

Appendix S1. Definition of Dietary Supplement and Functional Food

Component	Definition
Dietary Supplement	<p>“Product intended for ingestion that contains a "dietary ingredient" intended to add further nutritional value to (supplement) the diet. A “dietary ingredient” may be one, or any combination, of the following substances:</p> <ul style="list-style-type: none">- a vitamin- a mineral- a herb or other botanical- an amino acid- a dietary substance for use by people to supplement the diet by increasing the total dietary intake <p>a concentrate, metabolite, constituent, or extract (U.S. Food and Drug Administration, 2015).”</p>
Functional Food	<p>“Whole foods and fortified, enriched, or enhanced foods which have a potentially beneficial effect on health when consumed as part of a varied diet on a regular basis, at effective levels (Hasler et al., 2004).”</p>

Appendix S2. Search String

(((((TITLE-ABS-KEY ((Diet* OR Food OR Health*)PRE/0 Supplement*)) OR (TITLE-ABS-KEY ((Health* OR Food OR Edible) PRE/3 (Product OR Produce))) OR (TITLE-ABS-KEY (Nutr?ceutical OR Neutr?ceutical)) OR (TITLE-ABS-KEY (Functional pre/0 Food))) AND ((TITLE-ABS-KEY (Perception Or Perceiv*)) OR (TITLE-ABS-KEY (Attitude)) OR (TITLE-ABS-KEY (Behaviour* OR Behavior*))) AND ((TITLE-ABS-KEY (Focus PRE/0 Group)) OR (TITLE-ABS-KEY (Interview*)) OR (TITLE-ABS-KEY (Survey*)) OR (TITLE-ABS-KEY (Questionnaire)))) AND TITLE-ABS-KEY (Use OR Using OR User OR Buy* OR Purchas* OR Consume* OR Consumption OR Intake OR Take* OR Taking) AND (Human))) AND (LIMIT-TO (LANGUAGE,"English "))

Appendix S3. Quality assessment for questionnaire studies

Sample Selection: (Maximum 2 stars)

1) Representativeness of the sample:

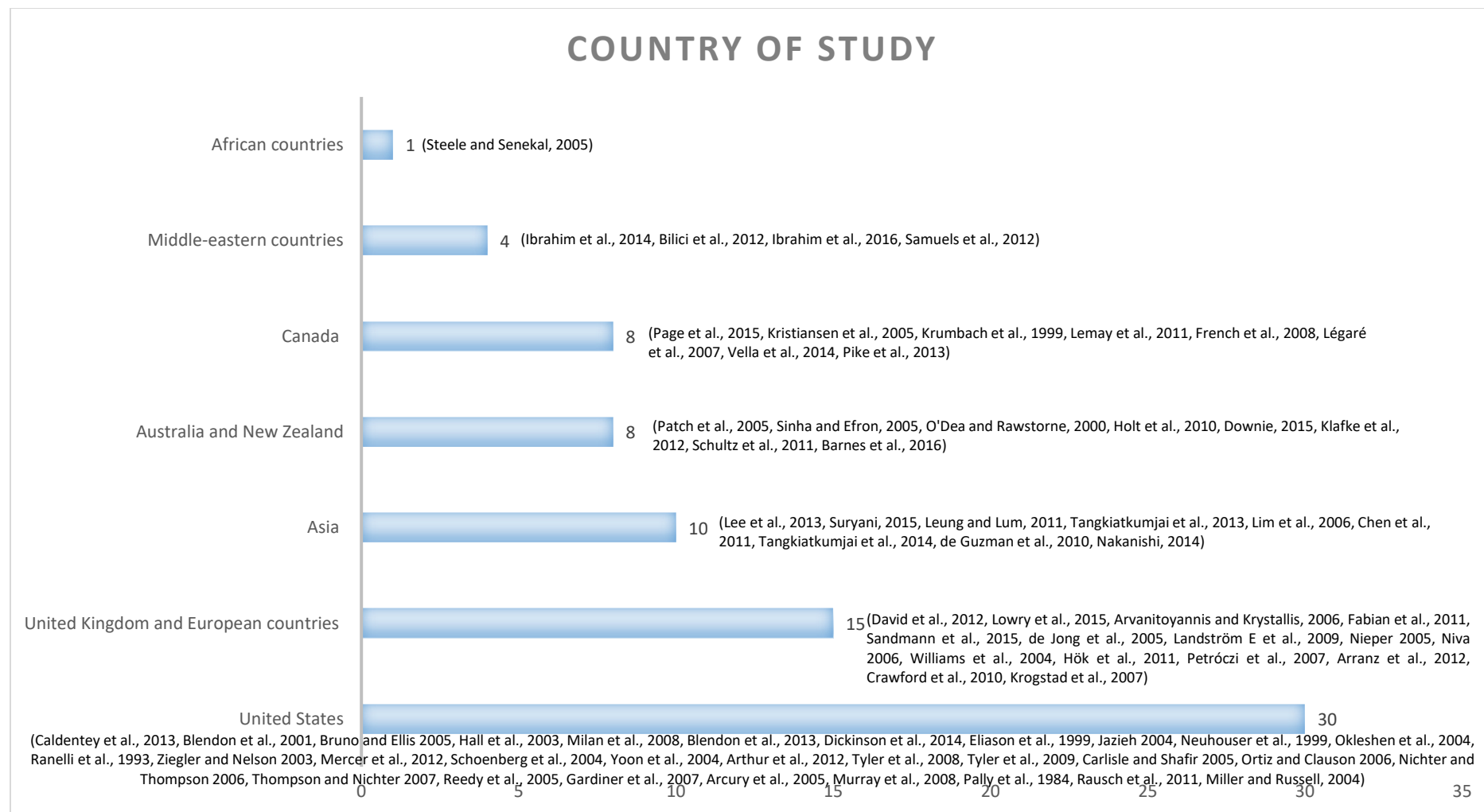
- a) Truly representative of the average in the target population. * (all subjects or random sampling)
- b) Somewhat representative of the average in the target population. * (non-random sampling)
- c) Selected group of users.
- d) No description of the sampling strategy.

