum, originally meant sour dough, and gist, the only term not used in religious literature to translate the idea of leavening, was the dried, relatively pure, form. If liquid, it seems unlikely that gist could have been stored in a cist (chest, box) (Gerefa), and it might make sense of the instruction to take new gist, i.e. newly dried and not two or three months old, for a brew (Cockayne 1851, II, li 1). The more general term teage (container) was used of holding beorma, and the term 'barm' was used until recently to indicate a solution of yeast. Although the terms may reflect different origins, they seem to have been more or less interchangeable in Anglo-Saxon times. In one case gist translates spuma cerevisiae (the froth on the ale) (Cockayne 1851, Herbarium 21, 6). But the common Germanic character of terms for yeast also points to the early production of leavened bread among Germanic peoples, particularly when there were also common terms for unleavened 'low' bread: O.E. peorfe and 'raised' bread, O.E. hlaf (Grube 1934, 151; Tooke 1798-1815, II, 155).

The procedures of breadmaking were presumably commonplace; the instructions given for a salve were gemang þ hit sie swilc swa dah (work it as though it were dough) (Cockayne 1851, I xlvii 2, II li I). The action of yeast must have been very well-known since it is used as the source of a number of metaphors (Swanton 1975, 95). 'Dough' is the polite answer to Riddle 45 in the

Exeter Book.

On contact with water, i.e. when dough is made, wheat gluten forms a tough rubbery material which traps the bubbles of carbon dioxide gas produced by the yeast. After ageing for one or two months, the light yellow colour of freshly milled corn is bleached, and the bonding characters of the gluten proteins are affected so that they form a stronger, more elastic dough (McGee 1986, 290). The oils in wheat germ and bran are susceptible to oxidation and develop rancid odours in a matter of weeks, so if flour is to be kept, thus improving its bead-making qualities, then it is better to sieve it until 'white' (McGee 1986, 233). Moreover, germ and bran dilute the bread-making qualities of flour, so for superior bread white flour is best.

Barley gluten tends simply to dissolve into a watery suspension (Dr. J. Graham, pers. comm.). Rye has its own gluten, but this does little to aid the expansion of the dough. There is no appreciable gluten in oatmeal (David 1977, 67). These factors explain why wheat was sought after for breadmaking.

LOAVES

The common term for bread was hlaf (loaf). The word bread/braead (bread) rarely occurs (Cockayne 1851, II xlix; Robertson 1939,

253). The dough could be formed into rolls and loaves of various shapes and sizes (Wright 1871, 104; Foote & Wilson 1970, 166; Wright 1871, 104). The Anglo-Saxons seem to have had two basic sizes of loaf: small and large. For example, Edward the Elder's will (901-8) refers to tu hund greates hlafes 7 þridde smales (two hundred large and one hundred small loaves) (Grube 1934, 155). The Abbotsbury Guild Statutes refer to broad loaves: one is to be provided by every two guild brothers for common almsgiving (Whitelock 1955, 560). Perhaps these were the same as the greate loaves. Judging by illustrations, loaves were round (Temple 1976, figs. 158, 166; Stenton 1957, fig. 49), and on the tables of the gentry, as far as can be gauged, were about the size of a present-day medium-sized loaf. The rule of St. Benedict allowed a pound of bread per day, and this would be represented by a present-day medium/large loaf, but may have been allocated as a portion from a 'broad' or 'great' loaf (Knowles 1940, 462; Ashley 1928, 12). Large loaves of leavened dough would be difficult to cook properly, other than in an oven, which would suggest the method of baking.

BAKING: HEARTHS & OVENS

In Asser's version of the story of Alfred and the 'cakes', the loaves are burning at the fire; in the Claud M.S. the loaves are on a pan with the fire underneath, while Matthew of Westminster's

version has the bread under the ashes of the fire to bake (Turner 1828, I, 560ff). Axbakenne hlaf and heorðbacen hlaf are two variants in translations of Gregory's Dialogues (Grube 1934, 153). One of the leechdoms instructs bacan him man þanne wearmen hlaf be heorðe (bake him a warm loaf on the hearth), but another prescribes ofen bacan hlaf (an oven-baked loaf) (Cockayne 1851, III 122; II xxvii). Ovens were enclosed - in their simplest form an inverted pot covered with embers (Bosworth & Toller 1898, 729). A clay-lined oven had been built into the chalk rubble walls of a what was evidently a cooking hut on the sixth/seventh-century site at Puddlehill, Beds. (Matthews 1985, 60, 69). In The Life of Ceolfrith, written soon after 716, but probably referring to a time before 674, an oven is lit and then cleansed before loaves are placed in it, suggesting a bread oven on conventional lines in which faggots are lit and the ashes raked out before baking (Whitelock 1955, 698). An ofenraca is one of the utensils listed in Gerefa and while none has been recovered from an Anglo-Saxon context, beech oven rakes were found in eleventh-century levels in Lund (Foote & Wilson 1970, 166). The sides and lower crust of the bread may have been cut off to get rid of ashes: some manuscript illustrations seem to show four slices cut from the sides of loaves (Furnivall 1868, 23).

BAKEHOUSES

Monastic and other large establishments of the middle period had bakehouses (Rahtz 1979, 8). A bakehouse in which a sequence of ovens had been built at North Elmham has been dated prior to 800 (Wade-Martins 1980, 69ff.). At Fladbury, Worcs., a sunken bread oven with similar dimensions to that at North Elmham - about 2m across - was found, and associated timbers were radiocarbon-dated to 851+/-51 (Monk 1977, 27). By the time of the Conquest there were evidently large communal ovens, like that of the Earl at Norwich (Munby 1982, 52d), and probably commercial bakeries too (Smith 1964, II, 135).

However, in a peasant's household bread would presumably still have been baked at the hearth fire. An eleventh-century scribe glosses formacula (a little oven) with cylen (kiln/oven) and heorb (hearth), indicating a continuation of the two methods (Grube 1934, 153). A griddle, or a small, circular, long-handled pan, such as are found in Scandinavian contexts, may have been used, particularly in areas where oat bread was common (Foote & Wilson 1970, 166).

BAKERS

Women were probably responsible for the bread supply of individual households. The term hlaefdige (lady) is etymologically derived from *hlaibadigon (bread kneader) (Grube 1934, 153). Old English has both masculine and feminine forms for bakers: baecere and baecestre, and the male baker of the Colloquy operates in a domestic, or commercial situation, not a monastic one (Fell 1984, 49). By the end of the period, the baker was one of the inhabitants of a large estate (Munby 1982, 52b).

Apart from the monastic and manorial bakers, it seems that there were bakers who were independent tradesmen (Loyn 1970, 324). By c.1100 Baldwin, the baker of the High Street in Winchester rented a number of properties; and there were at least five other bakers in the town (Barlow et al. 1976, 16, 45, 77, 94, 126, 133, 135-8).

BREAD

Asked about the importance of his craft, the baker of Aelfric's Colloquy says, buton craefte minon aelc beod aemtig byþ gesewen 7 buton hlafe aelc mete to wlaettan byþ gehwyrfed. Ic heortan mannes gestrangie, ic maegen wera 7 furþon litlincgas nellaþ

forbigean me (without my skill every table seems empty and without bread all food is turned to loathing, I gladden the heart of men, I strengthen folk, and because of this, the little children will not shun me) (Garmonsway 1978, 36-7). This suggests that bread was considered an essential part of a meal and was important for young children, particularly perhaps those who were being weaned. The author of leechdoms also considered bread a strengthening food (Cockayne 1851, II xv 1, xvi 2, xxx, xlix, il). Each of the craftsmen of the Colloquy tends to exaggerate the importance of his own craft, but there is other evidence pointing to bread as the main constituent of a meal (Whitelock 1955, 385,390, 410, 559, 560 760; Miller 1890 I, 1, 67; Owen 1841, I 69, 395, 677; Miller 1890, III 23). The standard meal was a loaf and something to eat with it. Possibly bread was already being eaten with butter as one of the 'accompaniments': þam mannum sceal sellan aegra to suppane, beren bread, claene niwe buteran (then give barley bread and pure new butter to the invalid to eat) (Cockayne 1851, II 220).

Loaves were often mentioned as part of payments in food, either to be made by tenants to the landlord, inheritors to religious foundations, or masters to their servants. In the time of Ine, ten hides were to provide 300 loaves (Whitelock 1955, 371). The numbers of loaves to be paid to religious foundations are particularly high, and perhaps reflect their large

establishments. Osuulf's will leaves yearly cxx hwaetenra hlafa 7 xxx clenra, cxx gesuflra hlafa to aelmsmessan (120 wheaten loaves and 30 without the bran and 120 well-seasoned loaves for almsgiving), and these categories recur in other ninth-century wills (Grube 1934, 154). Such bequests indicate that the estates were expected to produce a surplus, that they had the facilities for baking large numbers of loaves and that wholemeal flour was more frequently used than 'white', and that 'well-seasoned' loaves were in some way special.

Towards the end of the period, the number of loaves specified tends to increase. For example, Bury St Edmunds was to receive 1000 loaves annually on September 4th, and Leofstan added another 300 to this number, 7 Þurstan syflincge to iii hund hlafe (and Thurstan relish for 300 loaves) (Robertson 1929, 13, 193). Again, this suggests bread as the staple and the 'relish' or accompaniment as secondary, if highly desirable. Sometimes, as with a lease of land to Denewulf, bishop of Winchester, the size of the loaves is specified: tu hund greates hlafes 7 þridde smales (two hundred large loaves and another hundred small loaves) (op. cit., 39).

It is possible that loaves paid as rent were a special form of bread or rusk that would still be palatable after a number of days in transit (Jaine 1987, 78; Imellos in Fenton & Kisban 1986,

74-5; Weaver in op. cit., 354-5). However, the large numbers of bakers recorded for monastic centres may have been fulfilling contracts for food rents, as well as providing bread for pilgrims.

The title 'Lord' is generally thought to have been derived from hlaford *hlaidward (loaf-keeper) (O.E.D.; Tooke 1805, II 155). This would accord with the fact that the owners of estates owned substantial food resources, and also with the view of the loaf as the staple food. In the early code of Ethelbert (602-3), the first rank subordinate to the ceorl was his hlafaeta (loaf-eater) (Whitelock 1955, 358). The Dialogue of Salomon and Saturnus states, On xii mondum du scealt sillan dinum þeowan man vii hund hlafa and xx hlafa buton morgemetum and nonmetum (in twelve months you shall give your servants 720 loaves, besides morning and midday food) (Kemble 1848, 192).

Wheaten loaves were regarded as superior (Owen 1841, 533; Ashley 1928, 129-31; Skeat 1881, St Eugenia 1.404-5), white bread being preferred for the Eucharist (Miller 1898, I, 1 112). Those who chose to eat barley bread did so from ascetic motives (Mellows 1980, 37; Swanton 1975, 45). When Bishop Basil offered Julian barley bread such as he ate himself, the emperor was insulted, 'hors mete is bere' (barley is only fit for horses), and offered Basil some grass (Skeat 1881, l. 212).

On feast days, at least in religious contexts, the ordinary bread was replaced by a finer kind, or by spiced cakes (Knowles 1940, 464; Connor 1987, 196). Feast-day bread may have been made from enriched dough mixtures. Gesufel loaves were bequeathed as an offering on Sundays by Ealhburg and Eadwulf (see above), and the Abbotsbury guild loaves were to be well gesyfled. Gesufel seems to mean 'spiced' or 'flavoured' (Grube 1934, 156; Knowles 1940, 464). Guild loaves were also to be wel besewen, which perhaps means 'sprinkled with seeds' (Grube 1934, 156). Dill, caraway, poppy, fennel and sweet Cecily seeds could all have been used. Leechdoms give instructions for making anne cicel (a cake) of getemsud melu (finely sifted flour) into which cumin and march seed was to be kneaded, so perhaps seeds were incorporated in the dough (Cockayne 1851, III, 63). Such enriched loaves could have been kneaded with milk instead of water (cf. the Erce charm), or cream, and had eggs, butter or other fats incorporated in the dough. They may have been sweetened with honey, or contained fruits, preserved in honey or dried (Walker & Bennett 1980, 2). Local variations of enriched loaves and buns may derive from the special breads of Anglo-Saxon feast days.

The crumpet may also have been available to the Anglo-Saxons. Crompeht is used to gloss folialis, and Schlutter thought this was a form of thin bread. Grube thought that folialis=foliatus,

and the crompeht was a little flat cake with flowers marked on it, as shown in manuscript illustrations (Grube 1934, 156). However, it is more likely that crompeht is derived from the Celtic crempog, meaning a pancake (David 1977, 341). A leavened batter will produce a crumpet, in effect a small pancake with holes most of the way down from its top surface cooked in a pan or on a griddle.

CHAPTER 3

DAIRYING

THE MILCH ANIMALS

The Leechdoms contain ten references to goats' milk, three to cows' milk, two where cows' or goats' milk will do, and two to ewes' milk (Cockayne 1851, I ii 5, II xxv, II lxv (2), II xxv; Bonser 1963, 111; Cockayne op. cit., I lxxv). The more frequent references to goats' milk may reflect the Mediterranean origin of the text, or the fact that goats' milk is comparatively easy to digest, and good for those who suffer from certain allergies. Rectitudines Singularum Personarum refers to the duties of the cowherd, shepherd and goatherd:

> Be kuhyrde. Cyhyrde gebyreð, paet he haebbe ealdre cu meolc VII niht, syððan heo nige cealfod haefd, 7 frymetlinge bystinge XIIII niht...
>
> Be sceaphyrdan. Sceaphyrdes riht is, paet he haebbe ...his heorde meolc VII niht aefter emnihtes daege 7 blede fulle hweges oððe syringe ealne sumor.
>
> Be gathyrde. Gathyrde ge byreð his heorde meolc ofer Martinus maessedaeg, 7 aer þam his dael hwaeges...

(Concerning the cowherd. His right is to receive the milk of an old cow for seven days after she has calved, and the beestings of a young cow for fourteen days... Concerning the shepherd. The shepherd's entitlement is to have...the milk of his herd for seven days after the equinox and a bowlful of whey or buttermilk all the summer. Concerning the goatherd. The goatherd is entitled to the milk of his herd after Martinmas, and before that a share of the whey...) (Leibermann 1898, 450-1).

It is clear that the cow, sheep and goat all provided milk, and other dairy products. Archaeological sites provide evidence for the presence of all three animals, and deductions can be made from the age range of the animals concerned. For example, the age range of the goats at Beckery Chapel, Somerset, suggests a dairy function (Rahtz & Hirst 1974, 81 ff.).

Domesday evidence shows that some manors, for example those of the abbot of Bury St Edmunds in East Anglia and some royal manors in Devon, had cattle far in excess of the apparent draught needs. This suggests a cattle husbandry in which milk production was important (Trow Smith 1957). This may have reflected a preference in which only those with the necessary resources could indulge, and may have been coupled with another preference - the raising of fat cattle for food.

Households in towns and villages may have kept a cow for milk, the food being hay, or grass gathered from hedgerows (Mitford 1986, 73-4). Unimproved breeds, such as the small Kerry cow, comparable to Anglo-Saxon cattle, are able to subsist on very scanty fare and to milk on it (Fream 1952, 520).

THEIR YOUNG

Presumably not all young were reared: if a dairy animal was kept until it was five or six years old only one of its offspring would need to be reared to replace it during this period, so some lactations may have been available just for dairying, provided that, in the case of cattle, the demand for plough oxen had also been met. Calves, lambs and kids would all presumably have been eaten.

Monasteries may have had more cows' milk (and veal) available than lay establishments in that young calves were killed to provide vellum. The three Pandects or Bibles made for Ceolfrith at Monkwearmouth/Jarrow between 680 and 716 needed the skins of some 1,550 calves, though such a large production was the exception, rather than the rule (Dodswell 1982, 94). The extra milk would have played a useful part in a monastic diet.

DAIRY FARMS

There are records of dairy farms established by mid-Anglo-Saxon times, though these were for milch animals generally, and were not, as today, concerned exclusively with cattle (Finberg 1972, 105; Loyn 1970, 367; Robertson 1939, 171; Whitelock 1955, 489).

YIELD

The closest one can come to estimating the yield of Anglo-Saxon milch animals is by extrapolation from present-day breeds. Kerry or Shetland cattle correspond fairly closely and can convert poor-quality fodder into five to seven gallons of milk a day with 4% butterfat up to 3 months after calving (Bowie 1988, 442).

Evidence for the yield of an early medieval Welsh cow comes from the Ancient Laws and Institutes of Wales indicating a minimum of about two gallons a day (Owen 1841, 271; Herzfeld 1900, May). A sheep would give about one-tenth of this (Seebohm 1952, 126-8).

Beestings, the particularly rich colustrum produced by a cow immediately after calving, was sufficently valued to be the subject of an allocation: the perquisite of the cowherd, according to Rectitudines Singularum Personarum (Leibermann 1898, 450).

PROBLEMS OF HYGIENE

The Leechdoms include charms (which are not included in the section from 'Apuleius' on which they are based), for milk that has been spoiled (Meaney 1981, 56), involving plants, often lupins (Cockayne 1851, I lxvii 1). Plantain, cockle and cress were to be bound together, then laid on the milk pail, which was not to be put down on the ground for a week (op. cit., III, liii). It is difficult to know if these herbs would have a disinfectant effect; perhaps allowing the bucket to dry out thoroughly would have been helpful (Hartley 1954, 467). The incident where St Columba reproves Colomban for not casting out the demon that was lurking in the bottom of the milking pail, by making on it the sign of the cross, is additional indication that the souring of milk was a problem (Bonser 1963, 259).

A number of outbreaks of disease affecting domestic animals are recorded in the chronicles, and some may have been transmitted to humans, but it is not possible to identify the type of infection with any certainty (Min. of Ag. 1972, 1,2,6; Burnet & White 1972, 214).

DAIRY WORKERS

On large estates it appears that the men were responsible for milking the animals in their care. The shepherd of the Colloquy milked his sheep twice a day and made cheese and butter (Garmonsway 1978, 22). According to Rectitudines Singularum Personarum the cheese-maker was the only woman specified among the estate workers:

> Cys-wyrhtan gebyred hundred cyse, and þaet heo of wringhwaege buteran macige to hlafordes beode; and haebbe hire þe syringe ealle butan þaes hyrdes daele.

(The cheesemaker is entitled to a hundred cheeses, and is to make butter for the lord's table from the whey; and she is to have all the buttermilk except the herdsman's share) (Leibermann 1898, 451). Usually dairy workers are female (Roberston 1939, 257; Whitelock 1952, 113; Owen 1841, 80). This would seem a reasonable division of labour: the various herdsmen would be too occupied with their animals to spend time making dairy produce. The term daege/dey is cognate with dige 'kneader' (cf. hlafdige 'loaf-kneader, lady'). The working of butter from cream by hand, of butter to expel brine, the pressing of butter into storage

tubs and curds into cheese are forms of kneading.

From the Law code IV Aethelred, which could be as late as the last years of Cnut, and deals with London, comes the information

> Smeremangestrae (quae mangonant in caseo et butiro) XIIII diebus ante natale Domini unum den., et septem diebus ante natale Domini unum allium

(Women who deal in dairy produce - who sell cheese and butter - pay one penny a fortnight before Christmas and another penny a week before Christmas) (Robertson 1955 72). This confirms dairying as women's work, and that dairy products were sold in towns, although, as the reference is to the weeks immediately before Christmas, dairy products may have been a delicacy. Perhaps women also brought dairy products into towns in the summer, when milk would have been more plentiful, but they did not then make the kind of price that attracted tolls.

FRESH DAIRY PRODUCTS

A will leaves 4 pence for milk for the anniversary of a funeral feast (Robertson 1939, 253). It may have been used for frumenty, syllabubs, sweet curds or junkets, which were associated with festivities, or for making butter or cheese, since the

anniversary feast, unlike the funeral feast, could be prepared well in advance (Kuper 1977, 28, 34; Ayrton 1975, 461, 479). But it may have been to drink with the fish on the menu. Drinking full-cream milk was a luxury, since there were still drinkable liquids (skimmed milk, buttermilk and whey) after milk had been used to produce the valuable commodities of cream, butter and cheese. References to drinking skimmed milk, buttermilk and whey are much more common than to drinking milk (Turner 1928, III 27). Ascetics tended to drink milk rather than intoxicating beverages, but even then it might be þinre meolc (skimmed milk), or meolc waetre gemenede (milk mixed with water) which Cedd took in Lent (Miller 1890, III, 27, 23; Colgrave 1940, 345).

The terminology of other fresh dairy products is problematical. Flete derives from fleotan (to float), and therefore can refer to cream (cf. modern Danish fløde), and, in the plural, to curds or skimmings. A fleeter, in Suffolk dialect, is a skimmer for cream (Evans 1969, 104). Ream also apparently referred to cream, though perhaps to ripened cream, or cream which had been heated in order to preserve and thicken it (Cockayne 1851, III Gloss.). Clotted cream, deriving from the O. E. clut, may have been made in Anglo-Saxon times (Hartley 1954, 474).

Obviously milk and fresh milk products had a limited life, turning sour quickly in warm weather. Butter and cheese, however,

were forms in which milk products could be preserved for weeks and months, for consumption in the winter when there would be a shortage of fresh milk.

BUTTER

The Anglo-Saxon invaders were already practised in buttermaking (Brothwell 1969, 51). In order to make butter, milk is skimmed to collect the cream over two or three days prior to making butter (Wilkins 1982, 1). The cream is then churned until granules of butter form. After the buttermilk has been drained off, the butter granules are given several rinses of water, all cold in summer, but the last warm in winter (Cockayne 1851, I xliv 2). Then the butter is worked to expel all the buttermilk which would otherwise quickly turn the butter rancid. Unsalted butter may have been made for immediate use, but most butter was salted, since the salter of the Colloquy maintains, 'butergeweor aelc cysgerunn losaþ eow buton ic hyrde aetwese eow' (butter and cheese would be lost to you if I was not there to preserve them) (Garmonsway 1978, 35-6). The salt would be worked into the butter, and if it was to be stored, it would probably have been pressed down into barrels, with layers of salt, to exclude air pockets (Hartley 1954, 481). It is possible that butterwort (pinguicula vulgaris) was also used to preserve butter.

Around 20 to 30 pints of milk (depending on butterfat content), are needed to make one pound of butter, but skimmed- and butter-milk are also produced, and the rinsings of buttercurd were traditionally used for fattening pigs (Wilkins 1982, 4). However, cheese could be the primary product, and butter made from the whey, which is the situation described in Rectitudines Singularum Personarum: the cheesemaker is to make butter from the wringhwaege. A good deal of cream may be raised from whey by gentle heating, and this form of butter is little inferior to ordinary butter (Seebohm 1952, 107; Trow Smith 1957, 119). The practice seems to have been to make the maximum use of a quantity of milk by using it to make butter then cheese, or cheese then butter. The liquid residue in both cases could be used as a drink.

Buttermilk is slightly thickened and soured by the activity of airborne bacteria during churning, and bacterial cultures may have been perpetuated in the wood of the dairy utensils. Since it has only a short life, it was probably consumed on the farms where the butter was made, although some may have found its way into markets near at hand.

The vigorous activity of churning butter is made the subject of Riddle 54 from the Exeter Book. Like Riddle 45, the respectable answer to which is 'dough', the language is packed with sexual

innuendo:

Hyse se cwom gangan þaer he hie wisse
stondan in wincle stop feorran to
hror haegstealdmon hof his agen
hyre stondendre stiþes nathwaet
worhte his willan wagendan buta
þegn unnette waes þragum nyt
tillic esne teorode hwaeþre
aet stunda gehwam strong aer þon⟨ne⟩ hio
werig paes weorces hyre weaxan ongon
under gyrdelse þaet oft gode men
ferdþum freogaþ ond mid feo bicgaþ.

(There came a young man to where he knew her to be, standing in a corner. The lusty bachelor approached her, lifted up his clothes and thrust something stiff under her girdle where she stood, had his way, so both of them were shaking. The thane worked hard; his good servant was sometimes useful, but, though strong, he always became tired and weary of that work before she did. Beneath her girdle there began to grow what good men love in their hearts and buy with money.) (Mackie 1934). The churn being described here is the knocker churn (Wright 1871, 105).

However, uuellyrgae is given as the translation for smus (i.e. sinus), uas quo buterum conficitur (a vessel in which butter is

made). Uuellyrgae is a derivative of wealwian/wiellan (roll), and so may refer to a rocker churn (Pheiffer 1974, 124; Hartley 1954, 479; Cheape in Fenton & Kisban 1986, 118).

CHEESEMAKING

In cheesemaking, rennet, a natural curdling agent, and sometimes lactic acid bacteria, which cause fermentation, are added to warm milk. When the milk has coagulated to form a 'junket', this is broken up, and the curds separate from the whey. The finer the curd is cut up, the more liquid drains out, and the harder and drier the final cheese will be. If the curds are heated up to between 70 and 130 degrees Fahrenheit they will become progressively more rubbery, and the resulting cheese will be correspondingly denser, and have better keeping qualities. This is likely to have been done in Anglo-Saxon England (Oschinsky 1971, 289).

Some soft cheeses, like Roquefort, are not cooked at all. The whey which is drained off can itself be curdled over heat with acid (vinegar, for example), and made into more cheese (McGee 1986, 44). Buttermilk, from which most of the fat has been removed, was also used for cheese. Some cheeses have salt, which will slow down the rate of spoilage, added to the curd before pressing in moulds. Other cheeses are put into a bath of brine

for a period after pressing. Salt can be rubbed into the surface of a cheese in order to protect it from spoilage. Cheese which is salted very heavily will not ripen, since all microbacterial activity is brought to a halt (op. cit., 47).

Anglo-Saxons had rennet available, and lactic acid bacteria were probably present in their wooden utensils (Cockayne 1851, 2, 376). Rennet contains the single enzyme, rennin, of which one part will coagulate five million parts of milk (commercial rennet works only in the ratio of 1:4500) (McGee 1986, 37, 44). Flowers of the wild thistle, seeds of saff flower and galium verum (lady's bedstraw) could also have been used to curdle milk for the preparation of cheese (op. cit., 37; Harris 1961, 82). Boiled nettle and the flower of the teasel can also be used, but, unlike rennet, plant proteases digest more casein than they coagulate, and the result is a soft, weak curd (Monk 1977, 124; Lodge & Herrtage 1973, Bk VI stanzas 21ff; McGee 1986, 37, 44; Renfrew 1985, 15). Vinegar can be used to curdle milk for cottage cheese, although milk will separate naturally as it sours, and the curd so formed can be drained and then salted to make cheese (McGee 1986, 35; Renfrew 1985, 15). Leechdoms state that milk could be gewyrd (turned) by heating with hot stones or a hot iron as well as rennet: þa meolc geren mid cys<l>ybbe (turn the milk with rennet) (Cockayne 1851, II li 3, II xxv, Lac. 18). The Anglo-Saxons had access to all the curdling agents that have been

mentioned. The evidence from one of the leechdoms is that even new cheese had a relatively firm consistency: nim niwne cysan 7 screda hyne on weallendan waetere...7 maca ealswa litles cicles 7 byd to þan eagan (take new cheese and shred it into boiling water...and make as it were small cakes and bind to the eyes); this might signify that the cheese was curdled with rennet and the curd heated (Cockayne 1851, III Peri Didacheon, 21).

While some cheese was eaten fresh (see below), the addition of salt would seem to have been standard practice. The salter of the Colloquy maintained that cysegerunn (cheese curd) needed to be preserved with salt (Garmonsway 1978, 35-6). Large dairy farms would have produced more cheese than could have been consumed fresh. The large number of cheeses listed in inventories suggests that they must have been preserved in some way (Robertson 1939, 197, 249). The Welsh seem to have used the brine bath method for preserving cheese (Owen 1841, 525). The cheese was sometimes hung up to keep it out of the way of vermin and domestic animals, but it is possible that it was hung up in order to be smoked, although if it was hung up in the dwelling house it may have been smoked incidentally rather than intentionally.

It is difficult to find any evidence for the size of Anglo-Saxon cheeses. A fragment of a will from Bury St Edmunds leaves viii pe. an. cese (eight pence for a cheese) for the first funeral

feast, which suggests a large cheese weighing several pounds (Robertson 1939, 253; D.G. Wilson 1977, 35; Hartley 1954, 486).

It is not known if there were any Anglo-Saxon blue cheeses. Certainly in France such cheese was a delicacy, and also a rarity, since when Charlemagne encountered it for the first time he had to be instructed not to throw away the aerugo (literally 'the rust of copper', i.e. mould), since this was the best part of the cheese (McGee 1986, 37-8). Presumably this was a Roquefort-type cheese, to which the mould Penicillium Roqueforti had imparted its special flavour. This is the same mould that flavours Stilton cheese; it may have occurred in some localities where it could have been incorporated into cheese (Hartley 1954, 483-7). Dorset Blue is also known as Blue Vinney, vinney being a corruption of vinew/finew, from the O. E. fynig (mouldy) (O.E.D. IV, 231, X Part II 216). It would seem on linguistic grounds to derive from Anglo-Saxon times, although it could be argued that the Anglo-Saxon population would refer to a blue cheese introduced from France at the time of the Conquest as fynig. It is a buttermilk cheese, which suggests the Anglo-Saxon dairying economy.

Cheesemaking was probably practised on a domestic scale by all households which possessed milch animals. Cheese was certainly made on large estates: the reeve was in charge of the cheese vat, and some cheese was made for sale in local markets or abroad (Leibermann 1898, 455; Poole 1958, 227, 231; Loyn 1970, 96). The more prosperous an establishment, the longer its members could wait for cheese to age. Mature cheese was consumed as a novelty by the rich, whereas the poor ate fresh cheese (McGee 1986, 38; Skeat 1869, 77; Seebohm 1952, 157). Perhaps cheese that was to be kept was more time-consuming to make, and expensive, since more salt would be necessary and probably a press of some kind was needed too.

DAIRY PRODUCTS IN FOOD RENTS

Butter is not often referred to in Anglo-Saxon food rents, though Ine's Laws call for the provision of an amber of butter from ten hides. Cheeses figure in some of the earliest records of rents. According to Ine's Laws, ten hides were to furnish ten cheeses as well as other food. Forty cheeses were part of an annual food feorme retained by Offa from a royal estate at Westbury, Gloucester (Loyn 1970, 304). Cheeses or weys of cheese are often referred to in rents (Whitelock 1955, 489; Robertson 1939, 39, 171, 241 ; Whitelock 1968, 10). Religious communities often received cheeses under the terms of wills (Robertson 1939, 59,

193). As a protein, cheese was of particular importance to monastic communities.

DAIRY PRODUCTS IN REMEDIES

Milk in leechdoms is sometimes to be taken warm from the cow, ewe or goat, to be drawn at one milking, or to be unsure (not sour) (Cockayne 1851, III lxv 2, II ix, xx, I lxvii, II lxv 2). The most general use for milk is as a liquid for boiling herbs in, or for making broth (op. cit., Peri Didacheon 37; I ix, II lxv 2). It is sometimes to be boiled, or gewyrd/geren (turned) by heating with hot stones or iron, or with rennet (op. cit., II xix, li 3, xxv, Lac. 17). The woman who could not feed her child was to take a mouthful of milk from a cow of one colour (op. cit., Lac. 104).

Ripened or newly-skimmed cream is called for in one recipe; in two others hens' eggs are to be mixed with fletan (cream), and three pieces of old lard or butter are to be taken with fletum (op. cit., III x, II li, III xiv 1).

Claene niwe buteran (pure, new butter) is part of an invalid diet, and the instruction drican amylte buteran bollan fulne (drink a bowlful of melted butter) is also given (op. cit., I i 3, 15, iii 8, viii 2 etc; I xxxi 7, Lac. XVIIIa, II xxvi, I xl). Butter is recommended to as an antidote to wolf's bane (op. cit.,

lxxxiv). It is to be added to chicken broth (op. cit., III xliii). Very common is the instruction to cook items - usually herbs or vegetables - in butter, sometimes with the addition of honey (op. cit., II li 2,3,4, liii, lvi 1, III xxiii 1, lxv, Lac. LI, LII, LII, LVI, LX, etc.). One leechdom states that butter is better than milk for boiling herbs in (op. cit., I ii 22).

Sealte buteran (salt butter) is also specified (op. cit., II lxv 1). In one leechdom butter is an alternative to oil (op. cit., Lac 3). Cu buteran is specified five times, suggesting perhaps that butter made from sheep's or goats' milk was more likely to be met with, but this may reflect the Mediterranean origin of the text (op. cit., I l 2, II li 4, lxv 2, Lac. XXXVII, Lac 29).

Cheese was often to be taken internally. For example, cheese with dry bread was part of an invalid diet for an asthmatic and included in the diet of a 'wit-sick' man (Cockayne 1851, III Peri Didacheon 52, III xli). Old cheese taken in goats' milk or sometimes roasted was recommended for dysentery (op. cit., II lvi 4).

ARTEFACTS

A number of factors militate against the survival and/or identification of dairy equipment but butter and cheese churns

were identified at Lund (Roesdahl 1982, 124; Edlin 1949, 55, 78, 104; Hartley 1954, 481, 486; Liebermann 1898, 455).

CONCLUSION

Cows perhaps became more common as the dairy animal on estates though peasants may have continued to rely on sheep for their own dairy products and in some areas - the marshes of Essex and Kent, for example - dairying continued to be based on sheep (Seebohm 1952, 157).

The impression is that cheese was the most important dairy product; butter was made from the whey, and the buttermilk drunk. Alternatively butter could be made first, and then cheese could be made from the buttermilk, again this would leave whey to be drunk. Consuming dairy products in this way makes an economical use of the resource. There would have been no standardisation and very great regional diversity, particularly where cheeses were concerned (Furnivall 1868, 85).

If the Leechdoms reflect general practice, butter was used primarily for cooking vegetables and herbs. Alternatives for this purpose existed - water, milk, oil and lard - and butter may have been something of a luxury. However, butter was to be produced

for the lord's table by the cheesemaker of Rectitudines Singularum Personarum, which may hint at the same use as today, butter for putting on cooked vegetables or as a relish for bread.

CHAPTER 4

BUTCHERY

NATURE OF THE EVIDENCE

The bulk of the information comes from animal bone reports, but these do not follow a standard format, nor do they always explore the same questions or give comparable information. The picture then is necessarily a sketchy one.

PLACE OF SLAUGHTER

All skeletal parts of meat animals were found in domestic waste pits in late Anglo-Saxon Exeter (Maltby 1979), as at Hamwih, Bedford, and other mid/late urban centres (Bourdillon 1980, 185; Grant 1979, 70ff, 141). In these cases complete carcasses could have been brought in from the agricultural hinterland, but it seems more likely that slaughter was carried out in the towns. Slaughter on the consumers' premises would have given them the benefit of all the perishable products.

BUTCHERY: THE BUTCHER

Consumers may have slaughtered their own animals, perhaps with the help of kinsmen and friends, or a professional butcher who

would have come to their premises. The slaughterman would kill the animal and hang it up, and may have returned to joint and salt the carcass (Groves in Kuper 1987, 97). It would have made sense to pay a skilled butcher: contaminated or damaged meat will deteriorate quickly (Walker in Fenton & Kisban 1986, 129, 130).

Payments for this service may have been made in kind. Butchers may then have had meat to sell to people who could not afford a whole animal. Rather than depending on a casual supply of meat, butchers may then have bought animals for slaughter if there was a steady demand. In time the households who had had their own beasts slaughtered, might find advantages in buying from a butcher. There are urban sites where the high percentages of waste bones argue for the presence of specialised butcheries. By the end of the tenth century oxen had to be slaughtered in the presence of two witnesses and it might have been easier to arrange for witnesses in a centre of population (Whitelock 1955, 404). The terms hyldere (slaughterer, flayer), flaesc tawere (butcher), flaesc straet (meat market) and flaescmangere (<retail> butcher) were in use by end of the period (Bosworth & Toller 1898, I 581, 291, 290, 291; Barlow et al. 1976, 27). In the country farmers no doubt continued to slaughter, process and store their own meat.

EVIDENCE FOR THE SALE OF JOINTS

Slaughter was carried on at the late ninth-century Whitehall farm site (Chaplin 1971, 127). There is no evidence that prime - or any - bones had been gnawed or destroyed by dogs, and there is therefore a good case for the dispersal of selected joints: leg and shoulder of mutton, quarters of beef, probably to what was already a substantial market in the city of London (op. cit., 126, 135-6). In the case of pigs, the foot bones are in short supply, so trotters may have been disposed of while the main joints of pork were salted (op. cit., 127, 136). As waste, they could have been fed back to pigs, but they may have been sold as delicacies.

METHOD OF SLAUGHTER

There was a biblical taboo against eating animals that had been strangled, and animals often had their necks severed with an axe (Owen 1841, 71; Turner 1828, III 36). Later, animals were forced to the ground (Walker in Fenton & Kisban 1986, 129) so the sitting cow in the Bayeux Tapestry may represent an animal pulled to its knees prior to slaughter (DM Wilson 1985, Pl. 45). At Hamwih there was no evidence for pole-axing, so the animals were possibly killed by having their throats cut (Holdsworth 1980, 9).

One fragment of pig's skull from tenth-century Skeldergate had a round hole 30mm in diameter immediately anterior to the bregma, which may indicate the way it was killed (O'Connor 1984, 29). The pole-axe, with a spike on the back of the blade, was used until very recently in conjunction with a cane, which was inserted through the hole in the skull to destroy the animal's nervous system (Walker in Fenton and Kisban 1986, 131). At Exeter the fragmentary condition of the skulls of cattle may indicate stunning with a hammer as well as removal of the brain (Maltby 1979). Presumably cattle were then bled (Walker in Fenton & Kisban 1986, 129; McGee 1986, 96).

Nowadays animals are hung up after slaughter, so that muscles do not set in a contracted position which toughens the meat (op. cit., 98). There is archaeological evidence that some sheep and cattle were strung up from the middle Saxon period on. Meat is left to age so that the accumulating lactic acid can break down the walls of the cell bodies which store protein-attacking enzymes. These enzymes attack the cell proteins causing them to degenerate into individual amino acids which generally have a strong flavour, and the tissue becomes softer, producing tender meat. This process is best carried out in cool conditions (1-3 degrees Centigrade), and takes from ten days to three weeks for beef, and from one week for lamb (op. cit.). Animals killed in summer would need careful attention or the meat would become

high, and this must have given rise to winter as the season for killing. Pork, which goes off more rapidly than other flesh, was traditionally never eaten in summer. A large animal presents the problem of getting the carcass cool quickly from its own body heat. The fact that Anglo-Saxon domestic food animals were smaller than most modern breeds was an advantage when it came to preservation.

BUTCHERY TECHNIQUES

There is evidence that the Anglo-Saxons had sharp knives for jointing, and saws may also have been used (Holdsworth 1980, 97; Cunliffe 1976, 272). The most commonly used instrument for cattle on some sites was a heavy chopper (op. cit., 273; Grant 1979, 59, 103). This technique would be considered heavy-handed in terms of modern butchery practice, where the careful separation of good and poor meat is important, but if the Saxon owner ate all his animal, this was not important (Cunliffe 1976, 273).

The Anglo-Saxon period seems to have witnessed a development in the techniques of butchery. On the Flaxengate site, Lincoln before 900, cattle carcasses were rarely split lengthways to give two sides of beef, but in the tenth-century levels 15-30% of vertebrae had been cloven in the sagittal plane, and this percentage rises to 50% in late eleventh/twelfth-century levels. Sagittally-cloven

vertebrae of sheep were also more common after the mid-eleventh century (O'Connor 1982, 16). By the second half of the eleventh century, some cattle vertebrae at Skeldergate/Yat were cloven lengthways, indicating some carcasses were butchered as sides by this time (O'Connor 1984, 20). On the eleventh- to thirteenth-century site of St John's, Bedford, cattle and sheep vertebrae were generally split in this plane (Grant 1979, 106). At Porchester the vertebrae were not generally found split, and splitting down the dorso-ventral axis was uncommon at Exeter before the post-medieval period (Cunliffe 1976, 272; Maltby 1979, 39). This major development in technique seems to have been introduced first in the east of the country, so perhaps Scandinavian invaders played a part. Traditional methods seem to have continued beyond the area of this influence.

The Bayeux Tapestry shows a carcass from which the lower limbs have been removed, although the head is still on (DM Wilson 1985, Pl. 38). This may indicate the pig was to be spit-roasted. The picture reinforces the evidence that the hooves and lowest bones of the legs were regarded as waste, not worth transporting (Rahtz 1979, 349; Hope-Taylor 1977, 328; Maltby 1979, 39).

On both Flaxengate and Bedford sites the evidence of butchery on pig bones was less extensive than on sheep and cattle, indicating that different joints were required (Grant 1979, 106). It may be

that the pig meat was to be processed differently, probably by salting.

Bones that were split for marrow extraction, but had not been cooked, indicate that some meat was de-boned before cooking (Holdsworth 1980, 97). At Exeter knife cuts on the distal epiphysis and lower end of the humerus were the results of cutting meat off the bone, not severance of the limbs, and there were corresponding cuts on the proximal portions of the radius and ulna (Maltby 1979, 39). Since this is the case, de-boned meat from substantial joints may have been eaten on sites where there is no trace of it in the archaeological record.

TONGUE & BRAIN

There is plentiful archaeological evidence for the extraction of the tongue and brain from all the meat animals throughout the period (Maltby 1979; O'Connor 1984, 17; Grant 1979, 106; Hope-Taylor 1977, 328; O'Connor 1982; Holdsworth 1980, 97).

MARROW

A practice for which there is both documentary and archaeological evidence is the removal of bone marrow. Ealle þa ban tosomne ðe man ge gaderian maege, 7 cnocie man þa ban mid aexse yr (gather

together all the bones you can, and crush the bones with the back of an axe) (Cockayne 1851, III, Lac. XXXI). The mearh (marrow) here was to be used externally in salves and ointments, but there can be little doubt that it was generally used to enrich soups and stews (O'Connor 1984, 17; Matlby 1979, 39; Buckland, Holdsworth & Monk 1976, 61ff.; Holdsworth 1980, 97; Cunliffe 1976, 272-3).

At Porchester so few whole bones were found, that the tentative suggestion was made that stews were a popular form of meat consumption (op. cit.). At Yeavering in the early part of the period in a kitchen-like dwelling there was an abnormally high number of bone fragments, never more than two inches across, resulting from the chopping of bones laterally and longitudinally (Hope Taylor 1977, 105). At tenth-century Skeldergate limb bones were reduced to small pieces, the majority having been chopped through lengthways, either specifically to extract the marrow, or to reduce the size of the pieces of bone for boiling in the stockpot (O'Connor 1984, 17). Chopping and splitting bones was practised on other sites too, and evidently continued all through the period on sites of different status. The chopping up of bones into small lengths presumably indicates stewing rather than roasting, a cooking method which would release the liquid marrow. The need to make full use of the food resource would have make the effort of chopping up meat and bones worthwhile.

OFFAL

Offal was probably a low-status food in Anglo-Saxon times (PE Jones 1976, 342; Owen 1841, 25, 71, 667). None of the food rents makes specific reference to offal, although that could be because it is more perishable than muscle tissue.

FATS

The various forms of fat: smeru (grease), swices (bacon fat), rysele (lard) and gelyndo (suet) are mentioned in Leechdoms, often for external use, but sometimes such items as healfne cuppan claenes gemyltes swices (half a cup of pure bacon fat melted), or rysle (suet) or unsylt smeoru (unsalted grease) are to be taken (Cockayne 1851. III Lac.116, I Herb. LXXV 5, III Lac. XXXIX).

EVIDENCE OF SITE STATUS

Where there are bones, then they may provide evidence about the status of a site. At one extreme, on the royal site of Yeavering the typical fossil of the early halls is the expensive butcher's joint (Hope-Taylor 1977, 327). In contrast, the heads and feet of older cattle and pigs, and most parts of the low-status sheep

seem to 'tell a story of scrupulous making-do' in Viking Age York (O'Connor 1984, 26; Whitelock 1955, 222; Maltby 1979, 39). However, this interpretation assumes that the inhabitants did not eat boned joints or salt pork, neither of which leaves any trace in the archaeological record.

CHAPTER 5

PRESERVATION

Some foods keep without any processing, and just have to be positioned away from creatures that would eat them. For short-term storage it was enough to hang some items from the wall or rafters (Colgrave 1940, 268-9). After processing, meats and cheeses could be hung up in the same way for long-term storage (Owen 1841, 753). This chapter is divided into three parts: (i) processing; (ii) storage; and (iii) manufacture and supply of salt.

(i) PROCESSING

Drying

Drying -in the sun, open air, by a fire, in an oven or kiln - was perhaps the most important method, since it was used for staple foods: cereal crops and beans (Liebermann 1898, 450). Leechdoms give instructions on gathering, drying and powdering herbs (Cockayne 1851, I xxii, lxxii, Lac XIVa, III xii 2). It was assumed that if you could not use fresh herbs, then you would have some dried (op. cit., Peri Did., II xxxix). Mushrooms and other fungi can be dried threaded on a string (Renfrew 1985, 17).

Seaweed can be dried, as can peas and beans (Cockayne 1851, Lac. 116).

Meat, birds and fish could also be dried (CA Wilson 1973, 113; Severin 1978). Into recent times in Scotland fish were dried in different ways (McNeill 1963). There is no reason why Anglo-Saxons should not have experimented and come up with different methods of preserving fish, each imparting its own taste. Less oily fish like flounders and large cod was probably dried, and made a very good reserve food in that it kept indefinitely (Roesdahl 1982, 120; Tannahill 1973, 216; Horander in Fenton & Kisban 1986, 54; Furnivall 1868, 98; Tannahill 1973, 216).

Smoking

Smoke is a complex substance containing alcohols, acids, phenolic compounds and some toxic substances which inhibit bacterial activity and retard fat oxidization, and impart the characteristic flavour of burning wood to the meat, poultry, fish and cheese it is used to treat Lauwerier 1986, 210; Cockayne 1851, II xxiv; Ayrton 1975, 11; Moryson 1617, IV 167; Roesdahl 1982, 120). A combination of salt curing and smoking was often used to minimise fat oxidization (McGee 1986, 104). There is some evidence for ceramic fish smokers being used to flavour,

rather than cure, the fish (Moorhouse in Aston 1988).

The wood used for smoking would depend to some extent on the supply available. Traditionally birch wood is used for smoking hams and herrings, oak and beech for kippers, York hams and bacon. Hams are sometimes smoked with juniper wood to impart a gin-like flavour (Edlin 1949, 41, 77). Dried seaweed was also used to smoke bacon in sea-coast counties. Smoking may also have occurred incidentally as foodstuffs were hung from rafters in smoky rooms.

Pickling

Pickling involves impregnating the foodstuff with acid, either directly with vinegar, though whey and various alcoholic liquids may also have been used, or indirectly by brining, which produces a medium in which acid-producing bacteria grow (Foote & Wilson 1970, 163; Holmes 1952, 92; Sass 1975, 109, 118-9). Salting was such an important means of preservation in Anglo-Saxon times that it is dealt with separately.

Pickling in honey has a similar effect, since a very sugary solution will also draw water across the cell walls and dehydrate bacteria which might otherwise cause food to decay and was likely to have been used in Anglo-Saxon times (McGee 1986, 370).

Boiling

Fruit will keep much longer when boiled down, so the natural sugars are concentrated, (McGee 1986, 171). The addition of honey before boiling would enhance this effect. The custom of boiling down rose hips and storing the resulting mush in jars is continent-wide, suggesting its antiquity; the same method was probably applied to other fruit (Sayce 1946). Such preserves may have been used as a relish (Clifton 1983, 19, 32).

Salting

Salt draws water across the cell membranes of some bacteria, dehydrating them when they would otherwise cause decay. Salting also causes the foodstuff to be impregnated with acid (McGee 1986, 173).

Salting was essential to food preservation in Anglo-Saxon England. The salter is one of the tradesmen of the Colloquy, and ranks in importance with the ploughman, fisherman and smith (Garmonsway 1978). When asked hwaet us fremaþ craeft þin? (How does your craft benefit us?), the salter replies, Þearle fremaþ craeft min eow eallum. Nan eower blisse brycð on gererduncge oþþe mete, buton craeft min gistliþe him beo...Hwylc manna þurhwerodum þurhbryceþ mettum buton swaecce sealtes? Hwa gefylþ cleafan his oþþe hedderna buton craefte minon? Efne, butergeþweor aelc cysgerunn losaþ eow buton ic hyrde aetwese eow, þe ne furþon þaet an wyrtum eowrum butan me brucaþ (My trade greatly benefits you all. None of you would take any pleasure in your meals or food without my hospitable art. How can anyone appreciate very sweet foods to the full without the savour of salt? Who could fill his cellar or storeroom without my skill? Look, you would even lose your butter and cheese, and you can't even enjoy your vegetables without making use of me) (Garmonsway 1978, 35-6). Leechdoms indicate meat and dairy produce were often salted (Cockayne 1851,

II iv, vi, xxxii, Lac. 39, 112). As well as preserving fats, fruit and vegetables, salt was important for treating the muscley parts of carcasses (Homes 1952, 92; Sass 1975, 109, 118-9; Kundergraber in Fenton & Owen 1981, 172-3).

Bay salt, coarse and heavily polluted with impurities, particularly calcium and magnesium salts, was apparently 'inferior' and did not penetrate fish or meat quickly enough to preserve the flesh (Tannahill 1973, 212). On the other hand it was also said to be 'preferred to finer salts for preserving processes', since fine salt tended to seal the surface tissues, but not to enter further (CA Wilson 1973, 39). Traditional recipes reconcile this contradiction, since they tend to contain both refined and bay salt (Hartley 1954, 329ff.). Just how pure Anglo-Saxon salt would have been is a matter of conjecture, although white, i.e. relatively refined, salt seems to have been preferred (Cockayne 1851, I v, vi, xxxviii 5, II x). Although it was probably not realised in Anglo-Saxon times that saltpetre (potassium nitrate) was useful in the curing process, nitrites would have built up in the wooden utensils and the salting larders (McGee 1986, 509; Hartley 1954, 326).

Dry salting, or curing, would have been more expensive than brining, as more salt is required, and time and energy would be expended in pounding salt to a powder (Horander in Fenton &

Kisban 1986, 55). With this method it is useful to have pepper to coat the knuckle area of hams, to prevent maggots (Kuper 1977, 42).

Whatever the method used, bacon was produced in quantity. An inventory of Thorney Abbey listed 43 flitches of bacon and to Peterborough were to go hundteongig fliccena 7 eal þa smean þe þerto gebyriað (a hundred flitches and all the delicacies that go with them) (Robertson 1939, 74-5). The highest quality bacon comes from lean-fleshed primitive breeds like the Tamworth, which has not been crossed with Chinese pigs (Wiseman 1986, 63, 65, 70).

A traditional curing mixture in Yorkshire and Westmoreland was common salt, bay salt, saltpetre, black pepper and honey. All these ingredients were available to the Anglo-Saxons at least towards the end of the period. The hams were turned and rubbed with the mixture twice a week for a month, then soaked for twenty-four hours and hung up to dry (Ayrton 1975, 79). Even with this cure, York hams were considered inferior to those of Gloucestershire and Buckinghamshire, since pigs in these two counties were fed on beechmast which gave the hams a special nutty flavour (op. cit.).

If after dry salting the meat was just dried, it was 'green'

bacon, but it could then be smoked. Meat pickled in brine could also be smoked subsequently (Ayrton 1875, 78).

A number of animals were probably slaughtered throughout the autumn because they had been fattened up on pasture, or, in the case of pigs, acorns and beechmast; also flies are absent on cool nights (Wiseman 1986, 178).

Most of the large numbers of fish referred to in food rents must have been preserved, very often by salting.

Other uses of salt

Perhaps because of what was seen as its purifying quality, salt was part of a specially consecrated diet for anyone pledged to undergo the ordeal (Whitelock 1955, 385). It was also needed for ecclesiastical ritual, and for the ancient charm addressed to Erce for the fertility of land (Cockayne 1851, I 402).

Salt was also used much as it is today, as a flavouring with radish, for cooking with beans, with meal and butter to give a savoury porridge, in a marinade for beef or even for an emetic drink (op.cit., I xvii 2, xxxi 1, lxxxiii, II vii; I lix).

Salt intake would need to increase slightly with a predominantly cereal diet: but the Anglo-Saxon population would have been unlikely to be short of salt when quantities of salt meat were consumed. The prevalence of salting as a means of preservation perhaps explains the comparatively large drink allowances.

(ii) STORAGE

Cereals

After harvesting and carting, when they were reasonably dry, sheaves were stacked outside, with heads to the centre of the rick, which was then thatched to keep the rain off, or in granaries (the term bere aern (barn) does not seem to have been used before c.950) (Liebermann 1898, 454; Monk 1977, 278; Owen 1841, 327: Cockayne 1851, III, MS. Cott. Vitell. E. xviii. fol. 61; Cunliffe 1976, 126; Bosworth & Toller 1898). Perhaps the owners of large estates had the resources to build barns large enough to accommodate sheaves, and perhaps they needed to do this if they had no one to keep a permanent eye on ricks standing in the open, but a barn came to mean a covered building where a cleaned crop was stored (Grube 1934, 145). Peas and beans were also threshed and, presumably, stored in the barn (op. cit.). The official appointed to have charge of the grain was the berebrytt (barn-keeper/granger) (Trow Smith 1957, 138). Those without the resources to build barns, or large supplies of grain or legumes, used pits (not a particularly successful method), or stored the food in their houses (Monk 1977. 341: Hickin 1964, 89; Turner 1828, II 513).

Like grain, flour and meal had to be kept dry in order to deter

insect infestation and the growth of moulds. Flour or meal could be stored in chests or bins, the cyste and mydercan of Gerefa (Liebermann 1898, 455). An ark was generally used for meal, and a bin for flour. It seems likely that the meal ark was a convenient place to store other foods that needed to be kept dry. Moreover, such containers could be padlocked, so that provisions were under lock and key.

Bread could also have been stored in the meal chest, but it was probably not kept for more than a few days, being baked as necessary, although a kind of unleavened bread that would keep for weeks, months, or even years, was traditional in Europe (Weaver in Fenton & Owen 1981, 355; Moberg 1973, II 38-9). Such bread may have been baked when there was a surplus of grain, for it was probably a safer way of preserving cereals than leaving them in store in their raw state.

Containers

Storage Jars

Croc (crock) was probably the Anglo-Saxon term for a storage jar, some of which had a relatively narrow neck and an everted rim, suitable for tying on a cover (Fenton & Kisban 1986, 114-5; West 1963, 246-72: 1982. 405).

Barrels and Boxes

Barrels and tubs were used for the storage of wet and dry goods (Edlin 1949, 72, 99). Examples of barrels have been found in archaeological contexts, since they were re-used as well linings. It is generally assumed that barrels were used for wine, but the Norman period oval cask found in the bottom of a food storage pit at Pevensey Castle may have been used for pickling (Spriggs 1977, 12). Time-consuming to make, and needing skilled craftsmanship, a new barrel may have been used first for wine, then, if it became tainted, for pickling, before being relegated for use as a well-lining.

The small boxes for which fittings, including locks, were found might have included in their contents particularly valuable spices (Evison 1987, 103; Ottaway 1985, 7-12).

Use of an airtight seal

Oil or clarified butter may have been used for conserving meat (McGee 1986, 104; Bonser 1963, 191; Ayrton 1975, 147-9; CA Wilson 1973, 64-5; Kuper 1977, 38, 41).

Storage Conditions

Alfred records in his addition to Orosius that Wulfstan told him that þaer is mid Estum an maegð þaet hi magon cycle gewyrcan (there is among the Estonians a tribe that can create coldness) (Sweet 1954, 22). They used it for preserving dead bodies during a lying-in period, but if man asette twegen faetels full ealað oðde waeteres, hy gedoð þaet oþer bið oferfroren, sam hit sy sumor sam winter (anyone sets down two vessels full of ale or water, then they cause one or the other to become frozen over, whether it be summer or winter) (op. cit.). This can be effected with saltpetre (potassium nitrate), but is recorded because it was evidently not practised in Anglo-Saxon England. In any case, unheated storerooms were likely to have temperatures not much above freezing for some of the winter months. Stores had probably diminished by the time hot weather came, and restocking of dairy goods and meat would not start until the advent of cooler weather.

Butter needs to be stored somewhere cool, since it will become rancid even when salted (Hartley 1954, 481). Unsalted cheese would have to be treated as butter, although it would not go rancid as quickly as unsalted butter. In many parts of Britain it was the custom to bury butter in suitable containers, in peat

bogs and a similar method may have been adopted for mutton fat in areas of Scandinavian influence (Renfrew 1985, 14; Brothwell 1969, 44; Furnivall 1868, 98). The partial exclusion of air helped keep the fat fresh. Perhaps most households had to make do with cool storerooms. Pots made of porous clay could have been dipped in water which took up heat to evaporate, lowering the temperature of the contents. Salted cheeses could be stored somewhere dry, in the meal chest, for example, or 'hung up'.

Eggs may have been preserved in ash pits, old malt, straw or bran, but results were often less than satisfactory (Todd 1987, 175).

Root vegetables could have been stored in cellars or dark storerooms. By spring, when the roots were less palatable, their shoots could be used as early salad (Kundegraber in Fenton & Owen 1981, 173).

Storehouses were separate outbuildings, but storerooms could probably be found within large dwellings (Colgrave 1940, 346; Olsen & Schmidt 1977, 235; Seebohm 1952, 95). The place where salt meat was kept was called, on account of the preponderance of bacon, a spic-hus (bacon house).

Cellars

There is archaeological and documentary evidence for cellars, which are ideal for storage, remaining cool in summer and winter (Hodges 1982, 131; Wiseman 1986, 178; Williams 1984, 133; Biddle 1976, 14, 40, 44, 339-40). Ad hoc cellars were probably holes in the ground, like the food storage pit from the Norman period at Pevensey Castle (Spriggs 1977, 12).

Responsibility for domestic stores

Girdle hangers found in pagan Anglian graves may represent the bunch of keys worn by Roman women as a symbol of their authority and probably indicated the status of their owner (Meaney 1981, 178-9; Evison 1987, 116-7). A chatelaine has generally been seen as evidence of matronly authority, and this would seem to be confirmed by Aethelbert's law code: Gif friwif locbore leswaes hwaet gedeð ... xxx scll. gebete. This is translated by Fell as, 'If a freewoman in charge of the keys is found cheating...then 30 shillings compensation is to be paid' (Fell 1984, 60-1). This law would seem to parallel the Welsh code where the freewoman had responsibility for her stores (Owen 1841, 95, 517). II Canute confirms this since it states when legislating about stolen goods: Ac ðara caegan heo sceal

weardian, þaet is hire heddernes caege 7 hyre cyste caege 7 hire taegan; gyf hit under ðyssa aenigum gebroht byð, ðone bið heo scyldig (But it is her duty to guard the keys of the following-that is her storeroom key and her chest key and her (?)cupboard. If the goods have been put in any of these, she shall be held guilty) (Robertson 1925, 214-5).

Pests

Probably both the housemouse and black rat were present in Anglo-Saxon England (Prummel 1983, 245; O'Connor 1988, 39). Corn had to be kept from these pests which could make inroads on the stores, contaminate the grain they did not eat and transmit pestilence (Bonser 1963, 76). The reeve was cautioned not to neglect even a musfellan (a mousetrap) (Liebermann 1898, 455). The remains of cats are found with remarkable frequency on Anglo-Saxon sites, including the earliest, and an acredited mouser was given a value of four pence in the Welsh Laws (Clutton Brock in Wilson 1976, 384; Bell 1977). Bones of weasels and polecats found on early medieval sites may indicate their importance in the domestic economy, since they were tamed and trained to catch rats and mice (Seebohm 1952, 133).

Flour, cereals and cereal products, cheese and dried fruits can become infested by the flour mite which causes digestive

disorders in those who consume infected foodstuffs (Hickin 1964, 143). Insects can also transmit moulds from one commodity to another as well as disease (op. cit., 93, 98, 103). Stores would have to be periodically checked, so that if there was infestation of any sort it could be dealt with before it contaminated quantities of food. On a large estate the reeve was responsible for the stores - their security and condition, cautioned to neglect ne corn ne sceaf, ne flaesc ne flotsmeru, ne cyse ne cyslyb (neither grain nor sheaf, meat nor fat, cheese nor rennet (Liebermann 1898, 453). In monasteries this duty rested with the cellarer (Knowles 1940, 462).

(iii) SALT PRODUCTION & SUPPLY

Vessels for salt

A container made of lead and called a lead was probably used for salt production and during the salting process as it would not be corroded by the salt (Loyn 1970, 108). At Bremesgrave, Worcester, which was in the king's demesne, Domesday records six plumbi ('leads') for boiling salt, and at Terdeberie were two plumbi (Commissioners 1819, 413-14). Provided lead was not in direct contact with flames, there was no reason not to use it, as it has a melting point of 327.5 degrees Centigrade. Gerefa and inventories list the lead with other catering equipment (Liebermann 1898, 455; Robertson 1939, 75). Archaeological evidence for such containers is likely to be scarce, as lead is a valuable metal, easy to melt down and re-use, but some fairly large lead vessels are known from the later period, like that from Westley Waterless, Cambs. (Wilson 1976, 267; Fox 1948).

Salt Production

Salt can be made from the ashes of certain plants, and from seaweed (Kuper 1977, 102: Roesdahl 1982, 120). However, there is no evidence that this method was resorted to in Anglo-Saxon England, perhaps because no district was very far from either the sea, or salt-producing areas. Bede mentioned that England

possessed salt pits (Hit hafaþ eac þis land sealtseaþas) which may refer to salt springs and/or pits into which the sea flowed at high tide (Miller 1890, I, 1 26). Water trapped in the pit evaporated in the sun's heat and the wind to leave a deposit of salt. However, in Domesday salt pans were usually conveyed with 'vessels for the boiling of salt' (Turner 1828, II 547; CA Wilson 1973, 29; Darby 1940, 39).

Domesday mentions 285 salt pans in Sussex alone, one hundred at Rameslie, a lost place-name, and most other seacoast counties have large numbers (Turner 1828, III 247). In the main the pans ran from Barnstaple in north Devon, round the south coast, and up round East Anglia. The waters of the Bristol channel may have been too turgid for successful salt extraction, or perhaps the superior salt of Worcestershire with its 50 salinae was near enough at hand. There were also salinae in Cheshire (10), Herefordshire (8), Gloucestershire (7), Shropshire (6), Warwickshire (3) and Oxford (1) (op. cit.).

The salt from geological deposits in Worcestershire was being extracted from salt springs at least as early as the late seventh century (Finberg 1972, 12, 86). Charters of the eighth and ninth centuries include salt pits or salt production plant (op. cit., 98, 101).

Sometimes the Domesday survey indicates that the saltworks were not objects of great importance: some yield scarcely any revenue. The 285 salinae in Sussex averaged two shillings and five-pence halfpenny, but one saltworks in Devon paid 13.10 shillings (Commissioners 1819, 413). By way of comparison, a salt pan in Droitwich was worth four shillings when a house in Worcester was valued at one; five saltpans in Halesowen were worth sixty shillings, the mill ten shillings (op. cit.; Bland, Brown & Tawney 1914).

At the time of the Domesday survey there seems to have been no standard measure for salt, which is recorded in ambrae, bulliones, mensurae, mittae, sextaria and summae (Commissioners 1819, 415). An amber was four bushels, so that we know the production of v salinae de cx ambris salis at Wassington in Sussex to have been 11 tons.

Salt workers

Salt workers seem to have been men working in a small way, renting their own salt pans. It is likely that many were fishermen or closely associated with fishermen (Loyn 1970, 106). Some may have been full-time salt-boilers, like Picot Sannarius of Winchester (Barlow et al. 1976, 85, 115). Block salt required considerable effort to reduce to powder, and the individual,

Hack-Salt, who is recorded in the Winton Domesday, may have had an occupational name (though equally, this may be a nickname) (Barlow et al. 1976, 96).

Provision of a salt supply

Large establishments were anxious to secure the salt supplies necessary for catering on a large scale. The earliest reference to the important Worcestershire salt trade occurs in a charter of King Wulfhere, who reigned from 657-74. He made over 50 manentes at Hanbury with all the meadows, woods and brine pits belonging thereto to Abbot Colman (Finberg 1972, 12, 86). By effecting an exchange of properties, including saltworks, the king and the community at Worcester seem to have finalised the convenient provision of their salt supply in 716/17 (Loyn 1970, 106; Whitelock 1955, 450). There are other eighth-century references to a salt supply, like the exemption from toll of a ship bearing salt in favour of a Kentish nunnery, and in 732 Ethelbert gave land at Sampton, Kent, suitable for the boiling of salt, to Abbot Dunn, plus 120 laden wagons of firewood annually for cooking the salt (Whitelock 1955, 450-1). It was common to provide ligna ad coquendum sal (wood for boiling salt) with grants of salterns (Page 1985, 221).

Similar grants continued to be made in the ninth and tenth centuries, sometimes in connection with weirs, so provision was made for the fish caught there to be preserved (Robertson 1939, 46). By the end of the period both Glastonbury and Sherborne

Abbeys had procured coastal estates in Lyme, whose importance seems to have rested entirely on the salterns (Keen in Haslam 1984, 229).

By the end of the tenth century some ecclesiastical establishments had more than provided for their own needs for salt, and were renting out saltworks as going concerns (Finberg 1972, 110, 126, 133).

Droitwich, Worcs., the chief salt town of England, was a very specialised community in which, while the majority of the pans belonged to king or earl, many other people had interests (Whitelock 1952, 115-6). Individuals also negotiated a salt supply. According to the Winton Domesday, Siward the Moneyer owed William of Chesney lodgings, salt and water (Barlow et al. 1976, 106). Probably most smaller households were dependent on the salt pedlars who transported salt from the saltpans on the coast, or from the wiches of Cheshire and Worcestershire, by way of the extensive system of saltways (Finberg 1972, 73; Hill 1981, map 189; Smith 1964, I 19, 218, 220, 222, III 62).

Tolls

A cartload of Cheshire salt drawn by two or more oxen and travelling to another county paid fourpence at the time of

Domesday (Langdon 1986, 49). Salt pedlars from Cheshire were given a preferential rate of one penny per cart (Whitelock 1952, 116). The temptation with tolls based on the packload, was to load a horse with as much as it could possibly carry (Langdon 1986, 49).The rate was twopence for a horseload or eight men's loads (Whitelock 1952, 116). The fact that salt from Droitwich commanded a higher toll than salt from elsewhere perhaps suggests that it was thought superior. The cost of transport and the taxes probably exceeded the price of the salt itself.

CHAPTER 6

COOKING

FIRE

WOOD

Securing a supply

It is sometimes difficult to ascertain for what purpose wood mentioned in grants is intended (Robertson 1939, 13; Page 1985, 221). Uuidigunge (wooding) is the only unambiguous term for fuel (op. cit.).

Cutting and gathering wood is one of the summer tasks listed in Gerefa. Wood was taken back to the homestead, sometimes in carts drawn by oxen as illustrated in two early eleventh-century calendars (Temple 1976, no. 199). Splitting the wood was a job for winter (Liebermann 1898, 454), after which it was stacked into a scidhraec (Robertson 1939, 241) and kept dry (Bosworth & Toller 1898, 213).

A peasant household presumbly found its own firewood. Rectitudines Singularum Personarum refers to wuduraeden be landside (the right of cutting wood according to the custom of

the estate) (Liebermann 1898, 449). A larger household called for more fuel, and the owners of large establishments used their power to ensure that they were supplied with wood. At Hurstbourne Priors, Hants., in about 1050, the ceorlas had to supply IIII fodera aclofenas gauolwyda to scidhraec on hiora agenre hwile (4 fothers of wood, split and made into a stack in their own time) (Robertson 1939, 241). Royal charters sometimes granted the right to gather firewood (Whitelock 1955, 484; Finberg 1972, 105). Tithes and guild dues included firewood (op. cit., 560; Field 1972, 209).

DIFFERENT TYPES OF WOOD

Anglo-Saxons who had to make fires for cooking no doubt knew what is now only accessible to most of us in mnemonic poems like 'Logs to Burn' (Edlin 1949, 62-3, 156-7, 170). An analysis of the charcoal in a seventh-century hearth provides evidence of hazel, hawthorn, oak and poplar or willow (Matthews in Hawkes 1985). Assuming that it is willow rather than poplar charcoal, all the woods are good fuel. Unfortunately there are too many imponderables to make it possible to work out by careful excavation and analysis of hearth material what kind of fire had been made, and therefore what sort of cooking process may have been been undertaken.

To spit roast a pig of 120lb dead weight, the ideal fuel is 15 cwt of large oak logs, a foot long and thoroughly seasoned, cloven into halves or thirds and placed on end to form a bed which will burn steadily. On this 15 cwt of ash with a diameter of 4-5" and in foot lengths (cut at least a month previously) is used to provide local areas of fiercer heat in line with the quarters of the animal.