2) Sample size:

- a) Justified and satisfactory. (Or rule of thumb of 300 sample and above (Comrey and Lee, 2013))*
- b) Not justified.

~This scale has been modified from the adapted Newcastle-Ottawa quality assessment scale for cross-sectional studies (Herzog et al., 2013) to assess the quality of cross-sectional questionnaire studies for the systematic review, "Factors influencing consumer's decision on the use of nutraceuticals: A systematic review". We used only part of the 'sample selection' of the assessment scale.

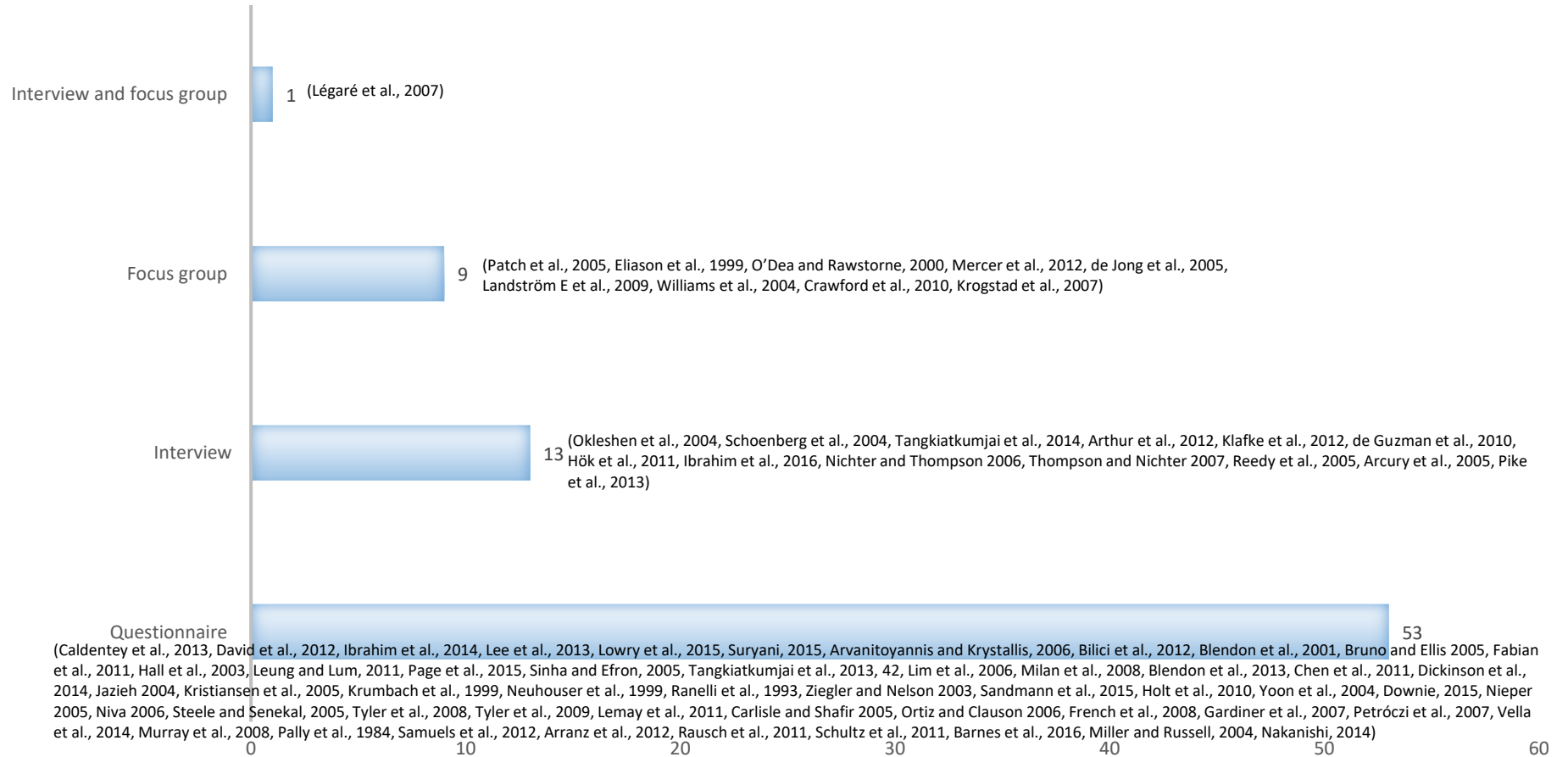
Appendix S4. The Characteristics of Study, Participants and Nutraceuticals and Quality of Studies.