OTHER FUEL

Glosses give O. E. col for carbo (coal), and sinder for scorium (cinder, clinker), and since col and sinder are O.E. words, this suggests they represent things known to the Anglo-Saxons from an early period (Wright 1871, 32). Charcoal may also have been used as a domestic fuel, particularly in braziers. Although reeds and straw produce a hot fire, and were used for baking, they burn very quickly, and processes like roasting would have been difficult (Corran 1975, 37; Mellows 1980, 2). It may be that woodland was decreasing during the Anglo-Saxon period, and that some areas of the Midlands, Yorkshire and the Fens had no woodland at all (Rackham in Biddick 1984, 75). If this was the case, then other, less ideal, fuels would have had to have been exploited, with a consequent modification of cooking processes.

It seems that even fires which could call on the best fuel were

what we would regard as excessively smoky (Owen 1841, 25). Soot (hrum) was evidently deposited on utensils in some quantity (Cockayne 1851, I xi 2, lxxii, for example). Food cooked by direct exposure to the heat of the fire, or in open pans may have had a smoky flavour.

FIRE MAKING

Fire-steels are often found in pagan Anglo-Saxon graves, together with flint or pyrites against which the iron could be struck to obtain a spark (Meaney 1981, 104; Cunliffe 1976, 195; West 1982, 73; Welch 1983, passim). These firesteels very often doubled as pursemounts, the purse almost certainly containing tinder for starting a fire, and sometimes a flint too (Brown 1977, 451-77). They were evidently in use throughout the period, occuring in such late Saxon contexts as the town of Thetford and the palace site at Cheddar (Rahtz 1979, 267). Tinder was often made from touchwood or punk, rotten wood decayed by fungal attack, birch bark, dried brushwood, gorse or straw (Edlin 1949, 159: Mellows 1980, 2).

Blestbaelg (bellows) were known (Pheifer 1974, 25; Bosworth & Toller 1898, I 82; Riddles 37, 86; Dodwell 1982, 73). Fire tongs are shown also in the Anglo-Saxon calendar, BL Cott. Julius A IV (Wright 1871, 32). Pokers and a fyr-scofl are recorded (Bosworth

& Toller 1898, I 354). Firecovers were used to keep the fire alive at a time when fires were not particularly easy to light, and to prevent sparks escaping (Hurst in Cunliffe 1964, 126).

COOKING: DIRECT APPLICATION OF HEAT

Food could be cooked by direct exposure to the fire, or by heating in a utensil placed in, on, above, under or beside the fire. Such fires were often the domestic hearth for warming a room and its occupants, as well as for cooking. The fires may have been lit directly on an unprepared floor or more commonly on a hearth made of clay, tiles and stones (West 1982, 37, 38, 41, 62, 71, 141, 194). Bede's account, Waes micel fyr onaeled on middum þam huse (a great fire was kindled in the middle of the house) accords with archaeological evidence from West Stow - and elsewhere (Miller 1890, I, 1 180-1; West 1982, 37, 38). Later hearths may have been built against a wall, if this was backed with stone (Owen 1841, 523).

There is evidence that hearths were also made in the open (Copley 1958, 172-3; Bell 1977, 276-86). No doubt cooking was carried on outside on suitable days, when the houses could be kept cool and free of smoke.

It is possible that the Anglo-Saxons used chafing dishes and

stoves, in effect portable hearths (Pheifer 1974, 3; Cockayne 1851 III lxii; Wright 1871, 99).

COOKING: INDIRECT APPLICATION OF HEAT

If utensils were available, but were not fire proof, their contents, liquid or semi-liquid, could be heated by 'pot-boilers', stones heated on the hearth and then dropped into the vessels, using tongs or dampened wooden shovels, as was the case at Sutton Courtney (Copley 1958, 172-3). There is evidence that heated stones were used for boiling and roasting material in troughs and hide vessels too (Renfrew 1985, 23). On occasion a heated iron or poker might be used to heat a liquid. Both methods are referred to in Leechdoms (Cockayne 1851, II xxv, xxxiii, No. 59).

If no utensils were available, then a cooking pit, probably lined with stones, could have been used. Turner deduced that Anglo-Saxons may have cooked their victuals in pits since seathan (to seethe, simmer, boil) was derived from seath (a pit) (Turner 1828, III 34). An experiment in pot-boiler cookery showed that a ten-pound leg of mutton wrapped in clean straw tied with a twisted straw rope, as indicated in early Irish literature, was cooked after 3 hours 40 minutes uncontaminated by ash or mud (C.A. Wilson 1973, 64-5).

OVENS

Earth ovens

Earth ovens used the heat from glowing stones heated on a nearby fire. A pit was dug into the ground, was perhaps lined with stones, and either pre-heated with brushwood, or half-filled with red hot stones on which the meat, packed in clay or leaves, was placed. It was then covered with more stones which, as they cooled, may have been replaced, or they may have been covered with earth or turf to retain the heat. In either case the meat would cook in a time comparable to that taken by a modern oven (C.A. Wilson 1973, 64-5; Roesdahl 1982, 124).

Hot-air ovens

Ovens in which the contents were cooked in hot air were known to the Anglo-Saxons. The ofn which was one of the fela ðinga sceal to tune (many things a farmstead must have) was probably of this type (Liebermann 1898, 454). There were three main methods of heating an oven. One, still in use today, is to burn faggots of brushwood in the oven, raking out the ashes before putting in the food to be cooked (Jaine 1987, 44). Another method was to light a fire beneath, or around or on top of an oven - a small 'oven' could be made by inverting a pot and putting embers around and on

it. The third method was to heat the oven by building it into a construction where hot air would be conducted round it in flues. The second and third methods are still in use, as is a combination of them.

According to the literature, ovens could be quite large: big enough for a man (Herzfeld 1900, May 3; Skeat 1881, St Sebastian 1. 291; Bonser 1963, 248; Cockayne 1851, II li), as are some ovens in the archaeological record. At the fifth- to seventh-century site of West Stow half a sunken-floored building was occupied by the remains of a large clay oven, 3'6" along the surviving axis; its floor consisted of a flat plate of clay 2 1/2" thick, incorporating a layer of flints, with walls up to 6" thick (West 1982, 85). The mid-period site of North Elmham yielded an oven of comparable size. A mid eighth- to mid tenth-century oven at Porchester in building S11, probably a bakehouse serving the hall, had been built largely of re-used Roman tiles and some lumps of limestone set in clay, with walls approximately 15" thick; the floors of the stoking chambers had been worn considerably in use. It had been built over the remains of an earlier oven 3' x 5' in area and 9" deep, the floor of which showed signs of intensive burning (Cunliffe 1976, 30-1, 58).

Ovens were probably a fire risk (Mellows 1980, 52). It was

probably this element, as much as the convenience of having all the baking processes together in a single-purpose building, that caused them to be housed separately.

Use

Perhaps their most important function was to cook bread but they could also have been used for roasting joints, perhaps coated in a flour and water paste which sealed in the juices.

KITCHENS

Provision of food on a large scale resulted in the use of a detached building as a kitchen, as distinct from a bakehouse (Rahtz 1979, 8; Skeat 1881, St Thomas l. 97; Hope-Taylor 1977, 63). According to Athelstan's Laws, a ceorl who had a kitchen could be accounted a thane (Turner 1828, III 83). From the tenth century the kitchen seems to have been integrated in the manor complex itself (Cunliffe 1976, 126; Davison 1977, 109, 113; Barlow et al. 1976, 293).

By the tenth-century monasteries had a coquina (kitchen) (Symons 1953, xxxi). Everyone had to take their turn of kycenan to þenienne (to work in the kitchen) (Napier 1916, 16). At Abingdon Aelfstan prepared food in the kitchen for the builders of the monastery (Whitelock 1955, 834).

In smaller households it is likely that part of the main room was used for cooking.

COOKS

The O.E. word coc (cook) is a masculine noun and those cooks who are mentioned have male names: Aelfsige þene coc (Aelfsige the cook), Albold cocus (Albold the cook) (Fell 1984, 49; Munby

1982). The cook of Aelfric's Colloquy is also a man, and he does not seem to be operating in a monastic context: with his ge (you) he seems to be addressing people in general (Garmonsway 1978, 37).

A specialist cook is likely to have been male and full-time. Considerable strength was needed to lift large cauldrons and their contents (Whitelock 1955, 235), whilst the quantity of cooking in a large household would have been too great for a part-time worker (Davies 1982, 50; Owen 1841, 47, 49, 355).

In a peasant household the cooking methods were no doubt adjusted to the amount of time that could be given to this task, which was probably worked in with other jobs. Stews of salt meat and bacon, for example, would have needed little attention, beyond making sure that the fire was kept alight.

The interlocutor in the Colloquy suggests most people could cook for themselves: we sylfe magon seoþan þa þingc þe to seoþenne synd, 7 braedan þa þingc þe to braedene synd (we can boil the things that need to be boiled and roast the things that need roasting ourselves) (Garmonsway 1978, 37). Aelfric's cook does not develop the difficulties of his profession, but it is not without significance that one of the dishes he cites - faett broþ (rich broth) may have been a speciality. For providing William I

with a dish of farinaceous pottage, his cook, Robert Argyllon, received a carucate of land (McKendry 1973, 12). Leechdoms tell of barley meal or groats togaedre gebriwed swa cocas cunnon (cooked together as cooks know how) which suggests that some skills were restricted to cooks (Cockayne 1851, II xxvi).

It seems likely that large monastic establishments would have specialist cooks although, according to The Rule of Chrodegang, each monk had to take a turn working in the kitchen and to return the batterie de cuisine intact and in good condition at the end of his week's work (Napier 1916, 16). The Rule does however consider the case where neod beo þaet laewede cocas þaeder in gan (it is necessary to get in lay cooks). They were to leave quickly swa raðe swa hi geþenod haebbon (as soon as they had served/done their work) (op. cit., 21).

As well as specialist cooks in large establishments, the fact that cooks are recorded in Domesday at Bury St Edmunds, may indicate that there were also cooks catering for pilgrims, setting up their cookshops in towns which attracted travellers (Loyn 1970, 370). In Winchester in 1100 Hugh paid the king four pence for his kitchen, and received from it five shillings, which perhaps suggests a cookshop (Barlow et al. 1976, 98). As well as Theoderic the king's cook, and Herbert the chamberlain's cook, there were seven others simply described as 'the cook' who rented

or owned property in Winchester at this time, as well as a confectioner (op. cit., 13, 18, 47, 91).

PREPARATION

Some preparation was doubtless done at table: getting oysters or periwinkles of scellum (out of their shells), or peeling apples (Banham 1991, 36; Cockayne 1851, Vol. 1 358, II i 1, xlix).

A large variety of leaves was eaten as green salad, but was usually picked over to remove poisonous plants: St Martin on his mete þigde þa aettrian wyrt elleborum hatte (ate in his food the bitter herb called hellebore) (Skeat 1881 St. Martin 1.196). Most vegetables were probably washed, even when eaten raw (Cockayne 1851, Leechbk I ii 23).

Some Leechdoms call for a claenne panne, claene faet (clean pan, clean container), but it may have been difficult to clean the various containers used in the preparation of food effectively (Cockayne 1851, Peri Didachaeon 36). This may be why a number of recipes call for new utensils (op. cit., I iii 12, xix, xxi, xliii, xlv 1, xv 5, vi 3, II xli). The success with which metal and soapstone vessels can be cleaned (in comparison with wooden and earthenware containers) added to their value.

After a preliminary scraping and wiping, perhaps with bunches of twigs, leaves or heather, pans could be cleaned with an abrasive sand mixture, or with wood ash (Edlin 1949, 117). Soap was known

at least to later Anglo-Saxons (op. cit., 159; Cockayne 1851, I, xxxii 2). Presumably the outside of pans was not usually bothered with (Herzfeld 1900, April 3).

Meat, from large oysters to carcasses, would have needed cutting up with knives or axes (Holdsworth 1980, 131; Roesdahl 1982, 125; Hodges 1982, 132; Owen 1851, 581). The Anglo-Saxons were able, not only to produce portions manageable enough to be eaten with the fingers, or small enough to be spooned up, but to mince foodstuffs (McGee 1986, 108; Hieatt 1980, 298). Minced meat eked out with offal, including such organs as the lights which are not now normally sold for human consumption, cereals, herbs and suet, and sometimes incorporating the blood of a slaughtered - or living - animal, is an ancient dish found in many parts of the British Isles (Ayrton 1975, 179, 296; CA Wilson 1973, 63; Kuper 1977, 51). Mixtures of this type are often put into animal membranes to make sausages or puddings (Kuper 1977, 51, 171; Hartley 1954, 111, 148). Mearh is used to translate lucanica (a pork sausage) in the Epinal and Erfurt glosses (Pheifer 1974, 32). Mearh-gehaecc, mearh-haeccel are terms for meat puddings; haccian means to chop up (Bosworth & Toller 1898, I 674, 497). (Furnivall 1868, 285). Such puddings or sausages could be made from the meat of virtually any edible animal or bird and could be boiled or grilled: in the latter case no further container was necessary.

For invalids and children who were being weaned, it was necessary to reduce food to a pulp. It could be gegnid on mortere (ground in a mortar) (Cockayne 1851, Leechbk I iv 2, 1 2, 1 3, vi 5, 1 2). Bolting cloths, hair and metal sieves and strainers were known (Owen 1841, 723, 725, 95; Cockayne 1851 I i 12, ii 21, xxxi 5, lxiii 1, 3; Bruce-Mitford 1975, 159; Davies 1980, 171-2, 176).

Salt meat and fish and dried foods were soaked before cooking (Kuper 1977, 19; Herzfeld 1900, l.663).

The principle of marinading was known: beef is marinaded in vinegar and herbs (Cockayne 1851, Leechbk II vii; McGee 1986, 108). Vegetables and apples were also marinaded - the latter overnight in wine and honey (Cockayne 1851, III lxvi, II iv).

Clay was sometimes used for encasing joints, much as a pastry case would do, and for wrapping seabirds, when the feathers would peel off with the clay (Alcock 1987, 47; CA Wilson 1973, 113).

Other miscellaneous instructions in Leechdoms read very like modern recipes. Quantities are not given with the same degree of accuracy, but anes scyllinges gewyht (a shilling's weight) or hand fulla (a handful) give some idea of quantities (Cockayne 1851 Peri Didacheon no. 49, Leechbk I ii 23). Clam of þam ilcan

wyrc (work it into a paste), geswet mid hunige (sweeten with honey), gehrer twa aegru on hatum waeter (beat two eggs in hot water), screda niwne cysan (shred up new cheese), gescearfa þas wyrto (shred the vegetables), mid hunige gewealcen to snaedum (bind into mouthfuls with honey) are all perfectly comprehensible (op. cit., I i 3, I i 7, I xxxii 2, I iv 3, Peri Didacheon 21, III xlviii, II xxxiii). Temperature is indicated: on waermum gledum (on warm embers), aet leohtum fyre (in front of? a gentle fire), berec on gledum (smoke on embers), do of heorde (remove from the heat) (op. cit., I ii 1, 9, I vi 4, iii 12). While such instructions sound archaic, because an open fire is generally no longer used for cooking, welle swiþe oþ þriddan dael (boil strongly until reduced by a third), oþ huniges þicnesse (until it has the consistency of honey) sound perfectly modern (op. cit., I ii 22).

COOKING METHODS

From a survey of Anglo-Saxon utensils, raw materials and methods of heating, it becomes possible to deduce cooking processes and the kind of meals eaten. However, rather than draw up an exhaustive paradigm of possible combinations and processes, I have drawn only a few inferences directly from the source material.

CAULDRONS

Cauldrons are in effect metal cooking pots. They could be larger than their earthenware counterparts and had significance as symbols of the kingly provision of food (Turner 1828, I, 33; Owen 1841, 391). The Sutton Hoo ship burial contained three cauldrons. The largest, raised from a single sheet of bronze, but with iron fittings, had a rim diameter of 70 cm, comparable in size to cauldrons from London and Taplow, according also with documentary evidence (Bruce-Mitford 1983, 488-90; Wright 1871, 38; Skeat 1881, St George 1.105; Maccabees 1.117).

Cauldrons were made of various metals or alloys: cyperen faet oþþe maestling oþþe braesen (a copper vessel, or a brass or bronze one), and a tinum faete (tin vessel) is also specified (Cockayne 1851, II Faustina AX fol. 115b; II xxxii, Lac. 112;

Owen 1841, 699). Cauldrons were also made of iron and although these may not have had the prestige value of bronze, copper or brass items, nutritionally they probably contributed significantly to the diet of their owners by preventing anaemia, since cooking acidic food in iron pots increases the iron content of the food by a factor of thirty to a hundred (McGee 1986, 623, 548).

Cauldrons (hweras) seem to be the cooking vessel most in evidence in the Anglo-Saxon period, and were associated with mass catering (Wright 1871, 39; Herzfeld 1900, April 3; Hodges 1982, 132; Whitelock 1955, 834; Wright 1871, 100; Owen 1841, 77, 437). A late Anglo-Saxon monastic inventory included an cetel (a kettle) - a metal container for cooking but differentiated from a hwer (cauldron) (Robertson 1939, 250). In one Leechdom a cetele is the vessel to be used for stewing beet to a pulp (Cockayne 1851, II xxx 2). The reeve was to have charge of a range of cooking equipment: hwer, lead, cytel, hlaedel, pannan, crocca, brandiren, dixas, stelmelas (cauldron, container made of lead, kettle, ladle, pans, crocks, firedogs, dishes, vessels with handles) (Liebermann 1898, 455).

Cauldrons had to be suspended over, or supported above, a fire. Pot hangers and suspension chains are recorded in documentary sources and from archaeological evidence (Hodges 1982, 8; Evison

in Haslam 1980, 37). When it was part of the hall furniture, the chain might be very elaborate (Bruce Mitford 1983, 535-6; Van Es & Verwers 1980, 186; Roesdahl 1982, 122). A different form of suspension is shown in the Bayeux Tapestry where a pole has been passed through the two rings on either side of the cauldron, and then supported on two forked uprights (Wright 1871, 100). The eighth-century Epinal gloss gives brandrad for andeda (gridiron/tripod), and the slightly later Erfurt gloss gives brondrad (Pheifer 1974, 3). Trefet (trivet) is recorded in an inventory for Yaxley, and trivets are illustrated supporting round-bottomed cauldrons, although these also have suspension loops (Robertson 1939, 75; Wright 1871, 38). Sometimes feet were an intrinsic part of the vessel (Owen 1841, 697; Pheifer 1974, 11).

Cauldrons, used in conjunction with meat forks and ladles. were presumably used for the production of soups and stews for the household (Seebohm 1952, 157; Dunning, Hurst, Myers & Tischler 1959, 56, 59; Pheifer 1974, 3; Wright 1871, 38; Roesdahl 1977, 194; 1982, 125). Fires on a hearth suited a hanging cauldron, or a cauldron supported on its own legs or a trivet, which made 'cauldron food' more or less obligatory (Gamerith in Fenton & Owen 1981, 92).

SOAPSTONE BOWLS

Soapstone bowls were desirable as being unbreakable on clay floors, easy to clean with good heat distribution and they did not taint the food. Probably imported from Shetland or Norway they have been found in Anglo-Danish York (Roesdahl 1982, 123; MacGregor 1982, 73; Foote & Wilson 1970, 186, 201).

EARTHENWARE POTS

Probably earthenware pots were in general use for cooking throughout the period (West 1982, 11, 404; Cunliffe 1964, 107, 109). Upright pierced lugs on the rims of bowls and horizontal pierced lugs on the shoulders of some of the smaller pots indicate these were for suspension over a fire, and therefore for cooking. Earthenware pots are thought of as being suited to cooking at low temperatures but they were apparently used for boiling too (Cockayne 1851, Peri Did. 17; Attenborough 1922, Appendix II). Good quality pots which were more heat-resistant were imported from widely-spaced centres across northern Belgium and France and Germany into such ports as Hamwih (Hurst in Fenwick 1978, 250).

LEATHER VESSELS

Leather containers were probably important as cooking vessels (Fenton & Kisban 1986, 117; Moryson 1617, IV 199). The Anglo-Saxon sceowyrt (shoemaker) made higdifatu (leather vessels), and it is likely these were used for cooking (Garmonsway 1978, 35, 57).

BOILING & STEWING

The Anglo-Saxons seem to have boiled food which we would expect to be roasted, for example, the goose offered by Cuthbert to the visiting brothers (Colgrave 1940, 268-9). Boiled meat preserves all its juices, making economical and nutritionally effective use of the foodstuff (Kuper 1977, 225,6, 8). It has a less luxurious connotation than roast meat which still keeps its special status. Stewing is the ideal way of cooking any part of a carcase that, because of old age, or hard work - in the case of plough oxen - would be very tough if roasted (Ayrton 1975, 53). In tenth-century Skeldergate, the limb bones of cattle were reduced to small pieces, suitable for boiling in the stockpot (O'Connor 1984, 177).

Boiling, or stewing, that is, cooking with the addition of water,

milk, butter or some other liquid, is likely to be the prevailing mode of cooking when salt meat forms a substantial part of the diet, since if cooked in other ways the meat becomes hard. Traditionally, after soaking for 12-48 hours the meat was wrapped in a floured cloth hung from the handle of a cauldron, and dried peas, or - in the case of bacon - beans and/or barley were also cooked in floured bags in the same cauldron (Ayrton 1975, 50-1). The vegetables, dried or fresh, would absorb the salt. Probably long, slow cooking was the order of the day: seowe swiþe lange ofer gledum (stew for a very long time over embers) is the instruction in a Leechdom (Cockayne 1851, I lxxxvi). Salt fish would also be boiled, traditionally in milk or butter (CA Wilson 1973, 40). Boiling was evidently such a common way of cooking meat that a Leechdom could give the instruction seow swa swyþe þ hit þriwa wylle swa swyðe swa waeter flaesc (boil three times as strongly as water for boiling meat) or simply ask for faet flaesc þ beo wel gesoden (fat meat well-boiled) (Cockayne 1851, Peri. Did. 33, 37).

Not just meat and fish, but a variety of foods were cooked in various liquids (Cockayne 1851, I ii 2, 11, xxxix 3, lix 14, lxxxv, II xix, xxx 2). Where no instructions were given as to the liquid, the presumption is that water was used. The instruction for hard boiling eggs, for example, is simply genim nigon aegra 7 seoð hig faeste (take nine eggs and boil them hard) (op. cit.,

Vol. 1 380). Vegetables were probably usually cooked in salted water, since in one case the salt is to be omitted: drige beana 7 geseow butan sealte (dry beans and boil them without salt) (op. cit., I xxxi 1). In one case the instruction was wyl on meolce on buteran is betere (boil in milk, butter is better), and in two cases butter was to be used (op. cit., I ii 22, I ii 15, 20). Honey and butter seem to have been used together in three Leechdoms, and honey on its own once (op. cit., II li 4, III xiii, xiv, Lac LIV). Vegetables were also to be seethed in oil, and seeds in a mixture of oil and ale (op. cit., II xxv, xxviii, xxviii). Manigfeald appelcyn peran aepeningas (many kinds of apples, pears and medlars) were to be stewed in vinegar, wine and water or just wine, on occasion sweetened with honey (op. cit., II ii 2, II iv, I i 7).

BROTH

Brod was the O. E. term for broth or soup, which might be enriched with milk or butter (op. cit., Peri Did. 37; Jackson 1971, 297). The cook of the Colloquy mentions faett broþ (fat/rich broth) as one of the dishes he makes (Garmonsway 1978, 37), possibly enriched with bone marrow, as well as dairy products. Beonbrod (bean soup) was recommended in Leechdoms, as was pysena broþ (pea soup) (op. cit., II xxiv, xxxix,lvi 4). Broths may customarily have included dried pulse (op. cit., II

xxiii), although the recommended geseaw broðu were perhaps made from fresh vegetables (op. cit., II xlix). Carrot broth and mint broth are also mentioned (op. cit., I xviii). Henne broþe is referred to, and one recipe for hen and mallow leaf broth confirms the supposition that, like modern soup, Anglo-Saxon broth was a relatively thin liquid) (op. cit., II lvi 1, III xliii). Similarly remedies could be taken on hat ala oðde broð oðde waeter (in hot ale or broth or water) (op. cit., Vol. 1, 378).

Like stews, broth was a convenient food for mass catering. The Rule of St Benedict allowed two dishes of soup every day in monasteries, although peppered broths were classed with dishes of delicacies (Turner 1828, III 34).

CEREAL POTTAGES

If broþe was retained to indicate a thin liquid, the term which supplanted it in the meaning 'pottage', is briw. Briw originally meant a simple cereal pottage, and even in late Anglo-Saxon times the references of rigenum melwe wyrcead briwas (make a brewit from rye meal) and niwe beren mela oðde grytta togaedre gebriwed swa cocas cunnon (new barley meal or groats made into a brewit as cooks know how) suggest this, even if their preparation seems by this time to have become the province of the professional (op.

cit., 150-1).

Grytta (groats) could have been threshed and pounded in a mortar. If the grain had been parched, it needed little further cooking to make it digestible. Unroasted grain soaked in water gelatinises into digestible frumenty (Tannahill 1973, 36-8). Whole grain preparations are a good source of vitamins A and B, and with milk are a highly nutritious food (Hartley 1954, 520-1). Linseed, or other oil-containing seeds, may have been used to enrich cereal-based pottage (Renfrew 1985, 16).

Lacnunga instructs wyll in buteran þas wyrte 7 scearfa smale (radish and helenium)...ado...beren mela 7 hwites sealtes fela wyl loncge 7 hatne ete (boil <cropleek> in butter, and shred up...add...barley meal and plenty of white salt, boil for a long time and eat hot) (Cockayne 1851, Lac. LI). A similar method is used in other recipes, though with other leaf vegetables and wheat meal (op. cit., LX, III xii). A mixture of ream oþþe gode flete (cream or good skimmings) god beren mela 7 hwit sealt (good barley meal and white salt) was to be beaten up oþ þ hit sie þicce swa þynne briw (until it is as thick as thin brewit) which suggests briw was a thick, porridgey mixture (op. cit., III x, I xxxii 2, xxxviii, Lac.116).

The serving of cereal or leguminous preparations with meat

continues in modern English cooking. Sometimes a direct comparison can be made with an Anglo-Saxon recipe: chicken with a parsley and bread stuffing, for example (Cockayne III xii; Ayrton 1975, 50-1, 299-300). Oatmeal (groats) is still used as a thickening agent in stews, as are other flours.

It is possible that such food had a rustic connotation, but while townsfolk may have eaten more cereal as bread, cereals eaten as gruel or porridge probably formed a significant part of the diet in Anglo-Saxon England (Seebohm 1952, 157; Bonser 1963, 357).

Cereal brewits may also have been fermented (Vaduva in Fenton & Owen 1981, 338; Gamerith in op. cit., 87ff.). Organic residues from the fermentation process in porridges have been recovered from the Anglo-Saxon period (Arrhenius 1984, 343). That such residues have not arisen merely because cereal mixtures were left in pots, is suggested by a traditional Swedish recipe: blodpalt, a mixture of salted blood and rye flour fermented for three weeks (op. cit., 344).

STEWS

Stews were the mainstay of the Anglo-Saxon cuisine (Hieatt 1980, 295-6; Holdsworth 1980, 97; Cunliffe 1976, 286). In poorer households a stew may have been prepared reheated with additions

over a long period (Moryson 1617, IV 27, 59; Kuper 1977, 224). Such a cooking method would have had much to recommend it to Anglo-Saxons without much in the way of domestic facilities.

ROASTING, GRILLING & TOASTING

These terms are dealt with together, since they cover O.E. gebraedan: to cook by the direct application of heat from a fire, though an item could also be gebraede on hatan axan (on hot ashes) (Bosworth & Toller 1898, I 375). Fish could be grilled, so could cheese and apples (Herzfeld 1900, March 27; Evans 1969, 45, 66; Cockayne 1851, II lvi 4, I lxi 1; Bonser 1963, 222). Butchery techniques suggest that some cuts of meat may also have been grilled or 'toasted' at a fire. In tenth-century Skeldergate, York, numerous cattle vertebrae were chopped across transversely in a manner consistent with the production of modern fore-rib or T-bone cuts (O'Connor 1984, 17). From the earliest, i.e. ninth-century, levels at Flaxengate, there is archaeological evidence to suggest meat was cooked on the bone and was probably roasted (O'Connor 1982). It has been assumed from the butchery remains at Yeavering that spit-roasted beef was a major item of diet (Hope-Taylor 1977, 327). As well as the cost of the metalwork and a large enough piece of meat for spit roasting, this method is expensive in terms of fuel and time. (A 120lb pig takes about eight hours to cook, it must be turned constantly and the fire also has to be regulated.)

Roasting spits have been found in Viking-age Scandinavia (Roesdahl 1977, 190; 1982, 124; Foote and Wilson 1970, 164), but

the only complete cooking spit known in Britain is from the 'pagan lady' burial at Peel Castle, Isle of Man. It was accompanied by a goosewing (with feathers) and some seed-bearing plants. Perhaps spit, wing and herbs belong together as a roasting kit, indicative of the prestige of their owner (Graham-Campbell forthcoming). Poultry and other foods are illustrated being delivered to the table on spits in the Bayeux Tapestry (Wilson 1985, pl. 46). In another scene food on spits is being passed from a stove to what may be a sideboard (op. cit., pl. 47). A tenth-century manuscript shows three diners, two of whom are being offered food on spits by kneeling attendants. The food here is cylindrical in form, and not immediately recognisable, though it may consist of lengths of sausage, or, more probably, eel (Wright 1871, 35; Banham 1991, 36).

GRIDDLES/FRYING

Food was cooked at or over the fire on a solid support: a griddle or a toasting/baking stone, for example (Roesdahl 1977, 194; Bruce-Mitford 1975, 161). Griddles/pans occur in the archaeological record in Scandinavia (e.g. Graham-Campbell 1980, no. 48), but were presumably well-known utensils in England since Bede refers to the different cooking methods their use entails in his commentary to the First Book of Samuel: 'We are

being nourished on food cooked on a griddle when we understand literally, openly and without covering...upon food cooked in the frying pan when, by frequent turning over the superficial meaning and looking at it afresh we comprehend what it contains...' (quoted in Hunter Blair 1970, 300).

In some places in Ireland a shallow pan was used to cook bread (O Danachair in Owen & Fenton 1981, 63). So a frying pan could be used without fat, but a flat griddle could take only a smear of fat to prevent sticking. A frying pan was a necessity if food was to be cooked in any quantity of fat. The Epinal and Erfurt glosses give bredipannae and breitibannae respectively for sartago (frying pan) (Pheifer 1974, 46). This was presumably the same utensil as the brade pannan which was to be gesmyre innewearde mid þan rysele (greased inside with pork fat) (Cockayne 1851, I iv 5).

Frying pans are found in archaeological contexts from the early ninth century (Evison in Haslam 1980, 37, 39). A much patched iron pan was finally relegated to a rubbish pit in tenth-century York. It has a diameter of 30-35cm and there were clear signs where the handle had been attached. It may have been used for cooking buckwheat cakes (Hall 1982, 21; Ottaway 1983, 22). Sheet metal from the iron dish of a smaller pan was also recovered from Anglo-Scandinavian York (McGregor 1982, 84). A complete iron

frying pan of late ninth- early tenth-century date was recovered at Winchester (Roesdahl et al. 1987, 169, J12, with illus.).

Rysele (lard/pork fat/dripping) used for greasing a frying pan, was probably a common medium for frying (Cockayne 1851, Peri Did. 58). Oil and butter were also used (op. cit., II, li, li 3, lix 9, xxxviii, Lac.3; Holmes 1952, 135).

The term afigaen/afigan was used to translate frixum (fried) in the Epinal and Erfurt glosses of the late eighth-early ninth centuries (Pheifer 1974, 23). Elsewhere the term for frying seems to have been gehyrstan, as in the instruction gehyrste on hatte pannan (Cockayne 1851, I lxviii).

From written sources it seems that fried dishes often consisted of eggs. Leechdoms contain detailed instructions for a sage omelette. Nim salvian ane hand fulle 7 cnuca hy swiþe smale 7 nim twelf piper corn 7 gnind (read grind/gnid) hy smaele 7 nim þanne aegru 7 swing ho togaedere mid þam wyrtum 7 mid þan pipor. Nim þanne aene claene panne 7 hyrste hy mid ele. (Take a handful of sage and grind it very small, and twelve peppercorns and grind them up fine; then take eggs and beat them up with the sage and the pepper. Take a clean pan and fry the mixture in oil) (Cockayne 1851, Peri Did. 63). Another recipe in Leechdoms is also a form of vegetable omelette (op. cit., 58).

BAKING

Abacen is applied to meat as well as bread (Turner 1828, III 34). Oven-roasted meat may have been encased in a flour-and-water paste before baking so that, technically, it was steam-baked (Weaver in Fenton & Kisban 1986, 44). Baking would also have been the method of cooking complicated composite dishes like osterhlafas (oyster loaves), probably made by filling a hollowed out loaf with oysters, suet, minced meat, egg and seasoning (Cockayne 1851, II xxiii; Ayrton 1975, 245-6).

Anglo-Norman recipes are more complex than those in the French sources and may derive from the Anglo-Saxon cuisine (Hieatt 1980, 295-6). They include a 'soutil brouet d'Angleterre': chestnuts, hard-boiled egg yolks, and pork liver ground up and made into a paste cooked with spices and saffron. Another unsual combination is cherries, ground chicken and hard-boiled egg yolks (op. cit.). These mixtures were presumably baked.

DESSERTS

Sweet omelettes containing flowers or fruit were also a possibility, as were egg custard mixtures (Ayrton 1975, 418; McGee 1986, 56). Certainly the Anglo-Saxons enjoyed dishes of

milk/cream/curds, sometimes with wine, or with the addition of meal (Cockayne 1851, III x). Summer puddings which use bread to contain fruit, often blackberries, raspberries or whortleberries, are also archaic. Cereal-derived flummery produced a slightly acid, solid jelly, and cows' heels and calves' feet may have been used to make jellies (Furnivall 1868, 34).

Sweet dishes - eft-mettas (literally 'after-meats', so, desserts) - were regarded as morally dubious (Turner 1828, II 36, 102). They were seen as a temptation to gluttony, and could result in the stimulation of other appetites. In the Epinal and Erfurt glosses, sperwyrt (elecampane) glosses gallengar, i.e. galingale, the preserved root of the cypress used in cookery and as a sweetmeat (Pheifer 1974, 134). Elsewhere sperwyrt glosses veneria, roots used as a confection (op. cit., 56). Perhaps it was the apparent implications of this semantic association that called down condemnations.

CAKES & BISCUITS

Fats and oils were almost certainly used as shortening in biscuits and cakes (Holmes 1952, 135). The glossing of crustulla (a flat cake) by halstan/heallstan (hall-stone, possibly hearth- or baking-stone) might suggest a mistranslation (Pheifer 1974, 16). However, halstan could have been something like a round of

shortbread, and the name a humorous one like 'rock' cakes. The French gastel, a type of biscuit or cake recorded in the twelfth century was compared to a flat, round stone (Holmes 1952, 91). This was made from flour, shortening and honey, and would have been similar to shortbread. The low temperature needed for cooking would have been available in an oven after the bread had been baked, or at the hearth-side. Enriched breads (see Chapter 2) provided another sort of cake.

Other Anglo-Saxon cakes were small: at least cicel (cake) is glossed by pastillus (a little cake) in one of the later word-lists (CA Wilson 1973, 250). Peri Didacheon prescribes new cheese pared into boiling water and made into little cicles to be bound to the eyes overnight. Here a 'little cake' would only be an inch or so across: perhaps the standard cake size was 2-5" in diameter, our bun or scone size. Grube considers that cake was known to the Germanic peoples long before the Migration period (Grube 1934, 156). He thinks that on occasion the term aeppel (apple) was used to signify a dumpling, as in Cnuce tosomne þan gelice þe þu aeppel wyrce (Knead it together so that you make it into an apple/a dumpling) (Cockayne 1851, I 250). On occasion these may have been sweetened to produce some sort of cake since hunig aeppel (honey dumpling) glossed Latin pastellus (Wright & Wulcker 36,7, 468,18). In the post-Conquest period types of cake were made by assembling and binding together ready-cooked

ingredients (Peacocke in Jaine 1986, 58), suggesting the hunig aeppel of Anglo-Saxon times.

SAUCES

A comparison of two later medieval recipes for green sauce, one French, the other English, suggests that the English either had more native herbs or at least appreciated them more (CA Wilson 1973, 40; McGee 1986, 130). There are several mentions of sorrel in Leechdoms, and this was possibly used as a sauce then as it is today (Cockayne 1851, I xii, xxxix 3, xli, xlvii 1, II li 3, liii).

Some fruit sauces are traditionally served with meat and fish dishes (Ayrton 1975, 182, 206-7, 284). Fruit sauces are useful in that they 'cut the fat', aiding digestion. Strawberry sauce for boiled meat, recorded in an Anglo-Norman recipe is reputedly subtle and very good (Hieatt 1980, 298).

Vinegar, honey and herbs (cf. modern mint sauce) are mentioned in Leechdoms as an appetising sauce, there is no reason to suppose that such sauces were not used as part of the normal diet in Anglo-Saxon times (Cockayne 1851, II vi).

Gerenodne senep (prepared mustard) was apparently used as a

flavouring with bread or other food (op. cit.). A mixture is to have þa onlicnesse geworht þe senop bid getemprod to inwisan (the form in which mustard is tempered for flavouring), and we learn that this could be spooned up, and so had the pasty consistency that made mustard has today. Cumin is also mentioned as an ingredient in a sauce, and both mustard and cumin were found in the Oseberg ship burial in Norway (Foote & Wilson 1970, 163).

CONCLUSION

Anglo-Saxon cookery seems to have been based on boiling, a method practised particularly in subsistence economies, where all parts of the animal have to be utilised (Kuper 1977, 51). The nobility may have been able to indulge a preference which is now widespread for tender joints which do not need stewing. Barley and other cereals, dried beans and legumes were commonly used in stews, brewits and soups.

Some basic procedures were already established in Anglo-Saxon times: clarifying butter, whipping cream, salting vegetables and serving them with butter, or with oil and vinegar, for example, but one important difference is a quantitative one: numerous herbs were used to flavour Anglo-Saxon dishes. That the cuisine used the resources to hand imaginatively, is emphasised by a comparison between Anglo-Norman and early medieval French

recipes. The Anglo-Norman recipes make a considerable use of fruit and flowers not found in any French recipes. They are also far more specific and discriminating in the spicing of different dishes (Hieatt 1986, 860). Features of the Anglo-Norman recipes which arguably represent the native English tradition are custard tarts with dried fruit, strawberries, blackberries and pears, hawthorn and rose flowers; white meat stews with elderflowers, mulberries or pears; red meat stews with rose petals, hawthorn blossoms, cherries and strawberries (op. cit.; Ayrton 1975, 251). There seems to have been a predilection for sweet dishes, as a number of the recipes include fruit or honey (op. cit.). There are dessert dishes: hazel nuts used in flour, and flour, milk and elder flowers used to made a pottage, for example (Hieatt 1986, 875ff).

As well as fruit sauces and seasonings, colourings and garnishes were seen as important as part of the overall visual effect (Hieatt 1980, 296).

This evidence for skilled cookery would seem initially to contradict the Colloquy, where the cook is summarily dismissed: We ne reccaþ ne he us neodþearf ys, forþan we sylfe magan seowan þa þingc þe to seoþenne synd, 7 braedan þa þingc þe to braedene synd (We don't consider we need him, because we can stew ourselves anything that needs stewing, and roast those things

that have to be roasted) (Garmonsway 1978, 37). The response might be the same today: even if we don't feel we can turn our hand to ploughing or smithing, we feel we can manage to cook for ourselves. However, professional cooks then as now will have produced delicacies - indeed, kings and nobles were certainly able to command a variety of dishes.

SECTION III

CHAPTER 7

MEALS

MEALTIMES

Taking meals at regular times was seen as a good thing in moral terms:

muþa gehwylc mete þearf mael sceolon tidum gongan

(every mouth needs food; meals shall take place at their proper time) (Bloch 1961, 74; Mackie 1934, Gnomic Verses 1.124). Gluttony consisted of eating before the time of the meal, as well as taking too much (Skeat 1881, Mem. of the Saints 1. 268; St Mary of Egypt). Regular meal-times seem to have been seen as evidence of an ordered, civilised life.

Moreover, in large establishments, serving meals at set hours would have saved time. Punctual meals were particularly important in monasteries where the offices had to be observed (Skeat 1881, St. Martin 1.331).

When meals were taken, or even how many meals a day there were, varied according to the calendar, social class, and personal

preference. The novice of the Colloquy seems to eat first soon after midday (Garmonsway 1978, 44). The novice is being interrogated at this point in his day, so we do not hear the time of any later meals, although this evidence may reflect the fact that children had their main meal at midday. The midday meal is referred to in other monastic contexts (Whitelock 1954, 704).

The Regularis Concordia mentions the prandium ad sextam at noon, and a cena between Vespers and Compline allowed daily from Easter until Whitsun. From Whitsun until September 14 (apart from certain fast days which included Wednesdays and Fridays) and on all Sundays and feasts of twelve lessons there were also two meals a day but the prandium was not taken until none (3 p.m.) (Logeman 1888, Chapter 41; Miller 1890, I 1, 162). A single meal ad nonam between Nones and Vespers (i.e. about 2 p.m.) was the rule for the winter period from September 14 to Lent; in Lent and on Quarter Tense days the one meals was ad vesperam (after Vespers) (Symons 1953, xxxv). So it appears there was a main, midday meal, though this might be put back to 2 p.m., or later, for which the term was ge-reordung or non-mete (Wright 1871, 33).

According to the O. E. Rule of Chrodegang, if preostas ate twice a day then it was at midday and evening, and at Aethelwold's monastery the monks had dinner and supper (Napier 1916, 14; Turner 1828, III 33). There are other references to

aefen-gereord, aefen-gyfl, aefen-mete and aefen-þenung (the evening meal) (Wright 1871, 33, 184).

In monasteries a drink was allowed just before collatio (the reading at 6 p.m.). By the time of Dunstan, this drink, probably ale, was replaced on certain days by a superior beverage (called the caritas), which was accommpanied by finer bread and cakes (Knowles 1940, 456-7). Frequency of the caritas grew to twice a week, and the provision of wine or mead for this was laid as a charge on all the administrative officials (op. cit., 430)

An earlier meal than dinner or supper is referred to - the undernswaesendum. Undern was roughly the period of dawn (Bosworth & Toller 1898, I 424). Aidan was sitting with King Oswald at an undernswaesendum (Miller 1890, I 1, 164). However, this was on Easter Sunday, and We etaþ on þam sunnan dagum on undern and on aefen forþan þe se sunnan daeg is swa halig (we eat on Sundays early in the morning and in the evening because Sunday is such a holy day), so, if there was not to be a midday meal, breakfast may have been eaten instead (Skeat 1881, Ash Wednesday 1.3).

In contrast to the monastic regimen where the main meal was at or around midday, it is possible that in a secular time-table, main meals were at the third hour and again at supper time, to allow a

full day's activity between them.

A number of individuals, usually for religious reasons, chose to have only one meal a day. There may have been others whose meals were similarly limited from lack of resources, but we do not hear of them: (Skeat 1881, St Aethelthryth l. 42; Miller 1890, I, 2, 244, 318). King Alfred added to his translation of Boethius on the Golden Age, 'They lived naturally and temperately. They always ate but once a day, and that was in the evening' (Turner 1828, II 36). Everyone was supposed to observe fast days, particularly the period of Lent, and to cut down to one meal a day, but in monasteries dietary observations were strictly observed, so the O. E. Rule of Chrodegang refers to both eventualities: swa hwaeðer preostas aetan on daeg swa aene swa tuwa (whether the priests eat once a day or twice) (Napier 1916, 14).

The ideal meal was the feast, taken in hall, with tables and seating. No doubt most nobles and senior members of their retinues managed to sit at table for their meals, even if the exigencies of campaigning meant this was, on occasion, improvised (Wilson 1985, pl. 47). Al fresco meals, eaten at a table with servants in attendance, are depicted in manuscripts, but this may reflect Mediterranean artistic influence. Some workers almost certainly ate their meals in the fields (Colgrave 1940, 70).

An anonymous letter to one brother Edward asks him to try to stop countrywomen at their feasts from eating and drinking in privies (Swanton 1975, 29). It was the element of gluttony that concerned the writer: eating should be done at table, and perhaps publically. However, it seems that some saints did not sit at table for meals in order to avoid gluttony (op. cit., 57).

DIET & COMPOSITION OF MEALS

The composition of meals is hard to assess, though they almost certainly included bread when possible. There was a sound nutritional reason for this. If meat is not accompanied by calorie-rich carbohydrate foods, the protein in the meat will be used as a source of energy and will not be available for other physiological functions (Harris 1986, 27).

The baker of the Colloquy is pleading a special case, but his reply to the question, 'Can we live without you?' must be close to the truth or if would have been commented on: Ge mag on þurh sum faec buton na lancge ne to wel: soþlice buton craefte minon aelc beoð aemtig byþ gesewen, 7 buton hlafe aelc mete to wlaettan byþ gehwyrfed. Ic heortan mannes gestrangie ic maegan wera 7 furþon litlincgas nellaþ forbigean me (You may for a period of time, not not for long, or very well. Indeed without my trade

every table would seem empty, and without bread all food turns to loathing. I strengthen the heart of man and am the strength of men. Even the little ones will not despise me) (Garmonsway 1978, 36-7).

The legal 'accompaniment' to bread, according to VI Athelstan, might be 'meat or cheese or beans, or what ever one eats with bread according to the season' (Whitelock 1955, 390). Aelfric's Homily on the life of St Benedict, observes of the Italians 'they eat oil...with their food as we do butter', which means that bread was generally eaten with butter (Wright 1871, 37). Bread seems to have been eaten with any kind of smeoru (literally: smearing), including dripping, new cheese or lard. If there was nothing more substantial, bread might be eaten with a relish of herbs like gitte (black cumin), suþerne wyrt sio is god on hlafe to þicgenne ('the southern wort that is good to eat on bread') (Cockayne 1851, II xxxix).

Even royal meals on feast days included bread (Miller 1890, I, 1 166). We probably would not know the constituents of two particular meals nor their cost if they had not been itemised for legal purposes in a will, of which only a fragment remains. The first funeral feast was detailed as follows: seuen peniges at hale 7 twa ore 7 an aere at braead 7 hoþaer haerae at an flychca 7 at an buch (7 pence for ale and 2 ores, 1 ore for bread and

another ore for a flitch of bacon and for a buck) (Robertson 1939, 252). At the second funeral feast, when more time could be spent on the preparations, 5 ores were to be provided for malt and fuel and 42 pence for bread, and 17 pence for a pig and 2 ores for a bullock and 1 ore for 3 bucks and 8 pence for a cheese and 3 pence for fish and 4 pence for milk (op. cit.).

At the bottom of the social scale were the destitute. According to Aethelstan's ordinance, one destitute Englishman on each of the royal estates was to receive one amber of meal and a shank of bacon or a wether worth fourpence every month (Attenborough 1922, 127). The meal could have been consumed as bread or pottage. According to Rectitudines Singularum Personarum, a male slave was to receive, inter alia, about 3 1/2 pounds of corn per day, and a female slave 2 1/2 pounds (Douglas & Greenaway 1953, 815; Whitelock 1952, 109). This is less than the feower punda gewihte hlafes (4lbs of bread by weight) provided every day by The Rule of Chrodegang for everyone fram þam gingstan oð þone yldstan (from the youngest to the eldest) (Napier 1916, 14).

Bread 'went without saying'. Asked what he eats, the novice replies: 'Gyt flaescmettum ic bruce forðam cild ic eom under gwrda drohniende...wyrta 7 aegra, fisc 7 cyse, buteran 7 beana 7 ealle claene þingc ic ete mid micelre þancunge' (I still eat flesh-meat because I am still under tutelage...vegetables and

eggs, fish and cheese, butter and beans and all things that are not taboo I eat very gratefully) (Garmonsway 1978, 46). The Bury St Edmunds will fragment and the novice's testimony suggest the kind of food that might make up a meal: bread, bacon or pork, beef, cheese, fish. vegetables, eggs, butter, beans and, for special occasions, venison; milk dishes or milk to drink, or ale, or failing that water, with wine for the older, wiser and richer (Robertson 1939, 252; Garmonsway 1978, 46-7; Napier 1926, 14-15). However, one might be expected, at least under normal circumstances, to limit oneself to one or two dishes (Garmonsway 1978, 46-7).

The monks might not have eaten as well as individuals in a noble household, but probably enjoyed a good diet most of the time. The agricultural labourer of Rectitudines Singularum Personarum lacked the variety and choice of the monastic table, but as well as the allowance of meal, the male slave received two sheep carcasses and a good cow, the female one sheep or 3 pence for winter food, one sester of beans for Lenten food and whey in summer or one penny (Liebermann 1898, 449-50). Both received food at Christmas, Easter, and harvest, and had a strip of land in which to grow vegetables. The swineherd had a pig in sty and the perquisites when he prepared the bacon. The cowherd, shepherd and goatherd all had some milk from their animals, in some cases beesting and whey too. No doubt some bartering went on, so some

butter, cheese and other whitemeats, would be added to the diet.

The Anglo-Saxon peasant's evening meal may very often have taken the form of broth, then chopped meat (Fell 1984, 144). Perhaps this was on the lines of the French pot-au-feu, which includes a beef marrow bone to provide marrow to spread on the bread served with the broth, and would help to account for the number of split marrow bones found on Anglo-Saxon sites (David 1960, 184).

About 25kg. of meat per head p.a. may have been consumed, as compared to the present national average of 63.5kg. More than half would have come from beef, pigs provided the second largest amount with sheep providing only a small percentage, although (as has been noted) animal bone evidence takes no account of salt meat. Venison seems to have been a fairly scarce meat. Wild-fowling provided a continuous supply of meat, and, if small in amount, more birds were available in winter when food supplies were short. Fish are often shown whole in illustrations of feasting. Perhaps this is because fish are easily recognisable, as well as because they were a desirable food (Garmonsway 1978, 27). Poultry - fowl and goose - was also present on sites throughout the period.

Regional Variations

Inhabitants of coastal districts would probably have included more salt-water fish and shellfish in their diet (Holdsworth 1980, 131; Bell 1977). Those living near large rivers, or lakes would probably have consumed a fair proportion of fresh-water fish, including eels.

The wetter western and northern counties were more suited to growing oats or barley, and therefore breads and cereal pottages would be likely to include these grains. In the region round Worcester rye was apparently used more than elsewhere. In the eastern counties bread would be more likely to be based on wheat.

Those in western and south-western counties with a climate suited to cattle-raising and dairying based on the cow, may have consumed more beef and dairy products (Davies 1982, 23). However, the consumption of beef probably depended more on who you were than where you were.

Seasonal Variations

These were very significant, especially for those with slender resources. A winter diet of bread, salt meat, legumes, with some

cheese, was probably short in antiscorbutic foods, but fresh vegetables, particularly early types of cabbage, onions and leeks, but also including 'wild' plants, like chenopodium, may have been eaten, although these would not necessarily feature in the written record. Lent would have been a time of short commons for some, though vegetables, together with fish, cereals and some fruit and nuts were available. Easter was technically a feast day, and could have been celebrated with fresh meat, probably lamb, eggs, salads of green shoots. The stock pot could be used again for stews of salt meat, lamb and veal. By midsummer some 'grass beef' was ready for eating, and mackerel were plentiful. Dairy products were available, and various whitemeats were eaten fresh. There may have been a dearth just before harvest. From the summer into autumn various fruits, which may have been eaten with cream, and nuts were available (Furnivall 1868, 85). By Michaelmas fat mutton was available, and at Hallowmas pork, sprats and smelts were in season.

Courses

The Old English Rule of Chrodegang refers to courses, so that a meal might have consisted of soft (?new) cheese, then 'delicacies' (i.e. meat puddings/ sausages), then fish or vegetables as the þriddan sande (lit: third sending), or the order might be meat puddings/sausages, then cheese then

vegetables or stewed meat (Napier 1916, 14-15). The Benedictine Rule decreed the prandium (lunch) should consist of two cooked dishes and a third of fresh vegetables and fruit (Furnivall 1868, 131, 152ff.). By the end of the period great feasts in rich monasteries might run to a number of courses. Secular meals in important households would seem to have consisted of four to five courses (Knowles 1940, 463).

DRINKS WITH MEALS

The four pence for milk for the second funeral feast detailed in a will fragment from Bury St Edmunds may have been to make whitemeats, or it may have been to drink, particularly with the fish after which it is mentioned, since the Danish custom was to eat fish with milk (Groundes Pearce 1971, 12). Food allowances never give fish with ale (Ashley 1928, 126-7; Seebohm 1952, 157). The monastic diet at Llancarfan included plenty of fish and milk (Davies 1982, 35). Otherwise wine (for the senior members of society), ale, mead, cider/fruit wines, or water were drunk.

CONCLUSION

Monotony may have been a characteristic of the Anglo-Saxon diet. Until recently peasants in central Europe ate the same dishes, basically farinaceous, on five days of each week (Gamerith in

Owen & Fenton 1981, 86). Penitents were often given a deliberately monotonous diet, perhaps bread, salt and pease pudding (Davies 1982, 35). Hunger would have made repetitious meals more acceptable, and we know that dearths did occur (Napier 1916, 15).

CHAPTER 8

FASTING

In Anglo-Saxon society an annual pattern of fasting and feasting was enjoined on the population as a Christian duty; periods of fasting were followed by periods of feasting, and single feast days were preceeded by a day of fasting. Fasts were observed by the laity as well as clerics; those exempt were children and the infirm.

The three main forms of fasting were to limit the diet to certain items, to limit the daily amount of food consumed, usually by delaying eating until a certain time, and consuming only one meal a day, but also by limiting the ration of food, and adulterating food with unpalatable additions.

REASONS FOR FASTING

It has been suggested that there were practical reasons for instituting fasting and that one effect would be the overall saving of food resources, but this can hardly have been a prime concern in a system which also enjoined feasting. However, if food supplies were comparatively short for most of the population at particular times of the year, then there would at least be a

psychological benefit if those forced to limit their food intake felt they were gaining merit by so doing. To some extent the pattern of feasts and fasts follows the pattern of the seasons, but a period of fasting is sometimes followed immediately by a period of feasting.

Theoretically at least, fasting freed food for almsgiving, so that food was redistributed to those who needed it most (Whitelock 1955, 410).

In the background was the vision of the ideal world in which man would be freed from the necessity of comsuming earthly food. The patristic tradition saw fasting as union with the angels, and that it made the soul clear for the reception of divine truth (Bynum 1987, 36). Meat eating was seen to reflect Cain's primal crime, and as proof of human weakness and cruelty (McGee 1986, 83). To abstain from meat was to go some way to recovering primal innocence. Old Testament models offered pure hearts to God by fasting, and the forty-day fast of Christ in the desert was the model for the forty-day fast of Lent (op. cit.; Dembinska in Fenton & Kisban 1986, 153).

Fasting was in some measure reparation for Adam's sin, which was seen as one of <u>oferfylle</u> (gluttony), as much as disobedience (Cockayne 1851, III <u>Lar</u> 1.40, 1.74-5; Turner 1828, III 505). It

is evident that fasting was a means of purification, and it was so used in various ceremonies (see below).

Apart from these theoretical considerations, it was observed that fasting moderated lust (Swanton 1975, 177). St Augustine maintained that the body was excited by the full satisfaction of the appetite, but acknowledged the difficulty of keeping the balance between supression of lust and enfeeblement of the body (Bynum 1987, 79). Other writers point out the difficulty of carrying out one's duties when following a very ascetic regime (Dembinska in Fenton & Owen 1986, 153; Skeat 1881, Prayer of Moses l. 104). Boniface complained of the perversity of priests who did not eat of the foods which God gave, and others, whose interpretation of the bible was perhaps over-literal, fed on milk and honey, rejecting bread and animal foods (Kylie 1911, 116, 122).

Fasting was employed to get God on one's side and thereby bring about desired results (Davies 1982, 168). The tenth-century Institutes of Polity suggest that if misfortune befell the people, then they should consult how amends might be sought from Christ with cleansing fasts and with frequenting churches (Bonser 1963, 5). There was a belief that choosing a lack would induce God to give plenty (Bynum 1987, 39).

PERIODS OF FASTING

According to VII Aethelred c.1009, the nation was to fast for three days on bread and herbs and water on the Monday, Tuesday and Wednesday before Michaelmas (and other penitential actions were to be performed). Slaves were to be freed from work during these three days so that they might more willingly observe the fast (Whitelock 1955, 409). This was to 'obtain God's mercy and his compassion that we may through his help withstand our enemies', with the food that would otherwise have been consumed being given to the sick and needy (op. cit.). Saints are recorded as practising or prescribing the three-day fast (Skeat 1881, St Basilus l. 235; St Sebastian l. 206). The three-day fast perhaps paralleled the three-day feast: both were serious matters. The week-long fast was called for on some occasions (op. cit., St Eufrasia l. 211; St Martin l. 1284; The Chair of St Peter, l. 262). Details of the regular fasts are given in Appendix A, and of fasting practised by individual saints and as penance in Appendix B.

COMMUTING FASTING

Although fasting could be carried out for the sake of others, fasting as a penance is most often referred to as atonement for one's own sins. Preventing a penitent from feasting cut him off from a normal social life, and reduced his prestige. Donating land, saying psalms, paying for masses to be said, or paying fines were alternatives to fasting. However, it was theologically acceptable to transfer a fast to another individual (Miller 1890, I 2, 233). This made it possible for a powerful man to avoid fasting for any length of time or making any payment. If fasting was imposed for seven years, he could get twelve men to fast three days on bread, green herbs and water. Then he could get 7 x 120 men to fast for three days, thus making up as many days of penance as there are in seven years (Turner 1828, III, 86).

CONCLUSION

Fasting and feasting gave an eating rhythm to the week and to the year. However, sume faeston eac swa þaet hi forsawon to etanne buton on ðone oðerne daeg and aeton þonne graedelice (some fasted as though they scorned eating, but on the next day they ate

greedily) (Skeat 1881, Prayer of Moses 1.96). Extremes were eschewed: aelce daeg eton mid gedafenlicnysse (eat every day with moderation) (op. cit.; Napier 1916, 123).

One had to be sure of the dates: it was not safe merely to fast, since feast days had to be observed, and ðe on þam daege faesten wile þaet he beo amansumod gif he hi hit for his anwylnysse deð (he who fasts on that day through self-will is to be excommunicated) (Skeat 1881, Ash Wednesday 1. 4). It was the mass-priest's duty to tell his communicants the dates of fasts: misinformation was punished by a fine. This is one reason why copies of calendars which gave the dates of fast- and feast-days were in demand.

Like the feast, the fast brought Christians together. To violate the Friday fast was the clearest, most visible way of rejecting the faith (Bynum 1987, 41). In Sermo Lupi ad Anglos, the failure to observe fasts and festivals occurs time and time again and is seen as being in some measure responsible for the state of the country (Whitelock 1955, 858; Swanton 1975, 120).

Fasting was always supposed to be accompanied by alms-giving: þonne bið his faesten God gecweme (then is his fasting pleasing to God) (Fowler 1972, 13). In theory, those who had food voluntarily forwent some in order that those without food could

have something to eat, but it seems unlikely that almsgiving was regularly and generously practised. Altruism was not a prime motive: those who submitted themselves to a rigorous regime of deprivation seem to have been looking ahead to heavenly feasting (Mackie/Gollancz 1972, The Wonders of Creation l. 95; The Phoenix; Soul Addressing the Body l. 36). For the poor who scarcely had enough to keep themselves alive, visions of the heavenly feast, though infinitely desirable, must have seemed cold comfort.

CHAPTER 9

FEASTING

Feasts in hall offered a variety of sense impressions - taste, smell, warmth, music and entertainment, the play of light on tableware, colours of hangings, the clothes of the guests. Companionship, a confirmation of one's position in the community, reward, the chance to drink and escape day-to-day concerns were all part and parcel of feasting, and the potent appeal of the feast derives in part from them, as well as the rich and plentiful food.

THE FUNCTION OF FEASTING

Although the feast was not primarily a gastronomic event, but a ritual - with religious, aesthetic, legal and societal ramifications - the provision and consumption of food and drink was central. The 'chieftain' provided food and drink that was prestigious in kind and plentiful in quantity. The term gegadorwiste meant 'assembly for feasting': wiste meant 'plenty' as well as 'feast' (Zupita 1959, l.1735-6). That the image of the king, as a provider of feasts was a particularly important and potent one, is suggested by the fact that in feeding the five thousand Christ is described in these terms (Kemble 1848).

The function of royal feasts was to emphasise the ruler's power, and through a lavish display of wealth, attract followers and supporters. Those who partook of the feast were declaring or confirming their obligations to the provider. In return for sustenance, they were pledged to fight to the death for him, sustaining him in his position of power, but also obliging him to continue to provide well for them. Feasting was functional: by keeping his retainers well-fed on a variety of foods, the leader ensured that he had, quite literally, strong supporters. A retainer who ate with the king gained a legal status, but the term fedesl used for such an individual occurs elsewhere only in the sense of a fatted animal, and implies special feeding (Whitelock 1955, 357-8).

A noble king not only provided amply for his retainers, but created a splendid occasion; an image of plenty and assured harmony in a world where shortage, uncertainty and conflict were the experience of many (Zupita 1948, l.2431; Huizinga 1977, 24). The feast retained its symbolism as a unifying force, even when the guests were not dependent on the king for sustenance and support (Whitelock 1955, 258, 280; Turner 1828, III 29, 234).

The lord of the Rhymed Poem comments that, when prosperous, 'feasts never failed, guests came and went', and certainly people apart from the king had the resources for a social life that

included feasting (Mackie 1973 Rhymed Poem; Miller 1890, I,1 180-2, I,2 396-8). The visit of guests was celebrated with a feast, though if the king was the visitor, the royal provisioners would arrive the day before to see everything was ready and suitable (Turner 1828, III 29). The king could not have his status compromised by attending a feast at which the supplies were insufficiently lavish, or the mead might run out (op. cit.).

Sometimes the guests may have been visiting specifically to consume the food payable as the food rent (Davies 1982, 165).

Most people probably only arranged feasts for special occasions, which could be personal, celebrating the arrival of a guest, celebrating or commemorating rites of passage, or seasonal, called forth by the time of year or the date of a religious festival (Bonser 1963, 109). Victories and coronations were celebrated with feasting (Skeat 1881, Eustace l. 387).

Funeral feasts and feasts on the anniversaries of deaths are most frequently mentioned. In pagan times the dead person seems to have been propitiated by a grand burial feast (Meaney and Hawkes 1970, 31-2, 53). Funeral feasts continued to be held after the introduction of Christianity, and ultimately had to be incorporated into the Christian scheme (Bonser 1963, 135; Whitelock 1955, 557, 707). Anniversary feasts were often held,

particularly in religious establishments (Kylie 1911, 200; Robertson 1939, 199).

THE CALENDAR OF FEASTDAYS

Gregory realised that pagan religious feasts, being an important part of the life of the people, would be difficult to eradicate (Bonser 1963, 123). A calendar of feasts celebrating Christian festivals took the place of pagan celebrations (op. cit., 125; Miller 1890, I, 2, 314; Whitelock 1952, 24; Seebohm 100-11; Skeat 1881, The Exaltation of the Cross). Festivals were holidays and feast days, and while the Church could not enjoin feasting, it could at least state (as above) that there should be no fasting during feast days. The council of all the greater men was summoned to the royal court for all the great festivals, with the Easter feast being the most frequently mentioned (Turner 1828, III, 210). It was the Easter feast which provided the illustration for April in the Anglo-Saxon Calendar (BL MS., Cott. Tib. B5).

A well-endowed monastery would have been able to feast on a large number of saints' days, as well as anniversaries of its benefactors' deaths. The arrival of bequests of food was timed to coincide with feasts (Whitelock 1968, 8). The Rule of Chrodegang states that those in monasteries would be able on

feast days to eton tuwa on daeg 7 haebbe ma to eallum þysum fulle þenuncge (eat twice a day with everyone having plenty to eat) (Napier 1916, 81).

The seasonal feasts associated with the completion of agricultural tasks and given by the landowner to his workforce were perhaps the only feasts likely to be attended by those of lower classes, including slaves. According to Rectitudines Singularum Personarum, Feola syndon folcgerihtu: on sumre deode gebyreð winterfeorme, Easterfeorm, bendform for ripe, gytfeorm for yrðe, maeðmed, hraecmete, at wudulade waentreow, at cornlade hreaccopp 7 fela ðinga ðe ic getellan ne maeig (There are many folk-rights: some are entitled to a winter feast, Easter feast, a feast to celebrate the binding of the sheaves at harvest, a feast at which the drink flows for ploughing, a reward for mowing, food for making ricks, the 'wagon-favour' when loading wood, the 'rick-cup' at corn carting, and many things that I am not able to ennumerate) (Liebermann 1898, 452-3). The very poorest probably did not participate in feasts directly, though they gathered when and where there was feasting in expectation of left-overs, and they might, on occasion, do much better than that.

GUILD FEASTS

Feasting together confirmed the unity of those present. Guilds were voluntary associations whose members, usually substantial members of the community, provided mutual support. The benefits were similar to those arising from kinship obligations, and guilds provided a valuable social service in the very late Anglo-Saxon period, in settlements where a substantial part of the population were recent immigrants, without families at hand (Barlow et al. 1976, 335; Turner 1828, III, 98; Whitelock 1955, 558). Officials of the peace guild in London at the time of Athelstan were to meet once a month and 'feed themselves as they themselves think fitting', an early instance of a civic banquet. The meal was evidently a substantial one since they were to 'distribute all the leavings for God's sake' (Whitelock 1955, 389). The regulations for the guilds at Cambridge, Exeter, and Abbotsbury all refer to feasting (op. cit., 557-60). Some of the feasts were fixed for church festivals, others were funeral feasts held at the interment of a member (op. cit., 558).

HOLDING A FEAST

A feast was arranged and guests <u>geladod</u> (invited/bidden/summoned) (Bosworth & Toller 1898, 407). They dressed in their best clothes

giestas...lustum glendon (guests...beautifully dressed), according to the Rhymed Poem of the Exeter Book, or perhaps their most splendid armour, like the byrnwiga of The Wanderer (Sweet 1952, l.151). The writer of The Ruin saw in hall:

beorn monig
glaedmod and goldbeorht gleoma gefraetwed
wlonc and wingal wighyrstum scan

(many men, joyful and bright with gold, splendidly adorned, proud and gladdened by wine; their armour shone). According to Cynewulf in his image of the Ascension, the radiant garments of the angels were appropriate to the great feast which was held in heaven to greet Christ's arrival (Clemoes & Hughes 1971, 294).

SUMMONING THE GUESTS

Presumably the guests foregathered, and then a horn was blown to summon them to the feast (Bosworth & Toller 1898, I 431). Such a use of the horn may have been strictly functional, or it may have played some further part in the ceremonial (Wilson 1985, pl. 48; Jones & Jones 1949, 162). Hand-washing was the first and necessary part of the ceremonial of feasting.

THE HALL

The scene of feasting was the great hall, furnished with trestle tables and benches, and guarded by door-keepers who turned away gate-crashers and prevented anyone from entering while the meal was in progress (Whitelock 1955, 299; Owen 1841, 79; Zupita 1959, 1.67 ff.). The number of compounds using synonyms for hall, e.g. sele-ful (hall-cup), wine-aerne (wine-hall), medo-aerne (mead-hall), wine-reced (wine-hall), indicates the importance of the hall for the feasting that took place there (Riddles 55, 56; Whitelock 1955, 559; Barlow et al. 1976, 336, 335; Turner 1828, III, 32). The archaeological record provides much evidence of halls, e.g. one of these at Yeavering was over 80' long and 40' wide and the walls were white-plastered on the inside (Hope-Taylor 1977, 130, 140), whilst at Cheddar there was a hall about 75' long dating from the mid-ninth century (Rahtz 1979, 50).

Other business was also carried on in the hall at mealtimes, so that Harold might receive news of William's landing when he was dining at York, and when Cnut was at table in hall at the end of a feast a crowd of petitioners was occupying his ear, while a bard wanted to sing him a poem he had just composed (Turner 1828, II, 344). In these circumstances it is not surprising that,

although communal feasting in hall continued, in the late period we hear that the lady of the household, and sometimes the lord retired to a private room to eat (Owen 1841, 51, 669; Wilson 1985, pl. 3; Turner 1828, III, 29). Some people were no doubt grateful for their entitlement to sleep in the hall after the feast (Jackson 1969, 157; Owen 1841, 47).

HANGINGS & TABLELINEN

Hangings, sometimes interwoven with gold, were used to decorate halls from early in the period (Dodwell 1982, 120-9; Turner 1828, III 50; Whitelock 1968, 12; Fell 1984, 46-7). Tablecloths were in use, at least on the continent, by the early ninth century (Hodges 1982, 132; Furnivall 1868, 92-3; Knowles 1940, 452). Table napkins (cneorift - knee-covering), known of by the eighth century, were certainly in use by the tenth century (Wright & Wulcker 1884, I; Wright 1871, 36, 42; Banham 1991, 32).