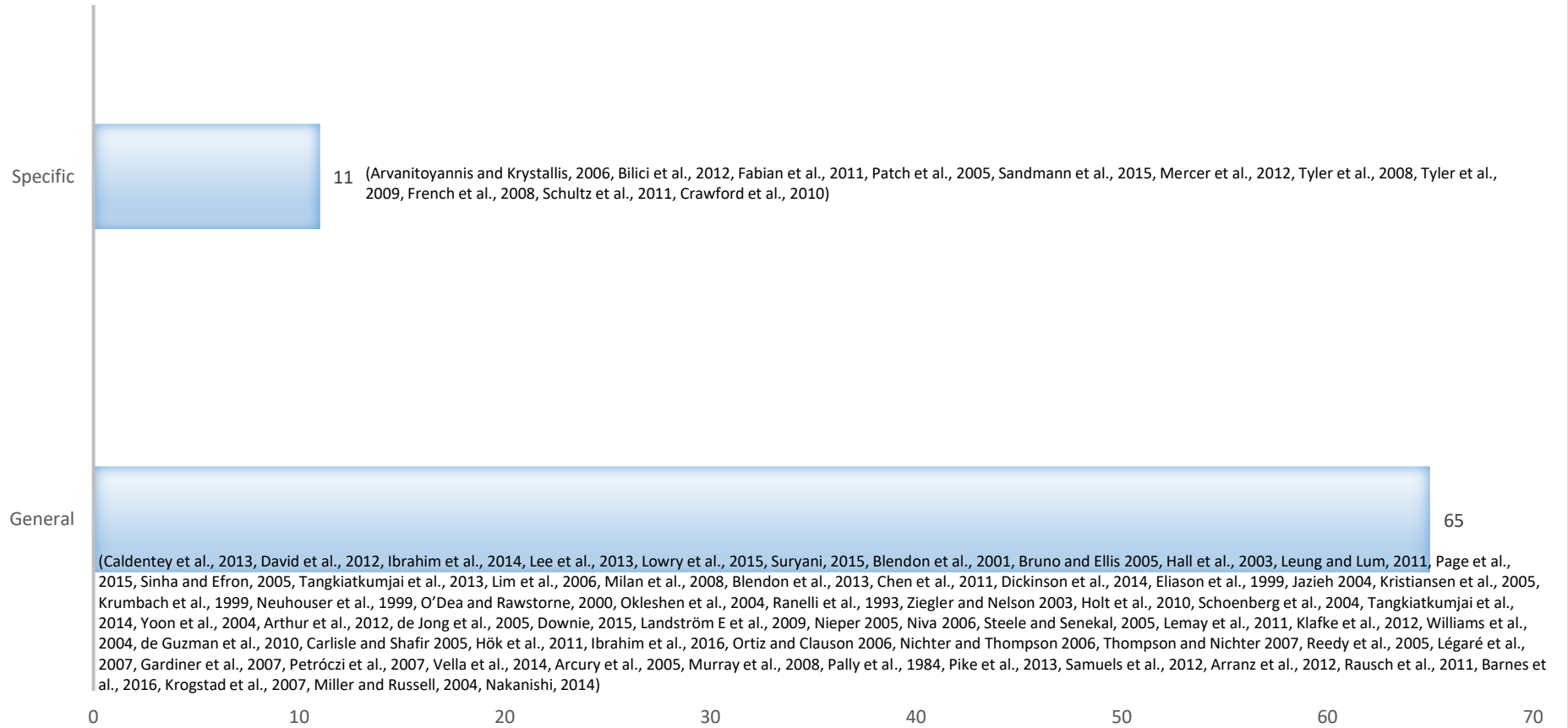
STUDY DESIGN