HEATING & LIGHTING

The hall was described as being desirably warm: swylc swa þu aet swaesendum sitte mid þinum ealdormannum 7 þegnum on wintertid 7 sie fire onaelad 7 þin heall gewyrmed 7 hit rine 7 sniwe 7 styrme ute (while you sit at the meal with your nobles in the winter and the fire is alight and your hall warmed, while it rains and snows and storms outside) (Miller 1890 I 1, 134-6). Some retainers were known as heorð-geneatas (hearth-companions), and while this may have been merely a poetic epithet, it may have indicated those whose status entitled them to a seat near the fire, or to sleep in hall. Braziers may have been used in upper rooms; this may possibly have been the case in the first-floor hall at the Cheddar palace site (Rahtz 1979).

The hall was probably lit by lamps and candles, as well as firelight (Jackson 1969, 120, 122; Owen 1841, 669; Roesdahl 1982, 113; Crane 1983, 241).

PRECEDENCE & SEATING

A royal feast had some of the elements of a superior dinner party today: fine table-linen, lighted candles, shining tableware. But, aesthetic enjoyment apart, how one fared in hall depended on rank. A visitor to a feast did not necessarily qualify for the rarer dishes unless he was a person of some rank (Holmes 1952, 114). A thegn was entitled to a seat in the king's hall, but it might be necessary to have had heanne had (high rank) before one could say, ne waes me in healle gad (I lacked nothing in hall) (Mackie 1973, Rhymed Poem l. 15).

There is evidence that an order of precedence was insisted on in early medieval England as well as Wales (Furnivall 1868, 365, 70-1, 170-1; Owen 1841, 77, 96-8, 363, 641; Garmonsway 1978, 25; Miller 1890 I 1, 196). It was possible to buy your way in at a guild feast. If a retainer, as opposed to a guild brother, wanted to sit within the stig (possibly a railed-off dais) at a feast of the Cambridge Thegns' Guild, then he could pay a sester of honey to be accorded the privilege (Whitelock 1955, 558).

Hrothgar bids Beowulf, 'site nu to symle' (sit now to the feast), and we learn that the medu-benc is gold-geregnaþ (decorated with gold) (Zupita 1959, l. 489, 774). Later we are told, Bugon þa to benc blaed-agande/ fylle gefaegan (then the glorious ones sat on the bench, rejoiced in the feast) (op. cit., l.1010). Tenth- and eleventh-century illustrations depicting feasting, show diners sitting on settles or benches which seem to be cushioned (Temple 1976, illus. 158, 197). Setl hraegl (seat coverings) were bequeathed in wills, so at a feast one might expect to sit on a cushioned or, at least, covered seat (Turner 1828 III, 51; Whitelock 1968, 12). The end of the bench was, for obvious reasons, a desirable seat (Jackson 1969, 134, 131).

RETAINERS

Guests seem to have been allowed to bring companions to a feast (Miller 1890, I 1 162; Owen 1841, 491, 673). A guest who arrived with a large retinue assumed his host had considerable resources (Jackson 1971, 30). If anyone brought a fotsetla to a feast of the Cambridge Thegns' Guild, then he was to pay a sester of honey (Whitelock 1955, 558). Whatever sort of retainer the fotsetla was (and he could have been a minstrel, since these are recorded as sitting at the feet of their lords, or even a footwarmer such as the Welsh king had), in the context of a guild feast where the

members had to provide the food and drink, he was to be paid for.

SERVANTS

The emphasis on those who 'sat to' the feast was perhaps because sitting down was a privilege in itself, for some of those present at a feast, including the servers, were not entitled to sit, such as the unfortunate apparitor of the Welsh laws, though a court official, who was not allowed to sit while the king was eating and drinking in hall 'lest the house be burnt while the king is at meat' (Owen 1841, 65, 393). At a great feast the servants had to 'scurry to and fro...speed on their tasks' (Whitelock 1955, 279). What they might be doing is illustrated in manuscript illustrations - bringing food on spits from the kitchens and kneeling with it in front of the diners who then helped themselves, serving drink, etc. (Turner 1828 III, 36).

Almost all the evidence as to who served food comes from Celtic sources and indicates that men were in charge of the great hall and the serving of food in large establishments (Jackson 1969, 34; Owen 1841, 355; 643). Rank was observed among servants too; high ranking servants served diners of high status. It is possible that men served men with food, women, women (Whitelock 1955, 706).

On occasion it seems to have been the women who served the drink to men at feasts. The Gnomic Verses outline the duties of a queen:

meodoraedenne
for gesiðmaegan symle aeghwaer
eodor aeþelinga aerest gegretan
forman fulle to frean hond
ricene gereacan ond him raed witan

(always everywhere before the band of comrades at the mead-drinking, she shall first of all greet the protector of the nobles, quickly offer the first cup to her lord's hand, and know good counsel) (Mackie 1973, Gnomic Verses l. 87 ff.). In Beowulf it is the queen who offers the cup to Hrothgar and his guest. The wife of a noble who was cured of an illness was then well enough to carry out her duties as hostess and brought the cup to the bishop and the rest of the guests, serving them all until dinner was finished (Miller 1890, I 2, 396).

In the early period, high born women perhaps poured imported wine through the delicate and expensive sieve spoons which indicated their status and were buried with them (Meaney 1981, 87-8). Women's graves also contained bucket pendants, which perhaps symbolised the female role as servers of drink, though buckets

were more likely to have been used as intermediate vessels for the serving of mead, beor or ale, than wine, which was imported in flasks or casks (op. cit., 247). Female servants who held the office of byrele (cup-bearer) are referred to in the seventh-century laws of Aethelbert, since an eorl was entitled to twelve shillings compensation if anyone slept with his cup-bearer; a ceorl was entitled to half this amount (Attenborough 1922, 6-7). What had traditionally been a female role would of course have to be filled by a man in a monastic household (Fell 1984, 50). However, it seems that towards the end of the period high-born women were eating with the men at feasts and were not required as servers.

BLESSING FOOD AND BREAKING BREAD

While Hrothgar simply invites Beowulf to sit down and enjoy the feast, after the conversion food was blessed before the eating started (Miller 1890, I 1, 166; Wilson 1985, pl. 48). After grace the most important guest seems to have broken the bread or divided the food (Turner 1828, III, 420).

MANNERS

By the end of the period table-manners were a matter of concern and interest to some (Holmes 1952, 89; Jackson 1969, 128, 100;

Magnussson & Palsson 1960, 117; Garmonsway 1978, 46). It was not considered polite to gulp down or gobble your food for which the perjorative word fretan is used (Page 1985, 14-15). This word is used to show that it was not the done thing to pick up and eat any morsel of food that had fallen on the floor:

> ðonne snottrum men snaed oddglideð
> ða he be leohte gesihð, lueð aefter,
> gesegnað and gesyfleð and him sylf friteð

(when a chunk of food slips from the hand of one of these clever men, he spots it in the light, bends down to pick it up, blesses it, covers it with seasoning and actually consumes it) (op. cit).

At Coppergate in York the evidence of the faecal layers which contained fruit stones, apple core fragments and fish bones, is that food was bolted, or at least eaten in uninhibited fashion (Jones 1987, 29). There is no way of knowing whether hunger was the reason for these foods being bolted, or whether this method of eating was habitual to the inhabitants of Viking York.

THE FOOD

It seems that feast-day food was anticipated with some pleasure, and then enjoyed: Athelstan 'entered joyfully the dinner apartment', and Hrothgar gladly partook of the symbel and sele-ful (feast and hall-cup) (Turner 1828, III 29; Zupita 1959, 1.619). It seems that one might expect better food at a feast - rarer items and choicer cuts - and plenty of it. The better cuts of meat could be roasted, especially as the diners would be on hand to eat the meat as soon as it was done.

Poultry and pork were suitable foods (Fell 1984, 144; Davies 1982, 35; Liebermann 1898, 454; Hawkes et al. 1985, 103; Robertson 1939, 199, 252). Beef, particularly from specially fattened bullocks, was feast-day food (Davies 1982, 23; Robertson 1939, 252; Whitelock 1968, 10). The fact that sheep are not mentioned could be an accident of the non-survival of evidence, but is is perhaps accounted for by the fact that pigs and cattle will more readily put on weight to give fatty, tender meat.

The game taken by hunting and fowling was considered suitable for feasts since it was expensive to obtain (Robertson 1939, 252). Fish was also a delicacy, as were broth and cheese (Robertson 1939, 252; Douglas & Greenaway 1953, 817; Garmonsway 1978, 27;

Davies 1982, 35).

Bread was the standard constituent of all meals, and specified for funeral feasts, as above, ordinary bread was probably replaced by a finer kind on feast days. A number of festival cakes based on enriched dough mixtures are known from across Europe from Roman times on (Chapter 2).

The most complete picture of food for a feast is that provided by the listing of the major ingredients of the funeral feasts at Bury St Edmunds (see above). The first feast consisted of ale, bread and meat; the second of ale (this time brewed specially for the feast), bread, meat, cheese, fish and milk (Robertson 1939, 252).

While one might expect Anglo-Saxon feasts to be hearty Homeric affairs, the impression from the documentary evidence is that considerable skill was exercised by cooks to produce delicacies: 'the strange diversity of sumptuous food' (Whitelock 1955, 279, 777; Kylie 1911, 42-3). Eating to show social status was a well-developed phenomenon of the medieval period, but was evidently established early in Anglo-Saxon England.

DURATION

Day-long feasts were common (Zupita 1959, l. 2103ff., 2115ff.;

Turner 1828, III, 29, 32; Whitelock 1955, 235; Mellows 1982, 42). It was not generally acceptable to leave before the end of a feast (Miller 1890 I 1, 162; Whitelock 1955, 234). Some banquets seem to have continued overnight (Turner 1828, II, 154). St Eligius exhorted people - ineffectually as it has turned out - not to make feasts lasting all night nor to indulge in intemperate drinking on the Calends of January (Bonser 1963, 141). The three-day feast seems to have been the standard for any great celebration (op. cit., 140).

THE DRINK

It is clear from the references to feasting that drink was as important as the food. Ealu (ale), beor (probably fermented fruit-based drinks, including cider), meodu (mead) and win (wine) are the four drinks frequently mentioned, and all occur in compounds with, for example, sele/heall (hall) and benc (seat). Gebeorscipe was a common term for feasting. The over-riding concern was that there should be plenty of drink (Turner 1828 III, 29; Owen 1841, 63).

DRUNKENNESS

The consumption of unlimited quantities of alcohol tended to militate against the preservation of an image of harmony which

the feast was calculated to further. Men 'drunken with beor renewed old grudges', and in extreme cases the conflict might threaten the king's peace, so this had to be protected by severe penalties (Gollancz/Mackie 1973, St Juliana; Attenborough 1922, 4; Whitelock 1955, 361). Fines for murder committed at a feast were much higher than if the act was done at an open grave, when feelings might be expected to have been running high (Turner 1828, II, 507).

GLUTTONY

Although feasting became incorporated into the Christian scheme, the problem was that feasts could and, according to a number of accounts, did lead to the sin of gluttony. Gluttony in respect of Anglo-Saxon feasting was the concern of ecclesiastical writers from the eighth century (Kylie 1911, 42-3, 169; Whitelock 1955, 777, 790). When Aethelwold was appointed to Winchester, clerics given over to gluttony and drunkenness attempted to poison him when he introduced a more austere regime (Whitelock 1955, 835). In 1008 Aethelred's law code specifically outlawed over-eating and drinking (op. cit., 408). The sermon of Wulfstan declares that it was in part gluttony which was causing the destruction of the country (Swanton 1975, 122). England as a whole had a reputation for heavy eating and drinking all over the continent by the end of the Anglo-Saxon period (Knowles 1940, 463;

Whitelock 1955, 291).

Some people must have had a somewhat ambivalent attitude to feasts: pleasurable as they undoubtedly were, ecclesiastics denounced them as sinful. One way of partially resolving this conflict was to dispose of the left-overs charitably (Whitelock 1955, 389).

TREACHERY

Eating with someone implied reciprocal social and even legal bonds. Hospitality carried with it a number of obligations - not just the provision of food but the protection of guests. Feasts were used as a cover for premeditated treachery on a number of occasions throughout the period (Turner 1828, I, 264, 419; Whitelock 1955, 323, 835).

ENTERTAINMENT

Despite the possibilty of violence, people went to feasts expecting to enjoy themselves. The sound of people having a good time is mentioned a number of times in the literature; perhaps most dramatically, Grendel is overcome with rage and jealousy when he dream gehyrde (heard the sounds of enjoyment) in Heorot (Jackson 1969, 149; Zupita 1959, l. 88). The drink obviously helped people enjoy themselves and everyone might be expected to contribute to the entertainment at a feast. In this connection the story of Caedmon is well known (Miller 1890, I, 2 343).

Harping must have been a common pastime at feasts since it is used as a metaphor for feasting (Mackie 1973, Rhymed Poem, l. 25 ff.). The poetic epithet for the harp/lyre was gleobeam (the wood of joy), suggesting association with the pleasures of feasting in hall. Such instruments have been found in the archaeological record (Bruce-Mitford 1983, 683, 687-8, 701, 718, 724-5; Evison 1987, 121).

Professional entertainers, jesters, actors and dancers as well as singers and other musicians, were employed as part of their establishment by those who could afford them (op. cit., Gnomic Verses l. 127). Riddles were asked and stories recited. Further

details of entertainment at feasts are given in Appendix C.

NOSTALGIA

Most people saw feasting as an infinitely desirable pastime. Hagiographers even made use of this fact in their writings. St Agatha Eode pa blidelice to than blindum cweaterne swylce heo waere geladod to lustfullum beor-scype (went as cheerfully to the dark dungeon as if she were invited to a pleasant banquet), though she was perhaps outdone by some brothers who swa blipelice eodon to heora agenum slege swylce to gebeorscipe (went as gladly to their own deaths as to a banquet) (Skeat 1881 St Agatha l. 97 ff.; St Cecilia l. 228). It is the dramatic contrast of the feast in the warm hall where the king sits with his retainers around him and the cold darkness outside that is drawn on for an analogy of human life (Miller 1890, I,1 134-6).

The loss of prosperity evokes nostalgia for feasting. The lord of the Rhymed Poem says that, when rich,

> secgas me segon symbel ne alegon
> feorgiefe gefegon

(men gazed upon me, feasts never failed and they rejoiced in the gift of life).

giestas gengdon gerscype mengdon
lisse lengdon lustum glengdon

(guests came and went, mingled their talk, lingered over delight, adorned themselves richly) (Gollancz/Mackie 1973, Rhymed Poem l. 5 ff, l.11 ff.). The seafarer regrets that he hears now

huilpan sweg for hleahtor wera
meaw singende for medodrince

(the cry of the curlew instead of men's laughter, the scream of the seagull in place of the mead-drinking) (Gordon 1960, 35). The regret for the silent, deserted ruin which was once meadoheall monig mon dreama full (a meadhall full of the sounds of music), a place where people had gathered and feasted, where the horn was passed round, is found also in the Celtic literature (Gollancz/Mackie 1973, The Ruin; Davies 1982, 30; Turner 1828, I 307 Elegy on Urien of Reged). The hall was a centre of companionship: the isolated exile has no-one þe in meoduhealle min mine wisse (who knows my mind in the mead-hall) (Sweet 1965, 149-151). It is in The Wanderer that nostalgia for the joys of feasting finds its most eloquent expression. The lament refers to several essential elements of the noble feast:

Woriað þa winsalo waldend licgað...

Hwar cwom symbla gesetu? Hwaer sindon seledreamas?

Eala beorht bune! Eala byrnwiga eala þeodnes þrym...

(The wine-hall crumbles, the walls decay...Where is now the place of feasts? Where are the joys of hall? Alas for the bright cup! Alas for the armed warriors, alas for the might of the nation...) (op. cit.).

CHAPTER 10

SPECIAL REGIMENS

This chapter is divided into three sections: special regimens for infants, invalids, and monastics.

(i) INFANTS

Children were probably breast-fed until they were about two. A woman who could not lactate, and could not employ a wet nurse, would probably lose her child. A Leechdom counsels the woman who cannot feed her child to nime þonne anes bleos cu meoluc on hyre handae 7 gesupe þonne mid hyre muþe 7 gange þonne to yrnendum waetere 7 spiwe þaer in þa meolc 7 hlade þonne mid þaere ylcan hand þaes waeteres muð fulne 7 forswelge (take the milk of a cow of one colour in her hand and then fill her mouth with it and go to running water and spit the milk in and then ladle up with the same hand a mouthful of the water and swallow it). After that she was to recite some words, but the element of sympathetic magic was no doubt important (Cockayne 1851, Lac., 104).

According to Bede, it seems to have been the case that a couple should not resume sexual relations until their child was weaned: To hire gerestscipe þonne hire wer ne sceal gongan, aer þon þaet acennde bearn from meolcum awenedð sy (her man must not go to her

bed before the newborn child is weaned from milk). However, this tended not to be observed. An unriht gewuna wel hwaer is arisen betweoh gesinhiwum þaet wiif forhycgað heora bearn fedan þa ðe heo cennað 7 heo oðrum wiifum to fedenne sellað. (A culpable custom has grown up between the married pair in that the wife neglects to feed her child and gives it to other women to feed).

The late seventh-century Laws of Ine suggest that wet nursing was established. The Laws allow a gesith-born man to take with him his reeve, and his smith and his cildfestre if he moves elsewhere (Whitelock 1955, 371). Cildfestre, translated 'children's nurse' literally means 'child's feeder', and is unlikely to mean simply a nursemaid who would have been easy to replace.

The milk of cattle, goats and sheep, and the whey from cheesemaking may have been given to babies and young children (Bonser 1963, 302; Holmes 1952, 200). The latter is rich in nutrients and easy to digest. Traditionally cows' horns were used as feeding bottles for babies, but there must have been a considerable risk of gastroenteritis as there is no evidence that utensils would have been sterilized, although experience with dairying may have shown the importance of cleanliness. The likelihood would be that a mother breast-fed her baby, supplementing as the child grew older with cereal porridges for which the grain could be finely ground.

FOOD FOR YOUNG CHILDREN

Babies were probably weaned onto finely ground cereal mixtures. The Welsh Laws provided wheat to be made into pap for a child during the first year of its life, and the 'pan with feet', which was also to be provided, was probably for cooking this gruel (Owen 1841, 519). Pap could also be made by soaking bread in milk or water. Probably babies were given bread to suck/chew as soon as they had teeth (Kylie 1911, 95).

Bread was probably the basic food for children. The baker of the Colloquy claims ic maegen wera 7 furþon litlincgas nellaþ forbigean me (I make men strong, and not even the little ones will shun me) (Garmonsway 1978, 36-7). Bread was all that the children at the monastery of Abingdon had to eat when Queen Edith came to visit them and decided to make provision for better food (Knowles 1940, 457). A tradition at St Albans assigned a gift of land in Aethelred's day to the provision of milk and cheese ad alimenta monachorum juniorum (for food for the young monks) (op. cit.).

Older children, like the novice of the Colloquy drank ale or water, not wine because win nys drenc cilda ne dysgra ac ealdra 7 wisra (wine is not the drink for children or the foolish, but for

the older and wiser) (Garmonsway 1978, 47).

RELAXATION OF DIETARY OBSERVANCE

Children were not made to fast. The Penitential of Ecgbert states, for example, gyf hit geweaxan man sy faeste 1 gear (if he is a grown man, he is to fast one year). The rigour of the Benedictine Rule was to be relaxed for children and the old on account of their wacmodness (feebleness). 'This is to be a kind consideration of them, and permission is to be given them to anticipate the regular hours' (Bonser 1963, 91). Ingulf says of Editha at the royal court that she used to send him to the larder for refreshment when he was a boy (Turner 1828, II, 354). Lanfranc's Statutua, perhaps codifying earlier practice, legislate for a mid-morning breakfast for the children and those monks unable to fast longer, and children could breakfast during the monks' chapter (Knowles 1940, 457).

The novice of the Colloquy says Gyt flaescmettum ic bruce, fordam cild eom under gyrda drohtniende...wyrta 7 aeigra, fisc 7 cyse, buteran 7 beana 7 ealle claene þingc ic ete mid micelre þancunge (I still enjoy meat because I am a child still under instruction...vegetables and eggs, fish and cheese, butter and beans and all untabooed things I eat with great thankfulness). He is not swa micel swelgere þaet...ealle cynn metta on anre

gereordinge etan maege (such a great glutton that <he> eats all kinds of food at one meal) (Garmonsway 1978, 46). It was important that the children were allowed to eat meat, otherwise they could have suffered from zinc deficiency, leading to arrested growth (Morgan 1975, 4).

MALNOURISHMENT

Infanticide was not accounted a crime in the earlier Anglo-Saxon period because it was considered better in times of stress, that a child should die as soon as it was born, rather than that it should linger a short time to die of starvation. By the time of the Pentitential of Theodore infanticide was accounted a serious crime, although more excusable if carried out by an impoverished mother (Bonser 1963, 87).

Wells suggested that enamel hypoplasia affecting the canines and second molars most often among the Anglo-Saxons indicates that periods of morbidity occurred between the ages of 2 and 4 years, perhaps due to nutritional disturbances associated with weaning (Wells 1964). However, Harris's lines in the early Anglo-Saxon communities at Burgh Castle and Caistor, Norfolk, indicate increased frequency around the ages of 4-6 and 8-12 (op. cit.). This is probably evidence of the more general 'bread-winner effect'. As in other agricultural communities which depend on

the strength of adult males for the heavy agricultural work, children probably ate afterwards with the women (Kuper 1977, 103-4, 107, 164, 175). If supplies were scarce, the women and children went short.

(ii) INVALID DIET

A tradition of doctoring, using herbs as the main treatment, was established by the middle of the period, though medical writings date from the late period (Turner 1828, III 4). The wort drinks so often recommended, are prescriptions rather than food, but so many recipes are given - some hundreds in Leechdoms - that they must have been a very common way of treating complaints. They would have been important as a valuable source of vitamins A & C in particular, as well as minerals, apart from containing active principles which may have been effective against the particular complaint for which they were taken. Godum wyrtdrencum swa laeces wyrcað (good herb drinks such as doctors make) elsewhere called oxumellis, contained vinegar and honey, a combination still recommended (Cockayne 1851, II i 1; II xxiii; Hills 1988, 70).

Instructions for invalid or special diets are sometimes given in very general terms: ete fersc flaesc þaer þaer hit faetost sie (eat fresh meat where it is fattest) for example, and there are a number of references to fat meat (Cockayne 1851, III lxv, lxxii;

Peri Did. 37, 38, II vi, vii). Leohte mettas (light foods) which included geseaw broþu 7 geseawe pysan 7 geslegen aegru 7 bread gebrocen on hat waeter winewinclan adon of scellum mid pysum (juicy broths and fresh peas and beaten eggs and bread broken into hot water and periwinkles removed from their shells with peas) are also called for, and hnesce mettas 7 godne drincan (delicate food and good drink) (op. cit., I xlix; Peri Did. 40; 44).

Sometimes the instructions are specific and worth quoting in full, since they are the nearest we get to Anglo-Saxon recipes, or to an idea of diet: sceal he etan drigne hlaf 7 cyse...baca hym man þanne wearmen hlaf (he is to eat dry bread and cheese...bake a warm loaf for him) (Peri Did. 52); cicene mete...seow on wine do þanne ele to þe beo of frencissen hnutu 7 drince þaet (stew chicken in wine and then add walnut oil and drink that) (op. cit., 53). Beef broth made from beef marinaded in vinegar and oil, cooked with salt, dill and leek was recommended for stomach trouble (op. cit., II vii). So was a diet which included apples, pears and peaches, bread in water, salmon, goose giblets, and pigs' trotters, and another leechdom recommends the flesh of small birds, stewed and roasted; apples, pears, medlars, and peas cooked in vinegar or sharp wine (op. cit., II i; ii 2). Salt meats, hares' and boars' flesh, roots of rue, cresses and easily digested meats were recommended for an

invalid with heardum swile þaes magan (a hard swelling of the stomach) (op. cit., iv). He was also to be given sweet apples, marinaded in wine, then stewed and sweetened with honey and peppered (op. cit.). An internal stomach injury was treated by giving the patient aegru to supanne beren bread claene niwe buteran 7 niwe beren mela oðde grytta togaedre gebriwed swa cocas cunnon (eggs to sup up, barley bread, clean new butter and new barley meal or groats made into a brewit as cooks know how) (op. cit., II xxvi). Niwe molcen meoluc mid hunige gesmeþed (fresh milk sweetened with honey), and ofen bacen hlaf (oven baked bread) were recommended for other gastric complaints (op. cit., II xxvii).

Meats þe god blod wyrcaþ (that make good blood) were thought to be scilfixas finihte 7 ham wilda haenna 7 ealle þa fugelas þe on dunum libbaþ 7 pipiones þ beoþ culfrena briddas 7 healfeald swin 7 gate flaesc 7 pisena seaw mid hunige hwaet hwega gepiperod (shellfishes, finned fishes and domestic and wild hens and all the birds that live on the hills, and pigeons, that is, the young chicks of culvers, half-grown pigs' and goats' flesh and the juice of peas with honey somewhat peppered) (op. cit., II xxxvii). The recommendation of fish was not in the original Greek, and fish remains an 'invalid' food today, as does chicken, recommended elsewhere (op. cit., II xvi, III lxxii, Peri Did. 51). The value of eggs, dairy produce and vegetables seems to

have been recognised (op. cit., II xvi 1, xxv, xxvi, xxvii, li, Peri Did. 37).

Hryþeres flaesc gaeten 7 hiorota buccena 7 ramma 7 fearra 7 þa þe swiðe ealde beoð on feoþorfotum nietenum 7 fuglas þa þe heard flaesc habbað þawa swan aened (bullocks' meat, goats' and harts, bucks' and rams' and bulls' and the meat of all old four-footed animals, and birds that have hard flesh - peacock, swan, and duck) are all recommended in one case (op. cit., II xvi).

AVOIDANCE

A pregnant woman was sensibly warned against sealtes ete oðde swetes oþþe beor drince ne swines flaesc ne naht faetes ne druncen gedrince (eating salt or sweet things or beor or fat pork or anything fat or drinking to excess) (op. cit., III xxxvii).

Instructions about what food is to be avoided is sometimes given in general terms: forga sur 7 sealtes gehwaet (avoid anything sour or salt), for example (op. cit., I iv 5, 6, xv 2, ii 1, II xliii). Food to be avoided by a man with liver disease is given first in general terms: nothing too sharp, bitter or purgative and then in detail: aelc broþ is to forganne...aegru sint to forganne...hlafes cruman gif hie beoþ ofþaende oþþe gesodene...ac na to swiþe. oþre waetan mete gearwa 7 cocnunga ealle sint to

forbeodanne 7 eal þa waetan þing 7 þa smerewigan 7 osterhlafas 7 eall swete þing þe wyrcað abundenesse...aeppla ne win (all broth must be avoided...eggs are forbidden...crumb of bread can be taken provided it is moistened or sodden...but not to excess. Other moist ?wheaten ?meat-preparations and cookings-up must be forbidden and all moist and greasy things and oyster pies and all sweet things that create wind...no apples or wine) (op. cit., II xxiii).

Other Leechdoms warned against vinegar, peas, beans, turnips, apples and nuts because they caused wind (op. cit., II xxiv, xxxix). Sometimes cealde ostran 7 aeppla 7 missenlice wyrta þigð (cold oysters and apples and various vegetables) were to be avoided, elsewhere leek and cabbage are singled out (II xxxvi, I ii 1). Cheese, goose, eel, pork, fish and waterfowl could be eaten if salted (II xxii; I xxxvi). Another Leechdom forbade fen fixas and sae fixas þa þe habbað heard flaesc...hriþeres flaesc ne swines ne sceapes...ne gate ne ticcenes (freshwater fishes and sea fishes that have hard flesh...bullocks' flesh, or pork or mutton...or goat or kid meat). It also counselled against drinking þicce win (II xliii). Asthma sufferers were given the comprehensive instruction to avoid feala cunna metas 7 drencas 7 wid gebraed flaesc 7 wid aelces orffes flaesc 7 þe cudu ceowe (many kinds of meat and drinks and roasted meat and the meat of every kind of animal that chews the cud) (Cockayne 1851, Peri

Did. 52).

RELAXATION FROM RELIGIOUS RULE

The Rule of St Benet allowed the flesh of quadrupeds only to the very weak and sick (Logeman 1888, Ch. 39). Aethelwold ate meat for three months when he was ill only at the command of Dunstan, and again during his final illness (Symons 1953, xxxv; Knowles 1940, 458). The Rule of Chrodegang allowed an invalid on aelcne sael aet 7 waet þicge þonne hine lyste oððe he maege, þonne he gedafenlicum tidum ne maeg (to take food and drink whenever he wants to or is able to, when he cannot observe the proper mealtimes) (Napier 1916, 47-8).

(iii) MONASTIC

Some Christian hermits, like Old Testament prophets, led a life of austerity in which a restricted, even eccentric, diet played a part (Turner 1828, III, 27; Whitelock 1955, 749). The growth of communal monastic living necessitated meals that were acceptable to a group of individuals. The most famous rule was that instituted by Benedict of Nursia in the sixth century. The standard meal was bread and its accompaniment, as in lay households, and a second dish was offered at mealtimes so that 'he who perchance cannot eat of the one, may make his meal of the other' (Matt & Hilpisch 1961, 114).

A restricted diet was thought unlikely to inflame the passions, and gluttony and drunkenness would also be avoided (Garmonsway 1978, 46; Napier 1916, 40). The Rule of Chrodegang declared: ...gebeorscipas...synt to fleonne...Ac sy eadelic aefenmete, hlaf mid ofaete, 7 amang þam gif ma fisc haebbe healde þaet for healicne est. Se þe mis Criste wilnaþ to rixigenne, ne recþ he na swiþe hwaeþer he of deorwyrþum mettum 7 drincum þaet meox his argancges 7 his micgan gesamnige (...feasts...are to be avoided. But let bread with vegetables and fruit make a pleasant evening meal and if anyone has a fish let it be accounted a great delicacy. He who wishes to reign with Christ, does not care if he

consume expensive food and drink which are excreted as dung and urine) (op. cit., 69). However, there was a problem in balancing food intake so that bodily lusts would be subdued, but the monks would have enough energy to carry out their work. According to the Rule of St Benet, 'Everyone hath his proper gift from God, one thus, another thus. For this reason the amount of other people's food cannot be determined without some misgiving' (Logeman 1888, Chap. 39, 40). Fixing reasonable rations was difficult and laxity tended to creep in because no absolute standard could be established (Knowles 1940, 150).

The capital question concerned the abstinence from flesh meat as Benedict supplied matter for argument. The term 'flesh' was taken not to include fat (pinguedo) since an incidental enactment forbids this only during the Advent and Lenten fasts. Because the word 'quadruped' was used, the flesh of birds was considered lawful (op. cit., 458). The Regularis Concordia does not include a chapter expressly devoted to diet, but announces that the Benedictine Rule is to be followed absolutely: that is, the two cooked dishes and one of fruit or vegetables, or, if the field labour was especially severe, other dishes at the abbot's discretion.

A number of religious, or quasi-monastic, communities were established in Anglo-Saxon England as early as the seventh

century, among them Canterbury, Ripon, Winchester, Gilling, Whitby and Icanho (Knowles 1940, Appendix III; Whitelock 1955, 152, 696, 697; Matt & Hilpisch 1961, 149). However, the numbers of men and women living under the monastic rule varied throughout the period, and the dietary regulations were not always observed. At Monkwearmouth and Jarrow, for example, Biscop compiled his guide from the observances of seventeen different monasteries he had visited (Knowles 1940, 23).

Ascetic individuals, like Cuthbert, and later Aethelwold, who 'thought to subdue himself by abstinence', were revered by their contemporaries (Colgrave 1940, 70; Whitelock 1955, 837). They had their adherents, ready to follow their example, and Aethelwold gave impetus to a movement for monastic reform. However, the respect accorded such individuals on account of their asceticism argues that it was not widespread, even among monastics.

TIMETABLED MEALS

The times of meals, and their number, varied according to the time of year (see Chapter 7), but meals had their place in a regular routine, not to be interrupted by personal circumstances, or the exigencies of work or weather. It is this element of regularity which characterises the monastic regimen. There was a

formal, ritual quality to a meal in the refectory (Symons 1953, Sect. 26). According to the Rule of Chrodegang, after washing their hands in silence, a bell would be rung after which the brothers were to kneel and pray, then take their seats one by one. After blessing the food and drink, the prior was the first to eat. The Rule was to be read, and no-one else was to speak (Napier 1916, 125-6). This regimented existence may have been irksome to some of the inmates, but for those who were not guaranteed sufficient food by their personal circumstances, regular meals may have been an attraction.

FOOD ALLOWED BY THE RULE

After the Regularis Concordia, abstinence from flesh meat was general throughout the monasteries of England until well after the Conquest (Knowles 1940, 460). Fat, in the form of lard, suet and dripping was eaten, though it was a luxury and therefore to be renounced from Septuagesima till Easter, and in Advent, save on Sundays and feasts (Robertson 1939, 199; Knowles 458-9). Lent was a time for fourfold abstinence and pinguedo (lard) was one of the four items to be abstained from (milk and eggs were two other items specifically mentioned, the fourth was presumably poultry) (Symons 1953, xxxv). The flesh of birds and fish could normally be consumed while still keeping to the letter of the law (Knowles 1940, 460).

The midday meal, the prandium, became the chief meal, to consist of two cooked dishes, twa gesodene sylfian/ twa gesodene sufel, to be eaten as an accompaniment to bread. These would have been of cereals, beans or other pulse, eggs, cheese and the like. There was to be a third dish of fresh vegetables and fruit if such were available. Bread was the mainstay of the diet with the individual ration set at a pound a day. St Benedict nowhere gave details of the second meal, but it may be supposed that it was a lighter version of the other, since a third of the daily ration of bread was kept back for it (Knowles 1940, 462).

This information may be amplified by the details given in the plan for the monastery garden of St Gall. Apple, pear, plum, service, medlar, bay, chestnut, fig, quince, peach, hazel, almond mulberry and walnut trees all featured, and the eighteen great beds of the kitchen garden were to contain onions, leeks, celery, radish, carrots, garlic, shallots, lettuce, parsnip, cabbage, parsley, dill, chervil, marigold, coriander, poppy, and corn campion (Stewart 1975, 46). The vegetables would have made suitable flavourings for cereal or bean dishes or could have been served as an accompaniment to bread (Cockayne 1851, III, 408).

The Rule of Chrodegang is interesting since it gives a more generous allowance of bread, and mentions flaesc (animal flesh)

foods: sylle ma aelcum...feower punda gewihte hlafes; 7...heora middaeges sufle, twam 7 twam an(e) flaescsande, 7 syddan odre smeamettas. Gif man naebbe smeamettas, sylle man twam 7 twam twa flaescsande. 7 (to) heora aefenþenunge sylle man twam 7 twam ane flaescsande odde odre smeamettas. On þam tidum þe hi sceolon flaesc forgan, ealswa on Lengtenne, þonne sylle man to middaegþenunge twam 7 twam an tyl cyssticce 7 sumne smeamete; 7 gif man fisc haebbe odde wyrta, sylle ma him to þriddan sande; 7 on aefen twam 7 twam an cyssticce 7 sume smeamettas; 7 gif it rumre cymð, þancion eadmodlice þaes aecum Drihtene. Þonne hi etaðf to anes maeles on daeg, þonne sylle man twam 7 twam sumne smeamete 7 tyl cyssticce, 7 wyrta odde sumes cynnes gesodenne mete to þriddan sande. (give each...four pounds by weight of bread, and...for their midday accompaniment for their bread let each two have a dish of fleshfood and offer other delicacies (e.g. meat puddings and sausages). If there are no delicacies, then let them be given two meat dishes. And for their evening meal let every couple have a meat dish or other delicacies. And at that time they must forego meat, and in Lent, then at midday day every couple shall have sufficient soft cheese and some delicacy, and if fish or vegetables are available, let them have them as a third course. And in the evening, each couple is to have soft cheese and some delicacy, and if the food is plentiful, humbly thank eternal God. When they only have one meal a day, then each couple is to have a delicacy and a serving of soft

cheese and vegetable or some kind of stewed meat (?food) as a third course) (Napier 1916, 14-15).

There are no precise and authentic data for reconstituting the daily monastic meals in the times of Dunstan and Lanfranc (Knowles 1940, 462). So far as can be ascertained, the arrangments for the common meals remained unchanged between 960-1216, modified only by the addition of more feast days in winter. How far the observance was relaxed in the decades before the Conquest must remain a matter of doubt (op. cit., 457). When information becomes plentiful, it is clear that, erected upon the basis of an ordinary day's fare of bread, cheese, vegetables, and two or three dishes of cereals, beans or eggs, a considerable fabric of extra dishes had sprung up. The most general form taken by these additions was the pittance, a small dish, usually of eggs or fish, served to each monk or pair of monks. A separate official, the pittancer, had charge of the material for the pittances (Knowles 1940, 464). At Glastonbury by the end of the period the monks had two pittances on Sundays, Tuesdays, Thursdays and Saturdays, and one on the remaining days of the week. At the same time the Abingdon dietary also allows two pittances on the same four weekdays, and three or four pittances on feastdays, with two dishes of vegetables, one or two of pulmenta (cereals/beans) and one generale of eggs and fish (op. cit., 463). In the opening years of Edgar's reign some men had

been attracted to Abingdon by its reputation for stricter observance, so other monasteries may have been more lavish in the matter of food, or, perhaps more probably, the laxity had crept in over the ensuing decades (Symons 1953, xix).

Wealthy individuals made provision for feasts in particular monasteries on the basis that the monks were to intercede for their souls (see above). Aethelgifu left St Albans xvi mittan mealtes 7 iii melwes 7 an sester huniges...7 viii weþeras 7 vi lomb 7 an slegeryþer 7 xxx cysa...anne oman wines 7 xx cysa 7 vi swin 7 an hryðer 7 nyme man of aeghwilcum tune to þam þryttgupan daege (16 measures of malt and 3 of meal and a sester of honey...7 wethers and 6 lambs and a fattened bullock ready for slaughter and 30 cheeses...one oman of wine and 20 cheeses and 6 pigs and a bullock...from each estate for the thirtieth day <i.e. after burial - the 'month's mind'>) (Whitelock 1968, 11).

LAXITY & REFORMS

There were ideals, but normal practice was not attuned to them. Bede complained to Egbert in 734 that 'certain bishops...are given to laughter, jests, tales, feasting and drunkenness' (Whitelock 1955, 737). He maintained the double abbey at Coldingham was destroyed by fire because of oferaeta 7 druncennesse 7 leasspellunge 7 oðerra unalefedlecra scylda

(gluttony and drunkenness and idle gossip and other unlawful transgressions) (Miller 1898, II, 354).

Aethelred instructed in 1008 that clerics, where there was property such that they could have a refectory, were to obey the Rule, but he had to follow this up in 1014 by declaring heonan ford we willad þaet abbodas 7 munecas regollicor libban þonne hi nu aer disan on gewunan haefdon (henceforth we desire that abbots and monks live more according to the Rule than they have been accustomed to do until now) (Robertson 1925, 126). The tendency towards laxity was a feature of monastic establishments, although this was checked by a number of individuals throughout the period (Symons 1953, xvi, xxi; Whitelock 1955, 836; Knowles 1940, Appendix III).

There was an infrastructure of lay servants at monasteries (Symons 1953, Sect. 24, 55, 60). Cynesige, a monk who was archbishop of York, is recorded as living very temperately when his clerks or household officers were daily feasting in great luxury and splendour (Mellows 1980, 37). Although there is some confusion over whether those who were feasting were in fact clerics or lay officials, the source indicates the potential for good living in an important ecclesiastical household, even when its head was an ascetic.

Since a monastery contained categories of inmates not bound to observe the Rule, it is not surprising, for instance, that the stores of the monastery of Bury St Edmunds contained flitches of bacon and associated delicacies since the flesh of domestic animals may have been used for guests, servants and the sick, while the lard went to the monks (Knowles 1940, 460; Robertson 1939, 199). It is possible to maintain that there is no trustworthy evidence to show meat was ever allowed in the common refectory of a Benedictine monastery between 960 and 1216, even if certain relaxations had begun to come in outside the refectory (Knowles 1940, 458-63).

The Regularis Concordia stated that all should feed together in the refectory (except in case of illness) and neither prelates not their subordinates should ever presume to be present at worldly feastings, unless perhaps in the case of unexpected hospitality when travelling (Symons 1953, xxxi). However, this dispensation was obviously open to abuse (op. cit.). The difficulty was that high status in lay society was indicated by the consumption of prestige foods in quantity and in the presence of numbers of guests or subordinates.

Monasteries were major landowners, and therefore generally had access to a plentiful food supply. Monks very often came from the ranks of a class used to conspicuous consumption: aeþel-boren

weras...þa waeron estlice afedde (nobly-born men who had been used to eating delicacies) (Skeat 1881, St. Martin 355). The fact that they subjected themselves to þaere stidnysse þa þaer stod on þam mynstre (the austerity that prevailed in the monastery) is seen as admirable, and even surprising. In a society where kings, nobles and landowners rewarded their retainers and servants and demonstrated their status by holding feasts, it proved to be difficult to prevent a movement towards feasting in monasteries.

CHAPTER 11

FOOD SHORTAGES & DEFICIENCY DISEASES

HUNGER

Steorfan did not yet mean 'to starve' but simply to die, though of hungor/hungre/hungaer was sometimes adjoined, but of the synonyms used for 'to die' only stearfan/steorfan and sweltan seem to have been commonly employed in the 'of hunger' connection (Bosworth and Toller 1898, I 917; Jember 1975, 21).

Bede mentions hunger and thirst as the first infirmities of nature, following from the sin of the first man (Miller 1890 I, 178). The Fates of Men refers to the individual eaten by a wolf, and then states sumne sceal hungor alipan (another shall be wasted by hunger) (Gollancz/Mackie 1972, The Fates of Men l. 15). The eventualities listed by the poem, though perhaps not commonplace, were distinct possibilities. A woman writing to her absent lover feels constrained to point out:

> Wulf min wulf wena me þine
> seoce gedydon þine seldcymas
> munende mod nales meteliste

(Wulf, my Wulf, it was my longing for you, your long absences and my sad heart that have made me sick, not lack of food) (op. cit., Wulf and Eadwacer l. 13).

A golden age of plenty was looked back to, but times had changed (Skeat 1881, St Maurice & his Companions l.160). Life on earth was geswinc-ful and on swate wunad...and on hungre gewaeht (hard and spent in sweating toil and wearied by hunger) (op. cit., St Cecilia l.143). Some of the writings about hunger are particularly vivid:

> Þa waes wop haefen in wera burgum
> hlud heriges cyrm hreopon friccan
> maendon meteleaste meðe stodon
> hungre gehaefte. Hornsalu wunedon
> weste winraeced welan ne benohton
> beornas to brucanne on þa bitran tid
> gesaeton searuþancle sundor to rune
> ermðu eahtigan

('Then was weeping uplifted in the towns of men, the loud outcry of the host, heralds shouted, they moaned the famine, weary they stood, bound by hunger. The spired halls remained, the winehouses empty, wealth needed not men to enjoy in that bitter tide. The wise of thought sat apart in council to investigate on their

misery') (Kemble 1848, l. 2311).

One way of dealing with misfortune purh here odpon hunger, purh stric odde steorfan, purh unwaestm odde unweder (through enemy invasions or hunger, through plague or mortality, through crop failure or bad weather) according to the tenth-century Institutes of Polity was to 'earnestly consult how amends could be sought from Christ, with pure fasts and with frequenting churches' (Bonser 1963, 4-5). Hunger was seen as a punishment for evil living. If monks and their superiors cared for worldly things then God would manifest his disapproval: Da pa man towearp munuc-lif and godes biggengas to bysmore haefde buton paet us com to cwealm and hunger (if men cast away the monkly life and hold God's services in contempt what shall we come to but disease and hunger?) (Skeat 1881, Prayer of Moses l.139; l. 152).

One specific incidence of famine is recorded by Bede, since for three years before Bishop Wilfred came to Sussex þaer naenig regn...cwom 7 þonon se grimmesta hungor þaet folc waes waecende 7 heo mid arlease cwale fylde waeron. Secgað men þatte oft feowertig monna oðþe fiftig somed, þa ðe mid þy hungre gewaecte waeron, þaet heo earmlice bi honum noman 7 ealle aetgaedre of saesofre ut feollan, 7 woldan heo sylfe oðþe offyllan oðþe adrencan (there had been no rain and consequently a very severe famine had weakened the people and they died a cruel death. It is

said that often forty or fifty people at a time suffering from starvation and in their misery, took each other by the hands, and jumped together from the cliffs, in order to kill themselves by the fall or drown themselves) (Miller 1890, I 2 302-4). Wilfred showed the people how to fish, since they knew only how to take eels. What were apparently suicide pacts may have been heathen sacrifices, but the rationale was presumably the same.

Scarcity may also be deduced from the laws relating to stolen food. Thieves were severely punished because 'they have snatched away very often the sustinence of the righteous'. Religious writings too confirm scarcity. Alcuin complains to Aethelred of Northumbria in 793 that 'some are inundated with delicacies and feastings like Dives, clothed in purple, ...and Lazarus dies in hunger at his gate. Where is brotherly love, where the pity which we are admonished to have for the wretched? The satiety of the rich is the hunger of the poor' (Whitelock 1955, 77).

RELIEF OF HUNGER

Some charitable individuals of means did make efforts to relieve hunger. A king orders his reeves to supply one poor man on each of his estates with an amber of meal, a flitch of bacon or a wether worth one penny every month (Whitelock 1952, 104). King Alfred left fifty pounds in his will to poor men in need, and

another fifty pounds to poor servants of God (Whitelock 1955, 494). Hunger continued a problem in the tenth century, since King Eadred left sixteen hundred pounds in his will to his people that they might be able to buy relief for themselves from famine, and from the heathen army if they had need. Wulfwaru in her will directs her legatees to feed twenty freolsmen, presumably freedmen, formerly slaves, on her lands (Kemble 1876, 220). Another testator left by will that a hundred poor men were to be fed at Ely, annually on St Audrey's day (Whitelock 1952, 104). There was no comprehensive system of organised relief for the hungry, and it is unlikely that relief reached all those who needed it.

SPECIAL CIRCUMSTANCES

An individual like Cuthbert, living the life of a recluse and refusing an attendant, was at risk from hunger, if not starvation, if he fell ill. Cuthbert had in fact only consumed half an onion of the five he had with him when he took to his bed (Colgrave 1940, 276-7). But when the brethren were, after a tempest of five days, able to reach him one of them observed videbam ... in facie eius quia multum inedia sinnul et languore erat defessus (I saw by his face that he was greatly wearied by lack of food as well as disease) (op. cit.).

FAMINE EFFECTING A CHANGE IN ECONOMIC CIRCUMSTANCES

Theodore's Penitential states Pater filium suum septem annorum, necessitate compulsus, potestatem habet tradere in servitium; deinde sine voluntate filii licentiam tradendi non habet (a father may sell his son aged under seven as a slave if necessity forces him to do so, after that he must have the agreement of the child) (Kemble 1876, 199). This was not as callous an act as at first appears. Selling oneself into slavery in exchange for food was an established practice throughout the period (Miller 1890, I 1 54; Walford 1879, 7). Under the terms of her will, written in a hand of the late tenth century, Gaetflaed set free Ealle ða men ðe heonon heora heafod for hyra mete on ðam yflum dagum (all the people who sold themselves for food during those evil days) (Kemble 1876, 196; Whitelock 1955, 563-4). Slaves who were already part of an estate might be in a reasonably good position in times of dearth. The land would not afford any profit to its owner if it were not worked, and so it was in the landowner's interest to see that workers were fit enough to work.

MONASTIC

In times of famine gold and silver was stripped from reliquaries, and crucifixes and chalices were melted down - presumably for the poor (Dodwell 1982, 219). St Aethelwold in the tenth century

declared that he could not endure the sight of men, created in the image of God, dying of starvation and want, so broke up the church plate to buy food for those in distress (op. cit., 7). Leofric at St Albans did the same, probably in 1005, adding to the church plate gold and silver vessels from his own table (op. cit., 108; Mellows 1980, 70).

CAUSES OF FAMINE

Weather

After a bad season food might be scarce, but a succession of bad years would bring about serious famine and probably pestilence (Bonser 1963, 86). Walford made a comprehensive analysis of the causes of famines recorded in the annals and found inclement weather the most serious factor (Walford 1879, 20ff; Whitelock 1955, 242, 290).

Entymological & zootic factors

There were occasional plagues of insects - 'locusts' according to the sources, which consumed quantities of the harvest. More important perhaps were the murrains which afflicted cattle and other animals periodically. They may have been influenced by poor pasture and reduced supplies of provender, so that a shortage of animal products might coincide with a reduced crop yield and compound the problem of securing sufficient food.

Human factors

Walford's 'defective agriculture' may have played a part in food shortages, but the consequences of warfare were a decisive factor

(Walford 1879, 108). The land itself might be ravaged by troops or agricultural workers might be away campaigning (Whitelock 1955, 255). Transport was certainly not organised on a comprehensive enough basis to make feasible the supply of provisions to an area suffering a shortfall (Walford 1879, 107). No doubt landholders with large scattered estates either went to their properties where there was sufficient food or organised supplies to be transported to them.

In some cases there may have been a lack of technological knowledge when it came to exploiting food resources. There is nothing intrinsically unlikely in the fact that the starving inhabitants of Sussex, used to taking eels by spearing them or catching them in weirs of brushwood, did not know how to net fish at sea.

FAMINE YEARS

Occurrences of famine were recorded in copies of the Anglo-Saxon Chronicle. These were kept at various religious houses, and local outbreaks may have been recorded in only one copy (Bonser 1963, 14). The most important, together with comments from the sources, are listed in Appendix D.

FAMINE FOODS

The likelihood is that if supplies were short, important foods like flour would be bulked out with less desirable additions: beans and peas, acorns and ground bark, for example (see Chapter 2). Diseased meat that might normally have been rejected may have been consumed, in some cases infecting the eater. Fruit that was unripe or bad would normally have been rejected, but in times of famine it was probably eaten. Herbs and roots (nettles and wild skirret, for example) would be gathered from the hedgerows to eke out a scanty existence (Drummond 1958; Fenton & Kisban 1986, 123-4).

In extreme conditions, as were recorded for 695-700, 'men ate each other' (Walford 1879, 5). Cannibalism is also recorded in the post-Conquest period. The Liber Eliensis records fames secuta praevaluit ut homines equinam, caninam, catinam et carnem commederent humanam (consequent famine prevailed with the result that men ate horses, dogs, cats and human flesh) (op. cit., 229). This pattern seems to be generally followed during times of severe famine; taboos play little part when existence is at stake (Victor 1955, 146).

Some famine foods, in particular dark green (i.e. high carotene)

leaves, including Chenopodium spp., were nutritionally valuable, high in Iron (4 mg per 100 gm), Vitamin A (3000 IU per 100 gm), ascorbic acid (100 mg per 100 gm), and contained valuable amounts of the B vitamins, thiamine, riboflavine, and nicotinamide. Other leaves with medium or low carotene would also contribute to a healthy intake (Platt 1968, 14-15). Wild rose hips would a particularly valuable source of ascorbic acid, with an average of 700 mg per 100 gm (op. cit., 36). Blood, and human flesh in particular, would have also been valuable nutritionally. However, it seems likely that without the bulk of cereals or dried legumes for bread or stews, the population would gradually have weakened.

MALNUTRITION

Lack of vitamin A

The probability is that Anglo-Saxon populations suffered from vitamin A deficiency with consequent skin, eye and urinary tract diseases (Bonser 1963, 375, 382, 400). The vitamin is present in butter , fish liver, offal and eggs (Platt 1968, 20-1, 24-5). The vitamin A value of dairy produce and eggs is highest when cows are out at pasture and hens are running loose on grass. Cows fed on dried hay yield milk which becomes progressively poorer in vitamin A. In winter the supply was greatly reduced and consequently reserves in the body would be depleted, so that many may have been in a condition of mild or sub-acute deficiency in the spring (Drummond and Wilbraham 1958). This might explain the high demand for fish experienced by the fisherman of the Colloquy, and also the demand for eggs, and fatty foods generally (Garmonsway 1978, 27).

Lack of vitamin C

In the winter and spring a shortage of fresh meat and vegetables may have meant some of the population were in a pre-scorbutic state, suffering from symptoms which included bleeding gums, ulcers and bloody dysentery (Holmes 1952, 226). A Leechdom

states : nis nan blodlaestid swa god swa on foreweardne lencten þonne þa yfelan waeten beoþ gegaderode on wintra gedruncene beoð (there is no time for bloodletting as good as the beginning of Lent when the evil liquid which has been absorbed during the winter has accumulated) (Cockayne 1851, I lxxii). This is not an isolated reference: a second Leechdom refers to various complaints, including skin complaints and leprosy, the bacillus of which can feed on human tissue in the absence of vitamin C, and continues Forþon sceal mon aer claensian þa yflan waetan aweg aer þon þa yfelan cuman 7 geweaxan on wintra 7 þa limo geond yrnen (therefore men should cleanse away the evil humours before the evils come and grow in the winter and run through the limbs) (op. cit., II xxx; McNeill 1977, 175).

The beet, mallow, brassica, nettle and elder leaves recommended, contained vitamin C which would remedy the deficiency (op. cit.). It may have been that in the warmer phase towards the end of the Anglo-Saxon period, green plants had a longer growing season than at present, and were readily available early spring. The numerous green herbs and sometimes bark used in Leechdoms may well have been beneficial by reason of their ascorbutic properties (Bonser 1963, 9; Bosworth & Toller 1898, I 344).

However, the likelihood is that scurvy was prevalent; Bonser considered that during the Danish invasions the populace was

always afflicted by a mixture of diarrhoea, dysentery and scurvy. (1963, 86). They may also have been affected by relapsing fever which was a famine fever, as is dysentery (McArthur 1949, 169). In general there is little evidence of scurvy in archaeological material, since it affects soft tissue, rather than bone, but it has been tentatively diagnosed in seven out of 350 Anglo-Saxons from East Anglia, in skeletons at Porchester and a skull from West Stow (Wells 1975, 756: Cunliffe 1976, 240, 255; West 1982, 197).

The symptoms of scurvy include anaemia, lassitude, loss of muscle tone and tendency to sudden death on slight exertion. Trouble with sore gums, loosening and loss of teeth was also likely to occur and the Anglo-Saxons had recipes for 'sore of teeth' and 'looseness of teeth', and banwyrt (bone-wort) was recommended for 'cancor of the teeth from which the teeth fall out' (Bonser 1963, 390).

Lack of minerals

Fluorine in the water or from fish would prevent tooth decay. The number of teeth lost ante mortem indicates that the teeth of the population at Monkwearmouth were healthier than those of the inhabitants of Jarrow, who would presumably have had a similar diet, but whose water supply would not have contained fluorine

(Wells 1964). Both both groups lost fewer teeth than Anglo-Saxon populations in general, perhaps because of the importance of fish in the monastic diet (op. cit.). It may also have been because the eating habits of monastic groups were more refined, or because they were less likely to use their teeth as tools.

Zinc is particularly necessary for growing children, pregnant and lactating women, and is easily absorbed from animal foodstuffs (Morgan 1975, 4).

Ignorance was still an element in malnutrition (Eydoux 1966, 81). The bread which young children were given probably did not provide all the nutrients necessary.

INDICATIONS OF FAMINE

Evidence of malnutrition came from a number of skeletons from early, mid- and late-period communities in East Anglia of which more than two-thirds were affected in the early and mid periods, about half in the late period (Wells 1964, 277).

MALE/FEMALE DIFFERENCES INCLUDING LIFE EXPECTANCY

What evidence we have indicates that girls suffered more than boys from illness, despite their more favourable chromosome

pattern, and more from carious teeth; they were probably less valued and had to content themselves with left-overs (Wells 1964, fig. 31; Kuper 1977, 107; Harris 1986, 241; Bosworth & Toller 1898, I 348).

Amenorrhea is one obvious response to malnutrition, and Leechdoms dealing with this condition prescribe, among other things, hot herb drinks fairly rich in iron (Fell 1984, 51).

On a number of sites the average age of women at death seems to have been several years less than that of the men. That malnutrition was the main cause of earlier deaths is supported by the frequency of enamel hypoplasia and Harris's lines. Women no doubt died from complications of childbirth. At Buckland Anglo-Saxon cemetery most women died in the 20-30 age range, then the 30-45 range, with few surviving to old age (Evison 1987, 128). The likelihood is that most of these deaths would not have occurred if the women had been well-nourished from birth: obstetric failures are more likely in malnourished women. The greater increase in male stature over female, from the Roman sample to the sixth-century Saxon sample found in Hampshire cemeteries indicates that the roles, and importance, of each sex in society varied considerably (Arnold 1984, 137).

Life expectancy derived from the skeletal series indicates an

almost complete absence of elderly people (i.e. over the age of 50 or so). The picture is complicated since there is some evidence that conventional methods for dating skeletal material give the age at death as being younger than was the case (Ascadi & Nemeskeri 1970). Even so, a larger percentage of Anglo-Saxon adults reached old age than in English parishes in 1800, and the child mortality rate was lower (Brothwell in Brothwell & Higgs 1963, 328). In fact the Anglo-Saxon statistics for mortality are closer to those of modern Europe, though this may reflect the fact that the Anglo-Saxons were not exposed to as many diseases as later populations so may not simply indicate superior nutrition.

RESULTS OF FAMINE

A longer-lived population indicates higher living standards and a more productive workforce. One serious shortage could start a vicious circle of early death, inability of the community to produce enough food, and further early deaths (Davies 1982, 42). The usual reaction to shortage is irritability, complaint and unrest, then lack of initiative, and apathy (Drummond 1958). So those suffering from a shortage of food would not be in a condition to organise themselves effectively to deal with the situation.

Leechdoms suggest that gif wif biþ bearn eacen feower monoð oþþe fif 7 heo þonne gelome eteð hnyte oþþe aeceran oþþe aenige niwe bleda þonne gelimpeð hit hwilum þurh þ þaet þ cild biþ disig (if a woman who is four or five months pregnant often eats nuts or acorns or any fresh fruits then it sometimes happens that her child is stupid because of this) (Cockayne 1851, III). It may be that a woman eating nuts, acorns, etc., was scavenging because supplies of the staple foods were not available, and the baby's subsequent defects may have been caused by malnutrition, rather than these particular items.

New-born children may have been killed, since infanticide in times of dearth was not accounted a crime (Bonser 1963, 87; Whitelock 1955, 754). Those who survived famine during their growing years were likely to be smaller and weaker than those who had not experienced this trauma (Brothwell in Ucko & Dimbleby 1971, 534; Jackson 1969, 117). However, the stature of Anglo-Saxons was greater than that of either Iron Age or later medieval populations (Wells in Brothwell & Higgs 1963, 363).

The occurrence of famine and pestilence might be stressed as a cause of England's weakness in the time of Aethelred the Unready. The country may have succumbed to Swein and Cnut in part because of the demoralised condition of the people. No outbreaks occurred in the reign of Cnut when the devastation wrought by the Danes

ceased with the accession of their own king (Bonser 1963, 52).

Resistance to disease is lowered by inadequate nutrition and there is a correlation between famines and plagues in Anglo-Saxon times: most pestilences did follow famine (Bonser 1963, 85, 63-4). The situation may have been exacerbated by the fact that some people are likely to have moved around in search of food in time of famine (Sayce 1946). While immune to every common pathogen in their own environment, leaving it to seek food could lead to an outbreak of disease since individuals would then be exposed to different pathogens. Other people might be on the move too, increasing the range of infections (Burnet & White 1972, 82, 146, 153).

As well as the plagues which were dramatic in their effects, poor food, combined with poor housing, probably gave rise to chronic 'lowering' diseases, where the sufferer lost strength over a period of months or even years before finally succumbing.

CONCLUSION

The number of references to hunger in the literature, chronicles and legal documents implies that it was probably a normal experience of life in Anglo-Saxon England, even if it was only the hunger of waiting for mealtimes. In the dialogue of Alcuin

and Pepin, the answer to the question, 'What makes bitter things sweet?' is 'hunger' (Turner 1828, III, 439). This probably explains how it was the Anglo-Saxons found palatable food that we would reject today. The higher incidence of caries may indicate not a greater reliance on cereals but the reverse: a dependence on rougher food: siliceous vegetables and stringy meat (Brothwell in Ucko & Dimbleby 1971, 537-8).

A proportion of the population, in particular women, probably had to make do with a less than adequate diet throughout the period. Some upsets of the metabolism connected with bad diet were probably effectively treated with medicinal herbs (Sergo in Fenton & Owen 1981, 264-5).

On a domestic level, the better a woman was as a manager, the more likelihood of her family surviving (Sayce 1946). Keeping the stores in good condition would be a vital task. The Lenten fast was probably a case of making a virtue of necessity. Easter, when the consumption of eggs and poultry would bring relief, probably brought to an end a season of hunger. Providing the rations laid down in Rectitudines Singularum Personarum were met in full and were complemented by vegetables, estate workers may have lived reasonably well most of the time (Fenton & Owen 1981, 161). There is archaeological (as well as documentary) evidence that monastic communities were comparatively

well-nourished (Wells 1964).

The devastation and disruption caused by Viking raids took its toll on the general health of the people, creating conditions favourable to outbreaks of hunger and pestilence (Bonser 1963, 4). Bad weather had the same result (op. cit., 57-8). Shortages of cereals and hay might mean that their owners could live on the carcasses of their animals for a season, but the following year they would be short of stock (Fenton & Owen 1981, 161). A dearth might take a year or two to make its effects felt, after which it might take several years to re-establish an adequate food supply.

If exacted harshly, the food rents paid by the poor to the rich could lead to very short commons for the poor. Even wealthy men wanted to buy out the right of food farms for considerable sums. Cnut relieves his subjects from what he calls this 'burden'. The powerful were able to strengthen their position during a time of famine by providing food, not as a charitable gift, but as a way of buying slaves.

CHAPTER 12

ADULTERATION: DAMAGE CAUSED BY DIETARY ELEMENTS

POISONS

Of adulterants poison was perhaps the most dramatic in its effects. It might be taken accidentally: Martinus on þaere tide on his mete þigde þa aettrian wyrt þe elleborum hatte (at that time Martin ate with his food the poisonous plant called hellebore) (Skeat 1881, St Martin l. 196). As green-leaf salads were served, some knowledge of plants was advisable. If food was short, plants not usually eaten might be tried, which would have increased the likelihood of poisoning. There are also a number of Leechdoms in case a man eats or drinks something poisonous. In these cases the poisoning was presumably accidental since there are separate remedies in case you suspect someone may try to poison you, as happened to Aethelwold (Cockayne 1851, II lxv 2, III xliii, I p.84, Lac. XXVIII, X; Whitelock 1955, 835).

Coccel (cockle) translating 'tares', was presumably corncockle, agrostemma githago. It contains githagenin, which predisposes those who consume it to leprosy, and can be fatal. Corncockle was recognised as a 'baneful weed' of corn at least by the eighth century (Kylie 1911, 116, 123). Corncockle would need to be

rooted up before harvest since the seeds are produced at about the same height and time as ears of corn, and are difficult to separate from cereal grains by sieving as they are not much smaller (Hall 1981, 5ff.). As Anglo-Saxon grain size was smaller than that of modern cereal varieties, this difficulty would have been exacerbated. Corncockle seeds turn up in quantity on middle and late urban sites (Monk 1977, 293 ff.). Perhaps farmers were less concerned with the purity of their corn if they were going to sell it, or the anti-helminthic qualities of corncockle may have been known, and the Anglo-Saxons who consumed it may have been trying to rid themselves of the heavy worm burdens most of them carried (see below) (Hall 1981, 5 ff.). Moreover, the githagenin is probably reduced or destroyed by prolonged heating, so contaminated samples could have been used in stews and porridges (op. cit.).

Ergot (claviceps purpurea) was established as a fungus disease of cereals in Europe before the beginning of the Anglo-Saxon period (Brothwell & Higgs 1963, 178). Ergotism, also known as ignis sacer, St Anthony's fire, or erysipelas, was one of the common complaints dealt with in Leechdoms, and could produce convulsions, gangrene and abortions in humans and stock (Deegan 1986, 20). There are several possible instances recorded by chroniclers of the sixth and eighth centuries (Brothwell 1969, 190). Anglo-Saxon populations may have suffered in areas where

rye was the main crop: parts of the West Midlands,for example, since ergot is much more common on rye than other cereals (Dickens 1974, 1, 3). Ergot flourishes in damp weather which is likely to cause low yields, and so populations may not have been able to afford simply to dispose of contaminated samples. Rye was probably more susceptible to ergot in damper British conditions than on the continent, which may be why wheat became the preferred species.

Moulds which secrete dangerous aflatoxins grow on damp grain, meal and flour (Renfrew 1985, 27; Erlichman 1986, 143). Mouldy samples might not be discarded if food was short.

PARASITES

The smoking of cured pork would not have killed trichinae (Trichuris trichiura), also known as whipworms, with which it was often infected, because the temperature reached was not high enough (Kuper 1977, 39). Large numbers of whipworm can lead to moderate to severe diarrhoea (West 1982, 310). In children the irritation leads to sleeplessness and loss of condition. Whipworm eggs were discovered at West Stow and Anglo-Scandinavian York (op. cit.; Jones 1980, 9; 1983, 228-9). Ascarids (Ascaris lumbricoides) also known as large roundworms, or maw worms, generally cause little damage to the host, though migrating larva

can produce hepatitis and damage the lung tissues, and cause serious trouble if they enter other organs (West 1982, 310; Jones 1980, 11). If these worms are numerous, the symptoms may be severe, simulating those of gastric and duodenal ulcer (Jones 1980, 11). A coprolite from Anglo-Scandinavian York was parasitized by a heavy infestation of maw worm and whipworm by today's standards, though it was well within the limits of human tolerance (Jones in Hall et al. 1983, 228-9). From the large numbers of parasite ova discovered in York, it seems likely that most people carried worm burdens for most of their lives (Jones, undated paper). It is possible that worm infestation was heavier in urban populations where there was more pressure on space (West 1982, 309). King Alfred indicates that he also was familiar with internal parasites, since to Boethius he adds, 'the small worms that crawl within and without <man> even sometimes nearly kill him' (Turner 1828, II, 34).

BACTERIAL INFECTIONS

There was, as one might expect, bacterial contamination of dairy products or brewings (Cockayne 1851, I lxvii 1, 2). Eating food that had 'turned' was recognised as leading to problems (op. cit., Lac. 90). St Gregory told the story of the nun who swallowed a devil through eating a lettuce without making the sign of the cross over it first (Bonser 1963, 259). Presumably

the 'devil' produced unpleasant symptoms, probably the result of eating the unwashed leaves. A general lack of hygiene may have made itself felt in terms of infections.

The common and lesser houseflies are likely to have been significant as carriers of disease. Disease organisms are transferred from faecal matter (which was almost certainly more in evidence in Anglo-Saxon times) to uncovered food (Hickin 1963, 118). Insects and mice which infested stores could act as vectors of disease (op. cit., 103; Bonser 1963, 76) (see Chapter 4).

Cured pork was a common source of botulism in Europe in later medieval times (McGee 1986, 512). There is a strong likelihood that the same situation prevailed in Anglo-Saxon England.

PHYSICAL DAMAGE

Anglo-Saxons from a number of sites showed marked toothwear, an indication of a coarse, fibrous diet, probably containing abrasive materials (Bonser 1963, 338-9, 390; Holdsworth 1980, 79; Wells 1964, 60, 125; Rahtz and Hirst 1974, 85, 87). They suffered from two kinds of tooth decay which arose as a complication of tooth wear, and both gave rise to abcesses (Miles 1972, 309). These types of caries differ substantially from caries in modern man and have a different etiology (Miles 1969,

1313). In 260 individuals from two cemeteries dating from about 600 and 800, practically all the caries was of the wear-fracture type (op. cit., 1314).

The evidence of arthritis on mandibles also points to a diet which contained tough and chewy materials, perhaps a combination of smoked or salted meat, siliceous vegetable fibres and hard breads or bannocks containing quern dust (Wells 1964, 60; Miles 1969, 1315). Female jaws were more commonly affected which partly reflects the problem the relatively lighter female jaw would have coping with tough food, but may also imply that women took second-best as far as food was concerned (Wells 1964, 60).

COOKING & PRESERVING METHODS

There was a high incidence of chronic sinusitis among the Anglo-Saxons (Wells 1964, 81). This may reflect the inclement weather, and the winter-long nasal irritation from peat or log fires buring in badly-ventilated rooms (op. cit.). Since cooking was done over such domestic fires, the household cooks, probably women in most cases, may have suffered more from sinusitis and, as a result, from general ill-health.

As well as poisons of vegetable or fungal origin, there is a possibility that Anglo-Saxon populations may have absorbed lead

from processing equipment. Salt was evaporated in leads, and was probably contaminated with lead in consequence. This contaminated salt might then be used for salting meat in lead containers. Brining creates an acidic medium which can dissolve metal. Lead-lined cider presses and vats may have caused outbreaks of colic and lead poisoning (Redfern 1987, 16). Brazen cooking equipment may have led to poisoning by copper salts.