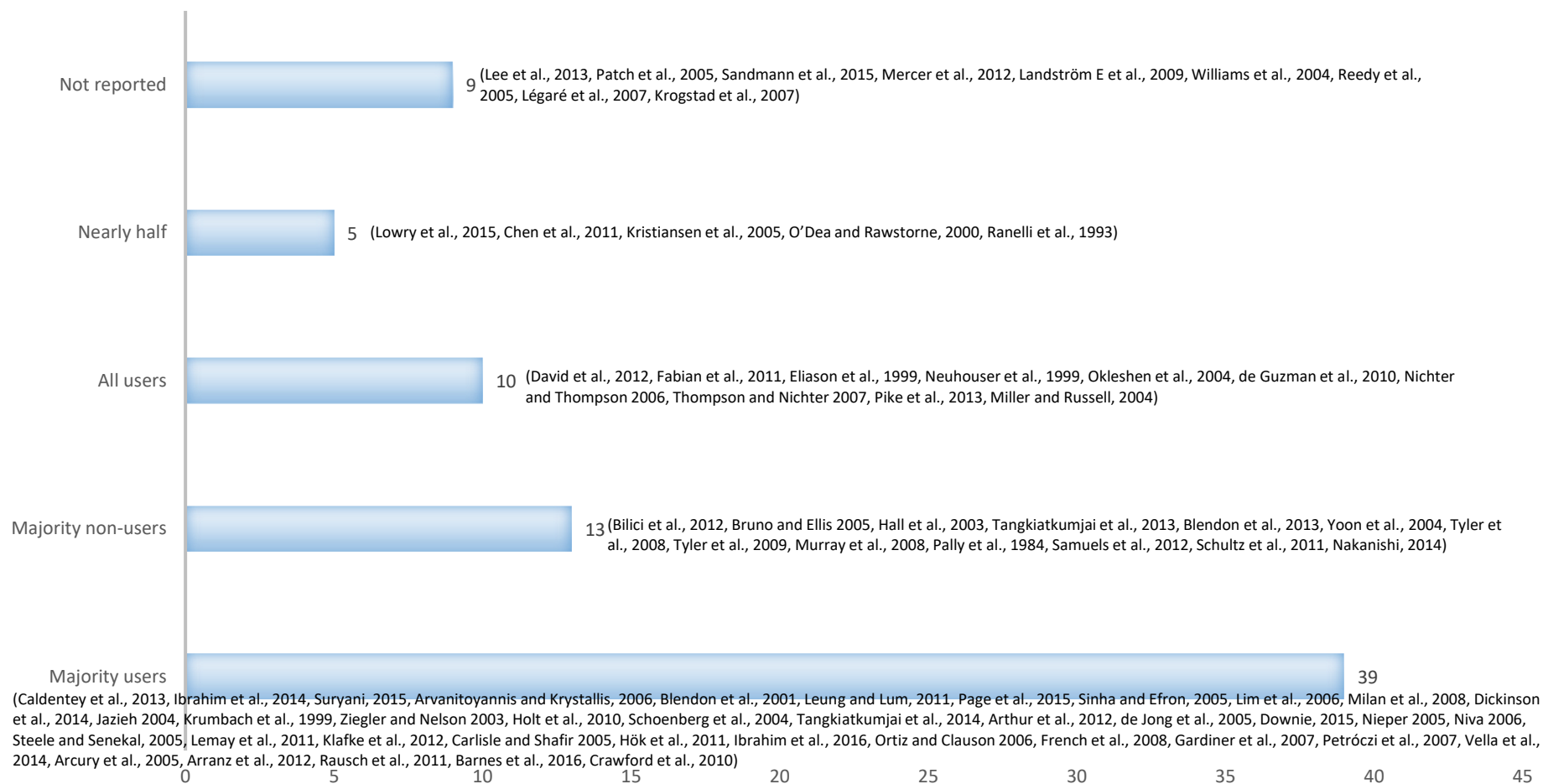
STUDY DESIGN



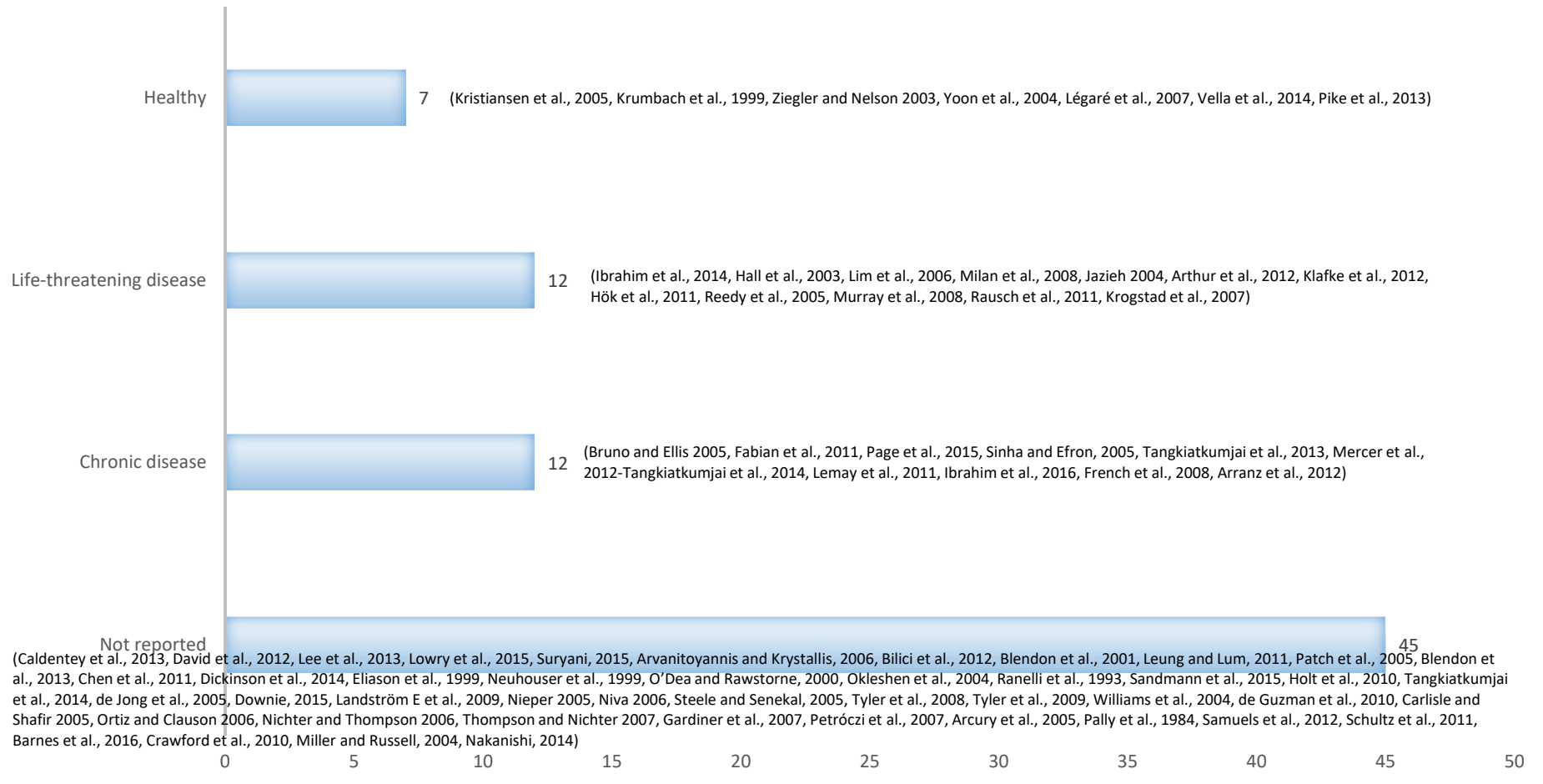
NUTRACEUTICALS TYPE



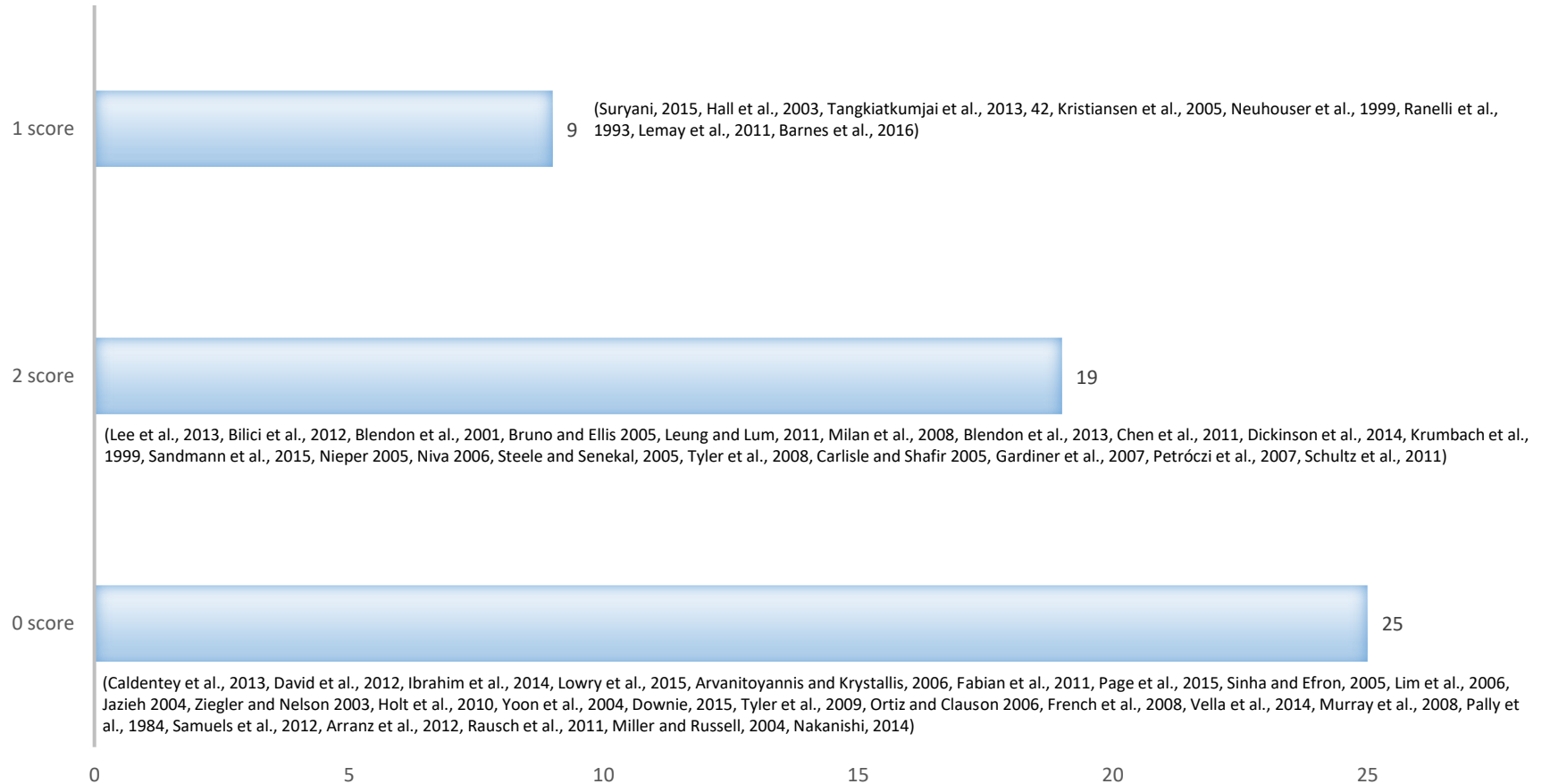