Smoke contains a number of carcinogens which are imparted to food preserved by smoking, a traditional method of preservation. The assumption might therefore be that an individual who ate a large amount of smoked food might be at risk from various cancers of the alimentary canal and intestines. On the other hand, if that individual also ate food rich in fibre, any carcinogens would probably not remain in contact with the walls of the digestive tract for long enough to have any serious effect. Since there are so many imponderables, it does not seem to be particularly helpful to deal with the number of scenarios which might conceivably have arisen.

CONCLUSION

In this area perhaps more than any other, the evidence is incomplete. However, the significant points are that food was contaminated by various substances. In some cases this had a

minimal effect on the consumers; in other cases it could have caused ill-health or proved fatal. While ignorance of the effects of, for example, lead poisoning would have been general, possibly most kinds of contamination were less likely in affluent establishments, where sub-standard food samples could be discarded, more tender vegetables and animals were eaten, and where hygiene was practised to some degree.

CHAPTER 13

CONCLUSION

The intention of this synthesizing study has been to gather information about the processing and consumption of Anglo-Saxon food from Old Engish sources, archaeological, place- and field-name evidence, to see what could be established about Anglo-Saxon diet and the ways this might affect the population. It has also been to try to discover what part the consumption of food played in social organisation and to discover changes over the period. From the vast number of references - many more than were expected - it is clear that food production for home consumption was the basis of economic activity throughout the Anglo-Saxon period, and eating together was central to social, and sometimes legal, obligations.

CHANGES OVER THE PERIOD

As settlement consolidated, the establishment of plough teams brought about an increase in cereal production. As the acreage of cultivated land increased, the habitat of wild animals and birds decreased, and the proportion of wild animals in the diet dropped (Holdsworth 1980, 99). Developing preferences were indulged in by those who could afford them, e.g. for lighter wheaten bread, for tender, specially-bred beef, and for certain

cuts of meat. In fishing, archaeological evidence suggests the development of the deep-water drift net increased the catch in the ninth and tenth centuries (Hodges 1982, 143).

The period does not show a consistent increase in the amount of food available for consumption. Malnutrition does not only result in a high death rate, but also in lowered fertility and a low birthrate as well as a general lowering of resistance to disease. In times of famine, when people left their homes in relatively small communities to look for food, they would have come across pathogens to which they had not developed immunity.

THE ROLE OF WOMEN

Eating and drinking seems to have been stereotyped as a male activity, whereas in domestic situations women seem to have prepared and cooked the food, and to have offered drink to guests (Bynum 1987, 190-1; Laurence 1986, 22). There is evidence that women and girls suffered the brunt of shortages, and in this were no different to females in a number of societies (Cole-Hamilton & Lang 1986, 2, 65). Death in childbirth may have been higher for women who had been undernourished, and there may had been high peri-natal and infant mortality rates for babies of such women.

THE IMPORTANCE OF BREAD

Bread was the staple food without which aelc beod aemtig byþ gesewen (any table seems empty), and buton hlafe aelc mete to wlaettan byþ gewyrfed (without bread all food is unpalatable) (Garmonsway 1978, 36). Tastes and textures of the 'accompaniments' usually contrast noticeably with the taste, texture and dryness of bread (Mintz 1985, 11). These are often oily, have ingredients that are dried, fermented, cured, smoked, salted, or are fresh. Fat and salt (sometimes together as butter) were used to flavour the bread, or the relish might very often be fatty meat, butter, or cheese. The preference for fatty foods can be explained by the fact that the assimilation of fats slows the digestive process, and thus delays the recurrence of hunger (McGee 1986, 530). Poorer classes probably had access to bread and some accompaniment, or cereal stews if they were unable to make bread, or vegetable stews with some cereal. The rich were likely to have been the only group with the choice to alter the general pattern of 'bread and its accompaniment', elevating the 'accompaniments' to the most important element of a meal.

Those in positions of power were able to do most to ensure an adequate and varied diet: drawing on food rents from different parts of the country, kings and nobles were not at the mercy of

local crop failures. Certain foods, fish and honey, for example are established as luxuries since the king or chief had first claim on them. The diet of the rich was not limited to what could be produced here. Wine, oil, some species of fish and spices were all imported (Hodges 1982, 54).

Spices would have made dubious meat acceptable, and spices were highly valued in Anglo-Saxon England, but used sparingly. The Anglo-Saxon cuisine seems to have made use of herbs, fruits, and to a lesser extent, flowers as an accompaniment to meat.

FEASTING

The ritual of feasting was well established and reflected social status very closely. Only the hlaford had access to plentiful food and with this he could repay his retainers. If a ceorl had social aspirations he had to own, inter alia, a kitchen, and be able to make provision for his own, and others', retinue.

The lord's diet might include beef, mutton, veal, lamb, kid, pork, wild boar, venison, hare, pigeons, fowls, ducks and geese both tame and wild, and other wild birds, fish (freshwater and sea). These foods might be available in fresh and preserved states. Fruit, nuts, honey, dairy products, cereal food, including wheat bread, and eggs were also likely to be available.

If he could, the lord would provide such wildfowl as crane and curlew for a feast, since they indicated his ability to pay for and keep expensive hawks, and the presence of venison and wild boar flesh would indicate that his resources enabled him to maintain a pack of hounds. Since the food value of these prestige foods was outweighed by the food resources that went to keeping hawks and hounds, they were symbolic of the conspicuous consumption that would confirm his power. The admission of strangers to royal feasts without question indicates generosity with food was a virtue as well as a measure of status.

Privileged groups maintain high standards of nutrition and the possession of food is a source of power. Access to animal foods bestows health and well-being above and beyond mere survival, as meat is a concentrated source of vitamins and minerals - the only source of B12 (Harris 1986, 22, 35). A higher percentage by weight of cooked meat, poultry, fish or dairy foods consists of protein than plant foods. This protein is also of a higher quality than any vegetable protein the Anglo-Saxons would have had access to, since the ten essential amino acids occur in ratios which make more of them available for use in the human body (op. cit., 31-3). Roast meats were highly desirable in cultural terms as well as nutritionally. 'Good' cuts of meat that can be roasted were top of the food hierarchy (Laurance 1986, 22).

References to feasting in the literature are so emotionally loaded as to make one realise that such indulgence in food and drink probably took place against a background of deprivation. Feasting was also a way of reinforcing social bonds, particularly the loyalty to the death owed by a retainer to his lord. Virtually every band or village society studied by anthropologists expresses a special esteem for animal flesh by using meat to reinforce the social ties that bind campmates and kinsfolk together (Harris 1986, 27). Sharing food is known to reduce individual and intragroup tensions and it was the fellowship experienced during such feasting that would unify retainers into a fighting band if need be (Marshall 1961, 236).

In a situation where long-term planning was difficult, and storage uncertain, there must have been pressure to celebrate times when food was plentiful, and to indulge the gratification of the moment. Such a feeling would be in conflict with the need to eke food out during the winter months and possibly through the following year if the harvest failed. Feasting for poorer groups was more modest and seems to have been regulated by being connected to the completion of agricultural tasks and holy days. The fact that the church enjoined feasting on occasions made it possible to indulge without guilt, and to endure periods of fasting.

FASTING

Fasting was one way in which God could be propitiated (Bynum 1987, 34-5; Whitelock 1955, 858). Fasting was connected explicitly with charity: the food one saved through restricting intake should be given to the destitute. However, for the poor fasting might have been unescapable, even on Sundays: only he who fasted for his anwylnysse (through self-will) was to be excommunicated (Skeat 1881, Ash Wednesday 1.4). It seems likely that the Lenten fast to some extent reflected the non-availability of food, a clear case of making a virtue of necessity. Once again the rich were able to escape the effects of fasting in that they could obtain allowed and acceptable food. Also, if a fast was inflicted as penance, they could pass the fast on to others.

Religious communities found it difficult to make the compromise between allowing food that would provide the necessary calories for labouring work and the necessity of subjugating the body, and particularly sexual appetites, by means of fasting. Adjustments, usually additions, or increased measures, were made to the diet, and this may have reflected the increasing prosperity of religious foundations (Dembinska & van Winter in Fenton & Kisban 1986, 152ff., 612-3).

GREATER DIETARY RANGE & FLEXIBILITY

The greater dietary range and flexibility in Anglo-Saxon times when compared with the situation today is striking, and there were a number of reasons for this. Firstly, perishable products were near at hand for most of the population. Offal was widely eaten and would have included a wider range of items than is now considered acceptable. A similar situation pertained to dairy products, with beestings, whey and buttermilk all being consumed. The availablity of all these products was seasonal. With the growth of urban development, some consumers were distanced from the sources of production, and only the less perishable supplies would be brought in from outside towns (Hodges 1986, 152).

Secondly, there was little standardisation. For example, there would have been a great range of grades of flour, which could contain all the grain, or be sieved and sifted until it was almost white. One cereal was frequently mixed with another, and flour could be more or less contaminated with the dust of querns or millstones, and chemically with the alkaloids of ergot, and the seeds of corncockle or other weed seeds that could not be easily sieved or picked out. Both grain and flour could have been contaminated during storage by rodents or insects. Baking was attended by some risks, and some batches of bread would fail to

rise.

Processing was necessary to preserve surpluses. Milk, from sheep as well as cows, was converted into butter and cheese, both of which will keep longer than milk. While the poor probably ate green cheese, the rich could afford to wait and enjoy matured cheese, even blue cheese. Preservation of meat and fish was also necessary, and salting, smoking and wind-drying were effective methods, but different local circumstances and varying conditions from year to year would have resulted in different flavours. Food was not uniformly fresh or well-preserved, and there is evidence that it was eaten in what would now be an unacceptably 'high' state.

Thirdly, a much wider range of plants, birds and animals was eaten than now. This was in part because they were at hand, whereas now some of the animals and birds are extinct in this country, and may have been getting scarcer and therefore have become prestige items for feasts during the Anglo-Saxon period. A number of plants which we think of as inedible are not only eatable, but rich in vitamins and minerals (Harris 1961, passim; Ayrton 1975, 304; Monk 1977, 124, 131). However, one item of diet - horse - had to be relinquished during the period because of religious pressure.

Seasonal variation would have been apparent, particularly in relation to plants, which would not have been available during the winter, apart from one or two exceptions like colewort and leeks. The tender shoots of spring would give way to the much more silicaeous, and in the case of bracken, poisonous, mature leaves. A summer diet: bread, milk, curds, butter, vegetables, for example, might give way to a winter diet of bread, butter, cheese, salt meat, dried peas and beans (Fenton & Owen 1981, 161). If fish was part of the diet, then the varieties available changed with the seasons. Wildfowl were more likely to be trapped in winter.

Regional variation was probably an important factor. Nearness to the sea would mean fresh fish and shellfish could be added to the diet. Closeness to a river could mean the addition of fish, fresh-water mussels and eels. Dairying based on cattle became established in the south-west.

Natural circumstances imposed variation on meals, but so did the church. It decreed periods and days of fasting and feasting which were closely regulated and therefore probably observed by most people. Feast-day and fast-day meals were different in kind as well as quantity.

Finally, necessity resulted in people eating what was not

normally considered food. Cereal flour was bulked out with ground peas, beans or acorns. Grass and the bark of trees may in fact have had some nutritive value, but these foods were not resorted to if there were more palatable alternatives available.

NUTRITION

It is difficult to arrive at any definite conclusions as to how nutritious was the Anglo-Saxon diet. Certainly crops were organically grown, and free from pesticide residues. It was thought that the protein content of wheat may have been higher than in modern varieties, but in fact this would have depended on the ground being sufficiently manured, since this is the factor which largely determines protein content (Ucko & Dimbleby 1971, 80; Dr. J. Graham, pers. comm.). What we know of the composition of meals: meat with vegetables or cereal products, suggests the Anglo-Saxons were aware empirically that such combinations were more satisfying without realising the scientific explanation - that these made available a greater proportion of the protein in the foods. The preference for white, leavened bread also made nutritional sense in that the effect of phytic acid, present in the outer layer of the grain, which prevented the absorption of essential minerals (iron, zinc and calcium) was lessened (McGee 1986, 284; Weicholt 1987, 53-7). Certainly wheat bread was preferred, since it will rise more than

other breads, and in consequence, be lighter.

Fermented drinks were especially valuable. Yeast cells synthesize proteins and vitamins as they grow, and make a fruit juice or ceral mash much more nutritious. Today yeast cells tend to be skimmed or filtered out, but these beverages when consumed 'whole' or 'live' are a valuable part of the diet (McGee 1986, 437). Liquid intake was probably higher, because of the consumption of items preserved by salting.

Relatively small amounts of milk, butter or cheese (3-4 oz. daily) will supply the recommended daily allowance of calcium, which is also present in significant qualities in oysters and some greens (McGee 1986, 546).

A lack of fresh vegetables may have meant that some of the population were in a pre-ascorbutic condition by the spring of some years; others may actually have suffered from scurvy. Lack of vitamin C may also have disposed individuals specifically to leprosy. Because of a general lack of hygiene, it seems likely that many people ingested the ova of parasitic worms, which made their own demands on the food consumed by their host. Teeth seem to have been at risk from stone dust in flour, tougher meat and vegetables as well as less inhibited table manners.

In bad years a lack of adequate food caused a number of deaths, but it seems likely that a proportion of the population was perpetually undernourished and therefore able to work at less than optimum efficiency, as well as being more susceptible to disease. In some monasteries, the Rule of Chrodegang seems to imply, food might be short, and rations vary according to the harvest. Probably those well-endowed monasteries, where hygiene was better, would offer the members of their communities a healthier than average life.

TABLE-MANNERS

It is apparent that the knife was used almost exclusively at table, and that eating from communal plates and using a communal wine jug was standard practice (Freeman 1970, 192). It seems to have been considered politic to bless food, by making the sign of the cross over it, in the Christian era. Grace was said before meals in monasteries and visiting ecclesiastics to a secular meal seem to have said grace and blessed the food.

COMPARISONS & CONTRASTS

There are some elements of Anglo-Saxon food and drink that are familar to us: meat and two vegetables, meat with fruit sauces, green salads with onions, garlic, oil, vinegar and salt dressing.

Candle-lit dinners, with imported glassware, wines, exotic foods, fine table-linen and silver tableware are still occasions for impressing guests. Feasts were occasions for escaping the concerns of everyday life.

lyt him geþenceð
seþe him wines glaed wilna bruceð
siteð him symbelgal siþ ne bemurneð
hu him aefter þisse worulde weordan mote

(he little thinks, gladdened with wine, enjoying pleasures, flushed at the feast, what must become of him after this life) (Mackie 1934, The Day of Judgement).

There were those who mourned the passing of feasts, and good fellowship in the meadhall, but there were those for whom heaven would be the only 'dwelling place of plenty' (Jackson 1971, 251). Anglo-Saxons were only too aware on a personal level of the importance of food as 'a primary and recurrent want', recognising more acutely than their descendants that Ure hwilendlice lif biþ mid mettum gefercod (our transitory life is sustained by food) (Richards 1932, 1; Bosworth & Toller 1898, I, 391).

APPENDIX A - FASTING

THE REGULAR FASTS

Some fasts were only day-long. The important weekday fast was on Fridays, though Saturday was also a day of fasting in anticipation of the following feast day. Some monastic institutions also observed a fast on Wednesdays. The ancient church followed the Jewish custom of fasting on two days a week, but instead of Monday and Thursday, altered the fast days to Wednesday and Friday (Colgrave 1940, 344). Bede tells us that Aidan and his community observed both these days: þaet hi him to gewunan genamen þaet heo þurh eall ger buton fifig neahta ofer Eastron þaet heo þy feorðan wicdaege 7 þy syxtan feaston to nones (it became their habit through the year, except for the fifty days after Easter, to fast till the ninth hour on the fourth and sixth days of the week) (Miller 1890, I 1 162). Possibly Cuthbert observed the Wednesday fast too, but in the sense that he did not eat until the ninth hour, since he did not abstain from flesh on Fridays (Colgrave 1940, 344). There was much variation in the matter of abstinence, especially among the laiety in the early medieval church (op. cit.). The eves of feast days were observed with a fast. The periods of fasting were Lent, September and

Advent. The eves of feast days are specifically mentioned in Ethelred's Code of 1008, which states that all festivals of St Mary are to be diligently observed, first with a fast and afterwards with a festival, and the same for festivals of every apostle, except there should be no fast for the festival of SS Philip and James because of the Easter festival (Whitelock 1955, 407). The Regularis Concordia of a few decades earlier had specifically stated that the fast should not be observed on the Vigil of the Epiphany, so perhaps by imposing a fast then too, the law code was simplifying matters by removing exceptions (Cockayne 1851 III). Ethelred's Code went on to say that there should be a fast every Friday, except when it was a feast day (Whitelock 1955, 407). The Lent and Ember day fasts were specifically mentioned in the Be faestene (Concerning Fasting), section of the later Code of Canute: Þaet man aelc beboden faesten healde, sy hit ymbrenfaesten, sy hit lenctenfaesten, sy elles oðer faesten, mid ealre geornfulnysse (That one must observe fasts, whether it be the Ember Day fasts, or the Lenten fast, or if it be any other fast, with all conscientiousness) (Robertson 1925, 65, 166). The Council of Placentia in 1095 confirmed the Ember day fasts as the Wednesday, Friday and Saturday following the first Sunday in Lent, Whitsun, 14th September and 13 December.

PERIODS OF FASTING

A fast lasting a few days before Easter was practised in the second century, emerging in the fourth century as a fast of 36 days. This was expanded to 40 days in the seventh century in the west (Bynum 1987, 37). According to the Old English Martyrology, Pope Telesphorus was the first to decree þaet man faeste on rome syfon wucan aer eastran (that one fast for seven weeks before Easter in Rome) (Herzfeld 1900, Jan. 2). It was not until nearly fifty years after the arrival of Augustine's mission that a Kentish king ordered the final supression of paganism, and þaet feowertiglice fasten healden beon aer Eastrum bi witeraedenne (that the forty-day fast be held before Easter on pain of punishment) (Miller 1890, I, 1 172).

It seems that violating the Lenten fast might invite more than legal punishment, and the following cautionary tale was recorded for the beginning of Lent. On þaere ylcan wucan com sum trud to þaes bisceopes hirede se ne gymde nanes lenctenes faestenes ac eode him to kicenan þa hwile de se bisceop maessode and began to etenne. he feoll þa aet daerne forman snaede under-becc geswogen and spaw blod ac him gebyrede swa deah þaet feorh (In that same week some buffoon came to the bishop's household and went to the kitchen while the bishop was saying mass and began to eat. He fell down backwards in a faint at the moment when he took his first mouthful, and vomitted blood and his life was preserved

only with difficulty) (Skeat 1881, Ash Wednesday ll. 59).

The fact that a presbyter et Scottus had eaten meat in Lent caused Charlemagne enough concern for him to mention it in a letter to Offa. Charlemagne sent him to be judged by the bishop, as he could not remain at his post because of the infamy of the sin, and the fact that others might be induced to violate the sacred fast (Turner 1828, I, 416).

On the other hand Fela dyslice daeda deriaþ mancynne...swa swa men doþ þe dyslice faestaþ ofer heora mihte on gemaenelicum lenctene swa swa we sylfe gesawon oþ þaet hi seoce wurdon (Many deeds foolishly injure mankind...like those do who foolishly fast beyond their strength in Catholic lent as we ourselves see until they become ill). Aelfric went on to explain that England was on the outer edge of the world and therefore not as strong as lands in the middle and there men might fast more easily. Moreover Ne nu nis man cynn swa mihtig swa men waeron aet fruman (Men now are not as strong as they were in the beginning) (Skeat 1881, Prayer of Moses ll. 91, 106).

The later medieval period records a period of fasting called the 'Lent of Pentecost' which ended on SS Peter and Paul's Day, June 29, but this is not often referred to in the Anglo-Saxon sources (Bynum 1987, 37). One occasion where it does occur, is when

Ecgbehrt says that he will keep to a very strict diet for þaet feowertig daga aefter Pentecosten (the forty days after Pentecost) (Miller 1890, I 2 242-4). The other sustained fast period in Anglo-Saxon England was the forty-day Advent fast, beginning on November 14, which developed originally as an expresssion of penance at the year's end, but then became seen as the forerunner of the Christmas feast (Bynum 1987, 37).

Although there were three forty-day fast periods, most references are made to the Lent fast. Bede gives an account of how Bishop John used to retreat to an oratory and church for the Lenten fast, with a few companions whom he asked to find sumne earmne dearfan, se ðe waere micel untrumnisse 7 woedelnisse hefigaþ, ðaet hie meahton in ðaem dagum mid him habban 7 mid him aelmesse doan. Forðon his gewuna waes, ðaet he symle swae dyde (a poor and needy man suffering from great infirmity and poverty, so they might have him with them at that time, and give him alms. For it was his custom always to do this) (Miller 1890, I 2, 388).

However, while Bishop Eadberht also took himself off, this time to an island, for the Lent fast, he did the same for the forty days before Christmas, so he could live in great abstinence, fervent prayers and outpourings of tears (Miller 1890, I 2 376-7).

Instructions as to the observation of a fast are given with reference to the Lenten fast, which may indicate its importance, although, as the first feast of the year, it would be logical to give regulations about fasting at that point. The Old English version of the Rule of Chrodegang gives the following details: we beodað þaet on þam feowertigum dagum aer Eastron mid alre syfernysse modes 7 lichaman ure preosthyredas hi sylfe gehealdon 7 an metes þigene 7 drinces habbon swa micle forhaefednysse swa him þonne God geunne 7 aelce daeg butan sunnandaege fram Lenctenes aginne oð Eastron aefter aefensange etan on beoderne 7 fram þam metton dricum hi forhaebbon hi (þe) se bisceop 7 se ealdor þonne gesetton 7 elles nahwer ne an þaere ceastre ne an þam mynstrum ne on nanum stowum, ne furðon on heora agenum husum þissum feowertigum dagum ne gereordigen hi, butan hwa for hwiclere nytwyrdnysse swa feor beo þaet he þam gefenlicum tidum to broðra gereorde cuman ne mage (we beg that on the forty days before Easter our community conduct itself with all soberness of mind and body and eats only one meal and takes drink with the abstinence that God decrees, and each day except Sunday from the beginning of Lent until Easter eats after evensong in the refectory and everyone is to keep to the food that the bishop and the prior has appointed and not to eat elsewhere, either in the town, or in the minster or in any place, nor even in their own house during these forty days, except out of necessity, in that they do not have enough time to get back for the brothers'

meal) (Napier 1916, 42-3).

It is clear that laymen were to observe fast days, but it is also evident that lay fasting, fasting practised by monastics, and the virtuoso performances - admired if not emulated - of saints were different in degree, and so I propose to deal with these three types of fasting separately.

FASTING FOR LAYMEN

Evidence for fasting is almost entirely documentary, though there is a possibility that stones sometimes found in the boxes which were excavated from tenth-century Fyrkat, and normally belonged to women, were sucking stones to relieve hunger or thirst, and they may have been used during fasts (Roesdahl 1977, 194).

The attitude laymen took towards fasting varied considerably. Alfred added to his translation of Boethius on the Golden Age, 'They lived naturally and temperately. They always ate but once a day and that was in the evening' (Turner 1828 II, 36). In this he seems to have been more abstemious than the clerics with whom Cuthbert was dining one Christmas. Exhorted by Cuthbert to 'earnestly engage in prayers and vigils' they understandably replied, 'You give us good, yea excellent, instruction, but nevertheless, because the days of fastings, prayers and vigils

abound, today let us rejoice in the Lord' (Colgrave 1940, 247).

The fast-day food of the poor may not have been very different from their normal diet. In the fifteenth century in the west, the poor on fast days ate mainly vegetable foods, since fish was more expensive and even a comparative rarity (Kisban in Fenton & Kisban 1986, 3). This is likely to have been the case in Anglo-Saxon England. The nobility and rich religious establishments took pains to secure a supply of fish, fish featured at feasts, and were in short supply (see previous chapter). Some dried cod or salted herring may have been available; these were eaten by the poor with linseed or rape oil in later medieval Europe as fast-day food (Dembinska in Fenton & Owen 1986, 162).

Originally a religious requirement, fasting became a legal one. According to the Laws of Wihtred, Gif mon his heowum in faesten flaesc gefe, frigne ge þeowne halsfange alyse (If a man gives meat to his household during a fast, he shall redeem free and slave by payment of his healsfang). Gif þeow ete his sylfes raede, vi scll oþþe his hyd (If a slave eat of his own accord, he shall pay six shillings or be lashed) (Attenborough 1922). Later Laws repeat and amplify the legal requirement for fasting. It was obviously important that people should be told when the fasts were, and apparently this was the duty of the parish priest. The

legislation enacted by Alfred and Guthrum states gif maessepreost miswyssige aet freolse oððe aet faestene, gylde xxx scill. mid Englum 7 mid Denum þreo healfmarc (if a mass-priest misinforms the people about feasts and fasts, he shall pay thirty shillings in an English district, three-and-a-half marks in a Danish one) (Attenborough 1922, 102-4). It continued: Gif frigman rihtfasten abrece gylde wite oððe lahslite. Gif it þeowman gedo, ðolie his hyde oððe hydgylde (If a freeman break an official fast, he is to pay compensation. If a slave does this, he is to suffer a beating, or pay a fine in lieu) (op. cit). The same situation is recorded in Canute's Laws, in that if a free man were to break a legally ordained fast, he was to pay a fine. Fasting is here further defined in that it was wrong to eat during a time of fast before the mealtime, and worse still to defile oneself with fleshmeat. If a slave was to do this, he was to suffer a flogging, or redeem himself from one, in proportion to the wrong-doing (Whitelock 1955, 425-6). Canute's proclamation of 1020 repeated that ealle men, earme 7 eadige...aelc beboden faesten geornlice healdan 7 þa halgan georne weordian þe us maessepreostas beodan sceolan (all men, poor and prosperous...should observe strictly the legal fasts and conscientiously celebrate saints' days, as the mass-priests tell us) (Attenborough 1925, 144). This again confirms the responsibility of the masspriests. The purpose of right observance was so that all to heofena rices myrðe becuman (may

attain to the joy of the heavenly kingdom) (op. cit.). About the same time the Laws of the Northumbrian priests also specified a fine for anyone violating a festival or a legal fast, fixing the amount at 12 ores (Whitelock 1955, 438). King Edgar's Code at Andover (959-63) had repeated that ordained fasts were to be observed with all diligence, and added that the fast every Friday was also to be observed, unless it was a festival (Whitelock 1955, 396). Evidently the importance of observing fasts was felt from the mid-seventh century on, since most law codes referred to it. Fasting as an institution presumably met with resistance from some individuals, since penalties for breaking fasts had to be imposed.

FASTING BY MONASTICS

Whereas laymen were to observe only the legal feasts and were otherwise free to eat what and when they wanted, monastics generally were restricted as to diet, as to mealtimes and quantity. Moreover, their regime on fastdays was probably more austere than that of laymen. According to the Rule of Chrodegang there was some restriction on diet for almost all the year. Fram Eastron of Pentecosten tuwa on daeg etan preostas 7 etan flaesc be leafe, butan þa daedbetendan buton Wodnesdaeg, 7 Frigedaege. Fram Pentecosten oð Sancte Iohannes gebyrdtide þaes fulwihteres, ealswa eton tuwa on daeg 7 forgan flaesc. Fram Sancte <Iohannes>

gebyrdtide of Sancte Martinus forsiðe ealswa eton tuwa on daeg 7 Wodnesdaege 7 Frigedaeg forgan flaesc. Þonne fram Sancte Martinus maessan oð midne winter forgan ealle flaesc 7 faestone to nones 7 aelce þara dage eton on beoderne 7 on þone timan Wodensdaege 7 Frigedaege forgan flaesc. Gif þonne þam dagum hwilc freolsdaeg gescyt, gif se ealdor lifð hi moton flaesc etan for untrumnysse (From Easter to Pentecost the brothers eat twice a day and can eat flesh with permission except for Wednesday and Friday. From Pentecost till the birthday of John the Baptist they also eat twice a day but forgo flesh. From John the Baptist's birthday until the anniversary of St Martin's death, they also eat twice a day and forgo flesh on Wednesdays and Fridays. Then from Martinmas to midwinter, they forgo all flesh and fast till nones and on all of those days they eat in the refectory, and during that period they forgo flesh on Wednesday and Friday. If one of those days is a festival it lessens the fast, and if the prior gives permission they may eat flesh for the sake of their health) (Napier 1916, 43-4).

However, a Vegan diet was not encouraged, perhaps because it weakened members of the community who would not then be able to do their share of the work. This effect was recognised as early as the fourth century on the continent, and caused concern, since it ultimately diminished the amount of food available to the whole community (Dembinska in Fenton & Kisban 1986, 153).

Forhaefdnes soðlice on þysum dagum sceal beon forneah ealra esta 7 syferlice and claenice to lybanne. Se ðe soðlice fram aegrum 7 cyse 7 buttan 7 fixum 7 wine forhabban maeg he is mycles maegenes. Se ðe witodlice fram þaem for untrumnesse oððe ahwylcum weorce forhabban ne maeg, he bruce, for an þ he þaet faesten of aefen symbellice breme, 7 win naes to drucenesse, ac he gereorde his lichaman nyme. Ðaet hwa fram cyse 7 meoluc 7 buteran 7 aegrum forhaebbe 7 ne faeste is gewolenlicost 7 fram eallum gesceade ascyreð. soþlice wines 7 aelces waetan druncennes 7 galne synt forbodene, naes meoluc 7 aegru. Ne cwaeð witodlice se apostol, 'Nellen ge þicgan meoluc 7 aegru,' ac he cwaeð, 'Nellen ge beon gynddrencede of wine, on þam is galnes' (Indeed abstinence in these days consists in giving up almost all delicacies and in living soberly and ascetically. He who is genuinely able to abstain from eggs and cheese and butter and fish and wine is of great strength/virtue. He who cannot really abstain from them because of weakness or any other reason may eat them; provided he solemnly fasts until evening before a feast and doesn't get drunk on wine they may be consumed to preserve his body. He who abstains from cheese and milk and butter and eggs when he is not fasting is very wrong and completely mistaken. Truly wine and every intoxicating drink and gluttony is forbidden, but not milk and eggs. Certainly the apostle did not say 'Don't eat milk and eggs'; what he said was, 'Don't get drunk on wine, gluttony lies there') (Napier 1916, 114-115).

The very austere regimes of the east where dry eating and raw eating were practised seem to have been admired. At the monastery where Zozimus went to live the brothers kept themselves alive mid hlafe and mid waetere (on bread and water) to demonstrate their devotion (Skeat 1881, St Mary of Egypt l. 93). But there was the realisation, voiced by Aelfric, that such a diet was not sufficient for monastics in the colder climate of England. Towards the end of the period the larger abbeys secured supplies of eels for Lent. They were Lenten food at Abingdon, and the abbot and brethren of Ramsey, who themselves presumably had a plentiful supply of eels, were to give 4000 in Lent to Peterborough (Cockayne 1851, III; Harmer 1952, 265).

Monastics who ate outside the cloister were presumably able to avoid some of the restrictions imposed on those who ate in the refectory, which is why monks were expected to make the effort to eat together in the refectory during fasts, unless it was too far for them to get back to. Bishops presumably could have eaten out on a number of occasions: when a gesith invited Bishop John to a meal widsoc se biscop 7 cwaeth þaer his mynster neah waere þaet he scold þyder faran (the bishop refused, saying his minster was near, and he ought to go there). However, he did ultimately accept the invitation when the gesith promised to fast and give alms to the poor (Miller 1890 I,2 394). A section in the report

of the Legates to Pope Hadrian prohibits ecclesiastics taking food in secret (Whitelock 1955, 771). This was presumably to limit the abuse whereby an individual might appear to be observing food restrictions, but was in fact consuming extra rations. On the other hand, an individual could not elect to fast without the permission of the abbot (Dembinska in Fenton & Kisban 1986, 154). In both cases the food resources of the monastery were affected, either directly, as in the first case, or indirectly, if the faster could not maintain his contribution to production.

Monastic meals in mid-fifth-century Gaul consisted of two cooked dishes, one a vegetable/cereal soup, the other a puree of pulses with oil, flour or cheese, and a third dish of raw vegetables with salt, oil and vinegar. Bread was also available, but was probably hard dried rusk, which had to be softened in liquid before it could be eaten. Meat was generally prohibited but some wine was prmitted (Dembinska in Fenton & Kisban 1986, 153). The strict fasting diet consisted of restricting intake to one meal of this sort per day taken in the evening, or to bread and water only. Those who could not comply with this regime were allowed to divide their meal into two, one part to be eaten not before three in the afternoon, and the other in the evening In the mid-sixth century Benedict laid down the 190-200 fast days in the year. Periods of strict fasting included the forty days of Lent, from

Whit Sunday till the autumn equinox, and thirty days before Christmas. There were additionally the two or three fast days each week (Wednesdays, Fridays and in some communities, Mondays) and the eves of twenty-five holidays particular to the monastery, when abstinence from fats, eggs, cheese and fish was called for. When two meals a day were still taken quantitive restrictions were achieved by serving the normal single ration in one bowl which was then shared by two monks (op. cit., 154). This was probably close to the fasting regime for early Anglo-Saxon monasteries. According to the later Regularis Concordia, the Lenten abstinence from milk and eggs was to be observed from Quinquagesima, and on the Ember Days (Cockayne 1851 III). However, it proved necessary to increase the amounts of food available under the strict fasting diet, since it did not allow for the fulfilment of duties (Dembinska in Fenton & Kisban 1986, 157). Fish were originally classed as deliciae (delicacies), to be eaten only with the abbot's permission on holidays. Later in the period after monasteries had acquired grants of land and rights to the fish in lakes, rivers and ponds fish became a fasting dish (op. cit., 155). The growing wealth of monasteries in England and on the continent led to some degree of laxity. The regime laid down by Benedict of Nursia was reformed by Benedict of Aniane, although this rule in turn was relaxed, since Cluny was founded in the tenth century to revive the strictness of the original Benedictine rule (op. cit., 163). In England

too, reforming ecclesiastics like Aethelwold worked to bring back a more rigorous regime.

The Regularis Concordia, produced in the reign of Edgar, confirmed that flesh was prohibited, but the evidence of the novice of Aelfric's Colloquy Gyt flaescmettum ic bruce, fordam cild ic eom under gyrda drohniende (I still eat meat because I am a novice) indicates that the importance of an unrestricted diet for growing children was recognised (Garmonsway 1978, 46). According to the Rule of Chrodegang, aer tide odde aefter tide naht metes odde drinces hi na underfo ut asyndrodum untrumum 7 cildrum þaera wacmodes fram þam ealdre is toforan sceigende (no food or drink is to be taken before or after mealtimes, except by the sick and children if permission has been previously given by the prior) (Napier 1916, 123).