NUTRACEUTICALS USERS



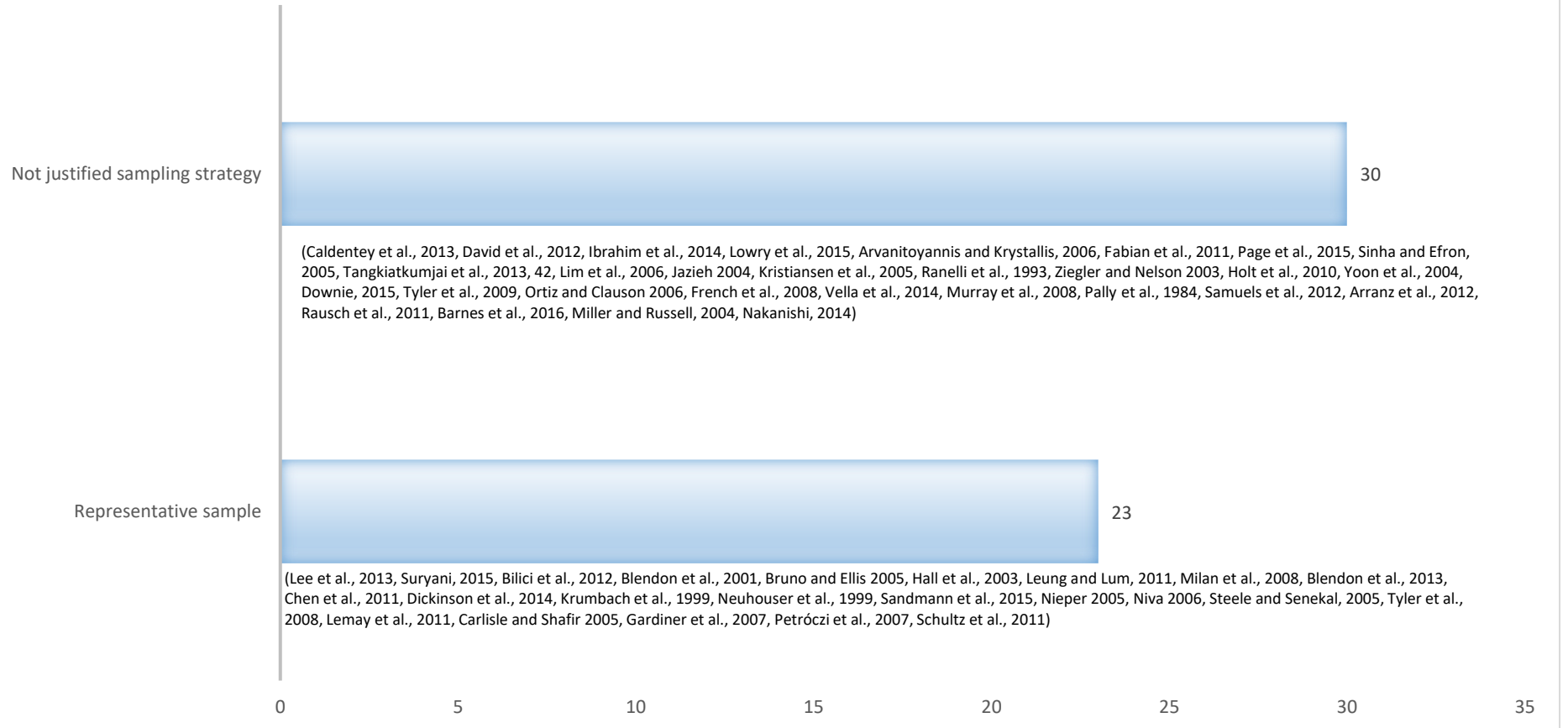
PARTICIPANTS' HEALTH