APPENDIX B - PART I: FASTING BY SAINTS

Saints, and others not officially canonised, either observed fasts more strictly than was ordained, or followed a regime of deprivation, the rationale being that increasing austerities increased merit. No doubt fasting was also used as a demonstration of moral superiority, and to try to influence opinion.

The fact that the early saints of the Christian church tended to fast strictly must have influenced their later followers. For example, Mary of Egypt be pam wyrtum leofode (lived on vegetables), and on one occasion was satisfied with a pinch of dried peas (Skeat 1881, St Mary of Egypt l. 569). Bread and water was a standard diet (Herzfeld 1900, July 9, January 17, July 7, June 2). St Eufrasia occupied herself in fasting and vigils day and night and waes swiðe geþynnod for þaere micclan and stiðan drohtnung (was very thin on account of her strict and austere life) (Skeat 1881, St Eufrasia l. 173, 236). Some individuals emulated these practices with the similar results: a twelfth-century hermit who ate nothing but roots became so thin from fasting that he could hardly stand (Holmes 1952, 125).

On occasion the fasts might not be voluntary, as when St Ananias was imprisoned for twelve days without food by Diocletian, or

when St Thomas told Migdonia to fast earnestly for seven days (Herzfeld 1900, Jan. 19; Skeat 1881 St Thomas l. 296-7). Or they might be incidental: Enbolus was so desirous of Basil's doctrine þaet he hlyste nanes metes...dry dagas...aetes ne gymdon (that he had no wish for any food..for three days..he took no heed of any meals) (Skeat 1881 St Basilus l. 43-4). But fasting seems to have been an attribute of saintliness, and not the prerogative of one or two indivuals (op. cit., l. 478).

During the Lenten fast Ecgberht aene siða in daege gereorde 7 elles ne þeah nemne medmicel hlafes mid þinre meolc (only ate once a day, and then only had a small loaf and some thin milk) , I 2, 244). Bishop Cedd ate only half a loaf and a hen's egg and milk in the evening during Lent (op. cit.).

Cuthbert, who from other evidence was a man of considerable bodily strength and stamina, found it difficult in his early years to fast for long periods, lest he should become unfitted for the labour required of him (Bonser 1963, 113). He did not abstain from flesh on Fridays, but always fasted until nones (Colgrave 1940, 344).

Once he had settled at Crowland, Guthlac nahwiht ne onbyrigde buton berenne hlaf and waeter; ond þonne sunne waes on setle, þonne þigede he þa andlyfene þe he bigleofode (tasted nothing

except barley bread and water and when the sun was set, then he ate the food on which he lived) (Goodwin 1848, 27). He rejected the suggestion of two devils that he should fast for seven days ac feng to medmycclan bigleofan, þaet waes to þam berenan hlafe, and þone þigede and his lif bileofode (instead he took a moderate meal, that is the barley loaf, and ate it and preserved his life) (op. cit., 35). A passage in the Exeter Book tells us that Gudlac faesten lufiaþ ead-mod þy aeplan gyfle (Guthlac loved fasting and was refreshed by that noble meal, i.e. the Eucharist) and certainly he did not begrudge the visiting brethren their beor, since he found amusing the incident where they buried the container so they could recover it after visiting him (Mackie/ Gollancz 1972, Guthlac; Swanton 1975, 54). The fiends by whom he was persecuted had warned him that beod hungor and þurst heard gewinnan (hunger and thirst will be hard foes), but he said that God sent by the hand of men his necessities each day (Mackie/Gollancz 1972, Guthlac). Presumably procuring the blessing of so holy a man by taking him what was a relatively cheap food, was motive enough to ensure that individuals took him enough to eat.

Neither Aidan nor Guthlac generally accepted invitations to eat out, though Aidan did on occasion eat with the king, and Guthlac dined with the bishop who ordained him þeah hit his life ungeþeawe waere (though it was not his habit to do so) (Miller

1890 I, 1 162; Goodwin 1848, 27).

According to Bede, Aidan influenced all monastics of his time in the matter of fasting. Mid þyses halgan mannes bysenum waeron getrymede on þa tid gehwilce aefeste ge waepnedmen ge wimmen, þaet hi tim to gewuman genaman, þaet heo eall ger buton fiftig neahta ofer Eastron, þaet heo þy feordan wicdaege 7 þy syxtan feaston to nones (By the example of this holy man at that time, all religious people, whether men or women, were so confirmed, that it became their habit throughout the year, except during the fifty days after Easter, to fast up to the ninth hour on the fourth and sixth days of the week) (Miller 1890 I 1, 162).

Bede cites a number of saintly individuals who fasted strictly, like Cenred who on gebedum 7 on faestenum 7 on aelmesdaeum awundade od done ytmestan daeg (in prayers and fasting and alms-giving lived until his last day) (Miller 1890, I 2, 448). Dryhthelm, having seen a vision of heaven, purgatory and hell, was so shocked, that he embarked on a regime which daeghaemlice faesteno (by daily fasts) left him swaencte 7 temede (exhausted and subdued) (op. cit., 436).

Columba once fasted on a diet of nettle soup because a poverty-stricken old lady living nearby was reduced to this extremity. However, his cook added milk to the broth, and when

Columba was complimented on how well he was looking, the deception was discovered. Far from being annoyed with the cook, he blessed him (Jackson 1971, 279).

Monastic situations were generally perceived as too lax by saintly individuals. In the mid-fifth century, Sampson, dissatisfied with the life he had tried at three monasteries for this reason, withdrew to an isolated community, and then used to retreat to a cave for seven-day fasts, when the brethren provided him with food (though of course no meat or alcoholic drink) (Davies 1982, 152). This withdrawal from even a strict monastic regime was paralleled by Cuthbert's retreats to Farne, after he was made bishop of Lindisfarne (Miller 1890). Occasionally an abbot like Aethelwold succeeded in imposing a more austere regime against considerable opposition. Aethelwold only ate the flesh of animals and birds once for three months when forced by infirmity, and this, moreover, at the command of Archbishop Dunstan, and again during the sickness from which he died (Whitelock 1955, 837).

Anglo-Saxon women are also recorded as practising lives of austerity. Leoba, Boniface's chief woman helper in his mission, ate and drank very sparingly, though she practised the greatest kindness to others. The little cup from which she used to drink was called 'the little one of the loved one'. In her case fasting

was accompanied by hospitality: she would produce a feast while fasting herself (Whitelock 1955, 722). After Aetheldrida had received the veil, seldon, buton maran symbelnysse 7 tidum oðþe maran nydþearfe, ma þonne aene siðe on daege þaet heo wolde mete þycgan (seldom, except at greater festivals and seasons or in case of greater need, would she touch food more than once a day) (Miller 1890 I 2, 318). Eadgyth, the sister of Athelstan, remained strong to the end of her life, at Polesworth, in fasts and vigils (Whitelock 1955, 257). Perhaps the lives of those important by virtue of their family connections are more likely to have been recorded, but we do hear occasionally of other individuals, like a certain widow called Oswyn, who lived near the burial place of St Edmund in prayers and faestendum manega gear syddan (fasting for many years afterwards) (Skeat 1881 St Edmund l. 191).

APPENDIX B - PART II: FASTING AS PENANCE

The view that fasting was an efficacious penance presumably received a boost from the account of purgatory given by a Northumbrian, who returned from the dead to say that souls could be aided by - inter alia - the fasting of other men so that they could be rescued before Domesday (Miller 1890, I 2 432). After the death of a much-hated prioress at Wimborne, the younger nuns danced on her grave, and the consequent subsidence was seen as evidence of the dead woman's sinfulness. In order to obtain absolution for her, the mother of the community enjoined a three days' fast for her soul, together with psalm singing and prayers. The depression in the grave duly filled with soil, indicating the success of their penance (Whitelock 1955, 720-1).

However, fasting is mostly mentioned as penance to be carried out by an individual to atone for his own misdeeds. Fasting was given as penance for such crimes as administering a love potion, passing a child through a hole in the earth for the sake of its health (40 days' bread and water), fasting in honour of the moon on health grounds (1 year's bread and water) (Bonser 1963, 149, 240, 249). These were presumably more likely to be lay misdemeanours, but the lazy monks of Winchester who refused to get up and sing the Te Deum every time St Swithin effected a cure, were threatened by the bishop that they sceolde hit mid

faestene seofon niht on an swarlice gebetan (should heavily atone for it with seven days' fasting) (Skeat 1881, St Swithhun l.261). According to Wulfstan's Canons of Edgar, Se canon segð gyf hwylc gehadod man on huntaþ fare, gyf it bid clerec forga xii monað flaesc, diacon twa gear, maessepreost þreo, bisceop vii (The regulation says if any man in orders goes hunting then if he is a cleric he must abstain from fleshmeat for one year, a deacon for two years, a masspriest three, and a bishop seven) (Fowler 1972, 15).

As in Wales, penance might involve a limited diet for days or years (Davies 1982, 192). Monastic penances ranged from missing one meal to foregoing flesh and alcohol and most fats for several years (op. cit). Welsh sources give in detail the fasting diet for the monastic priest or deacon found guilty of a sexual offence: bread without limitation and a titbit fattened slightly with butter on Sunday; on the other days a ration of dry bread and a dish enriched with a little fat, garden vegetables, a few eggs, a British cheese, a Roman half-pint of milk in consideration of the body in this age, also a Roman pint of whey or buttermilk for his thirst , and some water if he is a worker (op. cit., 151).According to the Old English Rule of Chrodegang, no-one was to sleep in the interval between utsange and daegeredsange (a period of time in which a man may say forty or fifty psalms), but gif hwa elles do, sy he ascred fram þaes

daeges drince (if he does, then he must abstain from that day's drink) (Napier 1916, 24). Or for various litlum gultum (small offences) ascyred fram gereorde...7 ete ana his mete aefter brodra gereorde, swilce...gif brodra etam to middaeges ete he to nones, gif brodra to nones, he to aefenes (he must abstain from meals...and eat his food after the brothers' meal, so that...if they eat at midday he must eat at 3 p.m., and if they eat at 3 p.m. he must wait until the evening) (op. cit., 35).

Adamnan naefre mete onfeng ne swaesendo þeah, buton Drihtenlecan daeg 7 þy fiftan wiicdaege...odrum dagum he swa faestende awunade (Adamnan only took meat and meals on Sundays and the fifth day of the week...the other days he fasted) (Miller 1890 I,2 352). This austere existence was imposed on him by a priest who said that a week of fasting was excessive and twydaeglic faesten oðþe þreodaeglic faesten is genoh to healdenne (two or three days' fasting is enough to observe), and that he would shortly return and tell Adamnan how long his penance should continue. However, he suddenly returned to Ireland, and as the penance was not rescinded, Adamnan continued with the regime, first for intingan þaed godes eges (on account of divine terror) and then on account of the eternal reward (op. cit.).

An example of penitential fasting is recorded from 735 when a lady of noble family in Oxford is recorded as mortifying herself

by lying on the ground and subsisting on broth made of the poorest herbs and a small quantity of barley bread (Turner 1828, III, 27).

According to Edgar's Laws, part of the penance of a rich man was that he should fast on bread, green herbs and water, and that he should eat no flesh nor drink anything intoxicating (op. cit., 30).

Special penitential bread was sometimes eaten. In monastic insitutions it was made from the lower grades of the unsifted flour of rye, barley, oats and pulses, or a mixture of these flours (Dembinska in Fenton & Kisban 1986, 154). Individuals like Gwynllyw and his wife ate barley bread with added ashes (Davies 1982, 192). The Cistercian Rule established in the eleventh century envisaged bread made of bran with some bitter herbs added (op. cit.).

Those who chose to fast were probably always outnumbered by those who preferred not to. Even though ascetics were held in very high regard, they were no doubt seen as different by most people who were not prepared to emulate them, even though fasting was a route to eternal feasting. Fast day dishes could be elaborate delicacies, so that even if a noble was observing the fast legalistically, and limiting himself to fish, he might be able to

enjoy a luxury meal. This problem was commented on by - inter alia - St Thomas Aquinas. Moreover with a certain amount of sophistry one could have reclassified the tail of the beaver, frogs, puffins and barnacle geese as fish, and unborn or newly born mammals as 'not meat' as had happened by the fifteenth century (Furnivall 1868, 37; Tannahill 1973, 112). There is no evidence for these evasions in Anglo-Saxon England, but we do not have a menu for a 'fish feast' like that held for the Archbishop of Canterbury in 1504-5) where these items are listed.

Bishop Theodred imposed a penance on himself (for having thieves at St Edmund's shrine hung there and then) and then called on the people þaet hi him mid faestan fullice þry dagas (that they fast completely with him for three days) (Skeat 1881, St Edmund l. 229). Alcuin thought that a fast should be declared because Aethelheard had fled his post as Archbishop of Canterbury in 797. The whole people were to join in this, and in addition, prayers were to be said, masses celebrated and alms given (Whitelock 1955, 789).

FASTING AS PART OF PARTICULAR RITUALS

Fasting was used to sanctify places and occasions. Cedd fasted to purify the site for his church, and various ceremonies were consecrated by fasting. As Lent was a sanctified period, the

fine for breaking and entering according to Alfred's Laws, was to be doubled if these offences were committed in lencten faesten (during the Lenten fast) (Attenborough 1922, 82). In a sense, feast days were sanctified by the fast on the preceeding day(s). The Canons of Edgar stated that we laerað þaet aenig unfaestende man husles ne abirige buton hit for oferseocness sy (we instruct that any man who has eaten, unless because of illness, may not take communion) (Fowler 1972, 8). Individuals were expected to refrain from eating and drinking in church, but Nu doð men swa þeah dyslice foroft þaet hi willað wacian and wodlice drincan binnan Godes huse...and se de wile drincan and dwaeslice hlydan drinc him at ham na on drihtnes hus (Now men nevertheless will foolishly weaken very often and recklessly drink within God's house...he who wants to drink and make a foolish noise let him drink at home, not in the Lord's house) (Skeat 1881, Prayer of Moses l. 72).

The protagonist of the ordeal was expected to prepare for the ceremony with three days' fasting. Gif hwa ordales weddige, ðonne cume he þrim nihtum aer to þam maessepreost þe hit halgian scyle, ond fede hine sylfne mid hlafe 7 mid waetre 7 sealte 7 wyrtum, aer he togan scyle (If anyone is committed to go to the ordeal, he shall come three days before to the mass priest who is to consecrate it, and live off bread and water and salt and herbs until he has to go to it) (Attenborough 1922, 138). According to

another account, an equal number from each party were allowed to enter the church as witnesses, beon ealle faestende (all having fasted) (op. cit., 172).

There are several instances in leechdoms were the patient is to fast before taking a cure (Cockayne 1851, II vi, xxv, xxxii, etc.). This may have been to make the remedy more effective - taking the medicine before meals, but equally it may have been to purify the patient and consecrate the treatment. Proverbs declared quite sensibly that 'If you want to be healthy, drink in moderation; all surfeit and all idleness nourishes sickness' (Swanton 1975, 177). Fasting was supposed to dry up bodily humours, and put demons to flight, so that it was seen as medicine for the body and the soul (Bynum 1987, 41). Gluttony was the first of the eight sins that troubled man, because it brought about sickness and caused early death through immoderate drinking (Skeat 1881, Memorial of the Saints l. 267). One of the chief virtues on the other hand, is Temperantia þaet is gemetegung on englisc þaet is þaet man beo gemetegod and to mycel ne ðicge on aete and on waete ne aer timan ne gereordige...ac se gesceadwisa man sceal ceþan his maeles...þonne maeg he oferswiðan swa þa gyfernysse (Temperance, which is moderation in English, that is that a man be moderate and does not eat or drink too much, nor eat before mealtimes...but a wise man shall observe his mealtimes...then may he overcome such as gluttony) (op. cit., l. 314).

APPENDIX C - ENTERTAINMENT AT FEASTS

Minstrels

It seems that the professional minstrel or the amateur singer ideally accompanied himself on a harp or lyre. According to the professional scop Widsith,

> þonne wit scilling sciran reorde
> for uncrum sigedryhtne song ahofan
> hlude bi hearpan hleopor swinsade
> þonne monige men modum wlonce
> wordum sprecan þa þe wel cuþan
> þaet hi naefre song sellan ne hyrdon

(When Shilling and I, with clear voice raised the song before our victorious lord - loud to the harp our speech made music - then many men bold of heart who well knew, declared in words that they had never heard a better song) (Gollancz/Mackie 1973, Widsith l. 103 ff.). Listening to the feast in Heorot, Grendel distinguishes

> Hludne in healle ... hearpan sweg
> swutol sang scopes

(Loud in the hall ... the sound of the harp and the sweet song of

the minstrel) (Zupita 1959, l. 88ff). The phrase to learn or say by rote apparently comes from the practice of reciting to harp accompaniment, since one of the types of harp was called a rota (Whitelock 1955, 766).

The harp of a chief was a valuable instrument, probably decorated with gilt mounts, like the lyre found at Sutton Hoo (Bruce-Mitford 1983, 724-5). This instrument had been kept in a beaver-skin bag, which was probably valuable in itself, since the Welsh Laws give the value of a beaver skin at 120 pence, that of a stag, fox or wolf as eight pence (Owen 1841, 948). At the Welsh court the harp of the chief of song (provided for him by the king) and the harp of the king were both worth 120 pence according to the Welsh Laws, while the harp of the gwrda was worth 60 pence (Owen 1841, 679, 77, 723). A harp was one of the three pledges that never lapsed, and the fee for tuning the keys was 24 pence, so that it was a prestige object (op. cit., 341). It seems to have been in the keeping of the chief of the household at the Welsh court - at least, he was to place the harp in the hands of the bard on the three principal festivals, and was entitled to a song from the bard whenever he wanted one (Owen 1841, 13). (However, if the queen wanted a song, then the bard had to sing it in a low voice, so that the hall should not be disturbed by him) (op. cit., 33, 35).

The form of harps is indicated in the manuscript illustrations. There seem to have been a large harp of seven or twelve strings which was held on the knee and the rota, a zither-like harp of five strings (Holmes 1952, 235). The two sorts are shown in a manuscript of between 1030-1050 (Camb. Univ. Lib. MS Ff I 23 f.4 v. illustrated in Temple 1976, fig. 249). One has a narrow trapezium shape, while the other is rectangular. One illustration from the mid-eighth century shows King David playing the lyre (Durham Cathedral Lib. B11.30 fol. 81 v), and harps are also shown in later manuscripts, like one dating between 1030-50 (Cambridge Univ. Lib. FfI 23 fol 4 v) (Bruce-Mitford 1983, 687-8; Temple 1976, No. 249). There is considerable archaeological evidence for harps/lyres. As well as the example from Sutton Hoo, there was also a lyre in the burial of Taeppa, a chieftain or minor king buried at Taplow (Bruce-Mitford 1983, 683, 701). This confirms the documentary evidence that harping was a fashionable accomplishment. Dunstan, for example, was accustomed to play his cythera 'which we in the native language call "harp"' to entertain a noblewoman and her ladies (Whitelock 1955, 234). Only the bone yoke facings from an instrument survive in a mid-fifth century immigrant's grave at Abingdon (Bruce Mitford 1983, 718). The remains of a lyre, consisting of two metal plates, plain and undecorated, in a poorly furnished burial at Burgh Apton, and remains at other sites, Morning Thorpe, and Buckland, Dover, may indicate the grave of a

professional scop (Evison 1987, 121).

According to the Welsh Laws, the professional bard was entitled to protection in his 'circuit of minstrelsy'; bardism and the science of a harpist, together with metallurgy, were the three domestic skills with special rights (Owen 1841, 475, 477). The chief harper seems to have trained minstrels who then set out on their own account as professionals (op. cit., II 19). According to The Fates of Men

> Sum sceal mid hearpan aet his hlafordes
> fotum sittan feoh þicgan
> ond a snellice snere wraestan
> laetan scralletan sceacol se þe hleaped
> naegl neomegende biþ him neod micel

(one shall sit at his lord's feet with his harp, receive wealth, and ever pluck the strings rapidly, let the leaping plectrum, the ringing nail shrill loudly, great is his eagerness) (Gollancz/Mackie 1973, l. 80 ff.). This suggests a permanent post with a lord, and Deor was the minstrel of the Heodnings for many years, until he was replaced by Heorrenda, leodcraftig monn (a man skilled in song) (op. cit., Deor l. 36 ff.). However, the minstrel Widsith has been to very many courts:

folgaþe wide
forþon ic maeg singan ond secgan spell
maenan fore mengo in meoduhealle
hu me cynegode cystum dohten...

(I served far and wide so I can sing, tell my story, declare before the company in the banqueting hall how men of high rank were noble, generous to me) (Gollancz/Mackie 1973, Widsith l. 53 ff.). He sang the praises of Queen Ealhhild geond londa fela (throughout many lands) (l. 99), and concludes:

Swa scripende gesceapum hweorfaþ
gleomen gumena geonde grunda fela
þaerfe secgaþ þoncword sprecaþ
simle suþ oþþe norþ sumne gemetaþ
gydda gleawnbe geofum unheawne
se þe fore dugueþe wile dom araeran
eorlscipe aefnan oþþaet eal scaeceþ
leohte ond lif somod lof se gewyrceþ
hafaþ under heofonum heahfaestne dom

(Roving thus as is their destiny, the minstrels of men wander over many lands. They tell their need, they speak words of thanks. North or south, they always find someone skilled in lays who wishes to exalt his fame among his retinue and do heroic

deeds until all passes away, light and life together. He gains praise and enduring glory under the heavens) (op. cit., l. 135 ff.). This passage establishes the fact of the wandering minstrel, readily admitted to the feasts of the great, as were also Alfred, Athelstan, and Olaf, who were able to trade on this, and disguising themselves as minstrels, were received into enemy camps where they managed to do some useful spying (Turner 1828 III, 62; Wright 1871, 47; Whitelock 1955, 278). The old poem about Athelstan's coronation feast quoted by William of Malmesbury suggests with its juxtaposition of 'stomachs are filled with delicacies, minds with song' that the music accompanied the meal (Whitelock 1955, 279). The story of Olaf confirms that the singing went on during the meal, and once the nobles had eaten enough, the conversation turned to war, and he was ordered out (Whitelock 1955, 278). It also confirms the connection between feasting, and adding to the prestige of the ruler, since the minstrel was paid in many cases to sing his employer's praises: 'one makes the harp resound, another contends with praises' (op. cit.). There is also a link between the feasting, the minstrel and the pagan concept that a man's immortality would rest in the commemoration of his deeds after his death.

Widsith received a jewelled bracelet from Gudhere of the Burgundians, as a reward for his song (Gollancz/Mackie 1973,

Widsith l. 65 ff). This was a suitably noble reward, within the heroic tradition. A ninth-century Irish poem complains of a boorish patron that he does not give horses for songs of praise 'but what is natural to him - a cow', but we also hear of a chief praised because he did not leave his court deliberately on the calends of January, and so was a profit to the ministrels of Britain, since the New Year's feast was when gifts were traditionally given to minstrels, among others (Jackson 1971, 132). So while employing a minstrel was prestigious, a suitable return had to be made for their services. The names of famous minstrels were recorded, like that of Gorthyn who provided song at a New Year's feast (Jackson 1969, 100). Grants of land are recorded to minstrels: meo fideli ministro Aethelwearde, (to Aethelwearde, my faithful minstrel), or Ealdberhto ministro meo (to Ealdbert, my minstrel) (Turner 1828 III, 567). William the Conqueror gave his minstrel 3 vills and 5 carucates of land in Gloucestershire (Waddell 1932, 210). More immediately, the minstrel seems to have been given a horn of liquor as soon as he finished his song (Gordon 1954, 307).

The council of Clovesho in 747 decreed that monasteries must not be ludicrarum artium receptacula, and these arts are defined as those of versifiers, harpers, minstrels or buffoons. The canon law forbade the clergy from having anything to do with mimes, jesters or play actors. The word 'minstrel' applied to all these

variety performers associated with bawdy songs and comic acts, as well as to the respectable gleemen who recited epics (Poole 1958, 605; Colgrave 1940, 246-7, 352).

However, it was not so easy to eradicate minstrelsy from the religious life. Wulfstan's Canons of Edgar were still trying to prevent priests from being an ealu-scop (ale-minstrel) or acting the gliwige (gleeman) (Fowler 1972, 14-5). Gliwig-manna (gleeman) glossed ganeones, a term which covered vagabonds, ribalds and jokers (Wright 1871, 47). The Laws of the Northumbrian Priests in c.1020 repeated that if a priest practised drunkenness or became a gleeman or ale-minstrel he was to compensate for it (Whitelock 1955, 437).

MUSICIANS

While the minstrel had his harp, the Welsh Laws refer to two other Chiefs of Song to be provided with appropriate instruments by the king. These were a crawd and pipe (Owen 1841 II, 19). A riddle in the Exeter book, describes a bagpipe which

> sitedꝧ aet symble saeles bideþ
> hwonne aer heo craeft hyre cyþan mote
> werum on wonge ne heo þaer wiht þicgedꝧ
> þaes þe him aet blisse beornas habbadꝧ...

hwaeþre hyre is on fote faeger hleopor

wynlicu wodgiefu

(sits at the feast and awaits the time when it may first make known its art to men on earth. It receives nothing there of what men have for their enjoyment yet it has in its foot beautiful music, a gift of pleasant sound) (Gollancz/Mackie 1973, Riddle 31 l.12). Manuscript illustrations show other instruments.

It is possible that, while the minstrel sung to his harp during the meal, after the eating louder instruments were played, since the horn, trumpet, drums and the flutes, which could be played two at a time, were hardly likely to have been used as continuo (Turner 1828, III, 59). A short trumpet, curved horn and organs are also shown in illustrations, and Bede mentions a drum and cymbals (op. cit., 455 ff.). A violin-like instrument with four strings played with a bow is also shown (op. cit., 59). The other instrument illustrated is a bell (Temple 1976, fig.305-6). Clochetes, a series of small bells strung on a rod and played with a hammer from a sitting position were known from twelfth-century France (Holmes 1952, 235). The musicians heapere (harper), bymere (trumpeter), pipere (piper), fithelere (fiddler), and horn-blawere (horn blower) are all recorded (Turner 1828, III, 61). The feminine forms fidelestere, hleapestre and sangstere (fiddler, dancer and singer) all appear

in the glosses, and as we find a manuscript illustration of a hleapestre, there may have also been feminine musicians and singers (Fell 1984, 54).

DANCING, JUGGLING & JESTING

Cot. Cleo. C. 8 shows two men in martial gear with a horn player and a female dancer (Turner 1828, III 59). Tumbian is the word used for dancing - Herodias' daughter tumbude before Herod, hence the term 'tumbler' (op. cit., 61). Harl. MS 603 also shows dancing (op. cit.). The cup-bearer is serving out wine, a man and a woman seem to be dancing together, another on her own, to the accompaniment of two horns, one larger than the other, a harp, either played by two men, or played by one and supported by a second, and a violin. The step-mother of the young King Edward had in her service a dwarf, a minstrel skilled in various modes of dancing who was sent to entice the young king to her home (Wright 1871, 47). Juggling may have been performed to a musical accompaniment, since an illustration in Cot. Tib. C. vi shows a juggler with three balls and three knives, and a musician playing a fiddle with a bow (Turner 1828, III 59). The same illustration shows King David playing one of the larger eleven-stringed harps, a musician with a curved horn, and another with a straight pipe resting on some sort of support (illustrated in Wright 1871, 48). There are also illustrations of dancing animals and what may be

buffones (clowns) (Turner 1828, III, 59).

Dancing was not just the province of professional entertainers any more than harping or singing was. In the account of the murder of King Ethelbert in 792 we are told that the royal party after dinner spent the whole day with music and dancing in great glee (op. cit., 61).

At the time of the Winton Domesday John ioculator the jester paid the king fourpence (Barlow et al. 1976, 96). A riddle describing a jay or jackdaw has the lines þe swa scirenige sceawendisan hlude onhyrge (who, like an actress, loudly mimic the ways of a clown), so there may also have been actresses (Fell 1984, 54). Adelina joculatrix held lands in Hampshire at the time of Domesday (op. cit.). These two late references would be out of place in the man's world of heroic feasting where the woman's function was virtually that of barmaid.

RIDDLES

The asking of riddles seems to have been part of the entertainment at a feast since Riddle 42 of the Exeter Book ends:

nu is undyrne
werum aet wine hu þa wihte mid us

heanmode two hatne sindon

(now it is revealed to men at their wine how those two mean-spirited creatures are named among us). Riddles are easy to devise, but the skill lies in providing more and more clues without making the answer easier, and also in ambiguity. A number of Anglo-Saxon riddles have an obvious ribald answer, a less obvious polite one. Feasts were also occasions for storytelling (Colgrave 1940, 246-7).

APPENDIX D

FAMINE YEARS

439 after a comet

466 caused by 'bad fatal air'

515 'most afflictive'

590 caused by a tempest which raised a great flood

592 caused by a drought from the 10 January to September, and locusts

605 caused by heat and drought

625 'grievous'

680 caused by three years of drought

681 at Selsey, Sussex (Walford 1879, 5).

688 Bede says that Caedwalla abdicated and went on a pilgrimage for the good of his soul, but Matthew Paris gives another reason in a marginal gloss. He says it was on account of a widespread famine in England that he fled from the country (Bonser 1963, 87).

695-700 famine and pestilence 'so that men ate each other' (Walford 1979,5).

In the second half of the seventh century the Yellow Plague was raging, and according to Adamnan's Life of Columba, about 684 there was 'a mortality upon all animals...for the space of three years so that there escaped not one out of the thousand of any kind of animal' (Whitelock 1955, 690). While there is no record

of famine in the chronicles for this year, supplies of animal food must have been scarce, even allowing for sensationalising on the part of the writer. Perhaps this confirms that cereal crops were the principal food resource.

730 great famine (Walford 1879, 5).
737 a great drought made the land unfruitful (Whitelock 1955, 259).

793 after many meteors, immense whirlwinds and flashes of lightning (Walford 1879, 5; Whitelock 1955, 167, 247). The fact that the pagan invaders slaughtered sheep and oxen no doubt contributed to the natural effects (op. cit., 242).

800 Contemporary evidence no longer exists for an extensive murrain of cattle in 800, but such is recorded by Roger of Hovenden, who was perhaps using a local copy of the chronicle no longer extant (Bonser 1963, 87). Brut y Twysogion recorded a great mortality of the cattle of the island of Britain for 810 (op. cit.).

820 The harvest was spoilt by continuous heavy rains and many men and cattle died. Floods prevented the autumn sowing (Turner 1828 II, 550.

821 harvest devastated by hail, pestilence among men and cattle. The story was told of a town that was afflicted aelce geare oftost þurh hagol swa heora aeceras aer waeron aþroxene aer aenig

ryftere þaet gerip gaderode (each year very frequently by hail so that their crops were destroyed before any reaper could gather the harvest) (Skeat 1881, St Martin l. 1215). While this presumably happened in France since St Martin prayed for the afflicted and there was no more hail there during his lifetime, it indicates how devasting hailstorms were for the harvest.

867 a great dearth (Walford 1879, 6).

868 a great famine with mortality of men and cattle (Turner 1828 II 550). There were almost certainly local shortages that went unrecorded, but the great plunder of cattle the invading Danes made in 870 on their way to Peterborough would have taken some seasons to replace, to take only one example (op. cit., I 524). Danish campaigns would certainly have disrupted supply in the areas they were conducted, even if famine is not necessarily recorded as a result.

872 'from ugly locusts' (Walford 1879, 6).
879 universal famine (op. cit.).
887 grievous two years (op. cit.).

893 The invading Danes were surrounded at Buttington on the Severn and were reduced to eating their horses, but even so a number died of starvation (Whitelock 1955, 187). (Many Danes also died of hunger in 914, when similar tactics were employed (op. cit., 195).

896 The English people were much more seriously afflicted by the mortality of cattle and men than by the Danes in these three years (op. cit., 188). In 894 they had been mid metelieste gewaegde (oppressed with lack of food) (Bosworth & Toller 1898 I, 463).

900 famine (Walford 1879, 6).

In the reign of Athelstan Olaf and his Northmen set fire to crops, 'the green crops withered in the fields, the blighted cornfield mocked the husbandman's prayers' Whitelock 1955, 209).

954 great famine which lasts four years (Walford 1879, 6).
962 famine caused by frost (op. cit.).
969 all grain burnt by the winds (op. cit.).

975 a very great famine recorded in the major versions of the chronicle, interpreted as the vengeance of God (Whitelock 1955, 209).

976 great famine in England, the micla hungor (op. cit., 210; Walford 1879, 6). This followed a period of frost, from the 1st November to the end of March (Turner 1828, II 551).

986 great mortality of cattle (yrfcwealm) in England (op. cit.).
988 famine from rain and barren land (Walford 1879, 6).

989 great drought and famine followed a period of much snow and rain when there could be no sowing (Turner 1828 II 551).
1004 such a famine as no man could remember (Walford 1879, 6). (This is presumably the famine referred to for 1005).

1005 great famine throughout England - such that no man ever remembered one so cruel (Whitelock 1955, 218). Perhaps this is what motivated the departure of the Danish fleet.

1012 endless multitudes died of famine in England and on the continent (Walford 1879, 6).
1016 famine throughout Europe because of hail, thunder and lightning (op. cit.).
1025 famine because of rains (op. cit.).
1031 famine because of great rains and locusts (op. cit.).

1041 weather inclement all the year, great mortality among cattle (Turner 1828 II 551).

1044 a dreadful famine in England and on the continent so that a sester of wheat cost above 60 pence (op. cit.). Henry of Huntingdon says that a sester of wheat was the burthen of one horse. The famine lasted seven years (Walford 1879, 6).

1047 great famine from snow and frost (op. cit.).

1051 an extreme dearth in which many thousands perished (Turner

1828 II, 325).

1054 terrible famine after a comet, wheat at fifteen shillings a quarter (Walford 1879, 6, 257). This compared with an average price for the previous fifty or so years of three shillings and sixpence (op. cit.).

1065 'Morkere and his horde from the north harried Northamptonshire, burnt corn, took all the cattle so that the shire and other shires near were for many winters the worse' (Douglas and Greenaway 1953, 140).

In the south-east counties which suffered most from the campaigns which followed Hastings there is frequent reference to the reduction in hideage on account of the waste and devastation (Loyn 1970, 312). This was the background to the famines recorded after the Conquest, and presumably led to local shortages.

1068 famine (and plague) after a severe winter (Walford 1879, 7).
1069 after harrying by William I the northern countries and other parts of the realm suffered a great dearth (op. cit.).
1073 famine followed by mortality so fierce the living could neither take care of the sick nor bury the dead (op. cit.).
1086 murrain of animals and intemperate weather (op. cit.).
1087 pestilence followed by famine (op. cit.).
1093 great famine and mortality (op. cit.).
1096 famine from summer rain, tempests and bad air (op. cit.).

1099 famine from rains and floods (op. cit.).

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