CONDITIONS



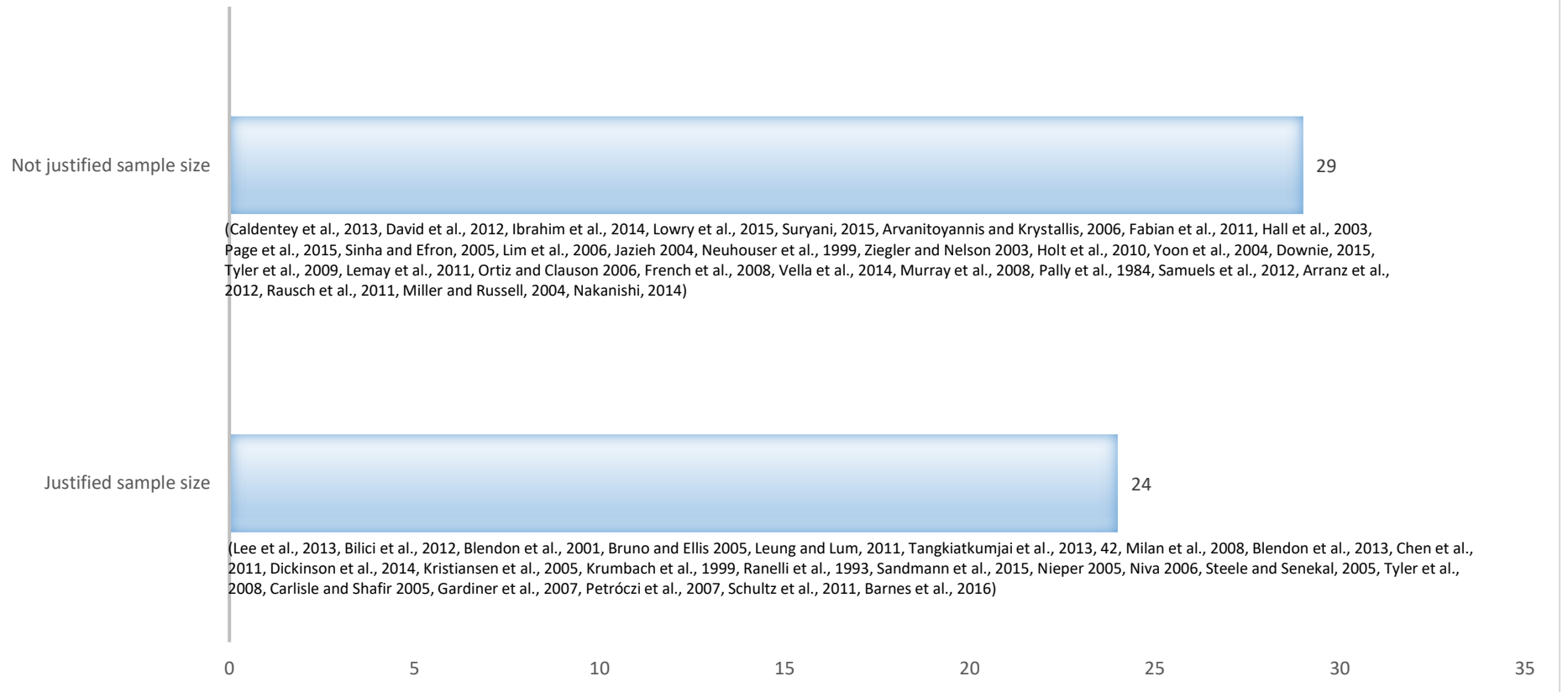
SAMPLE SELECTION



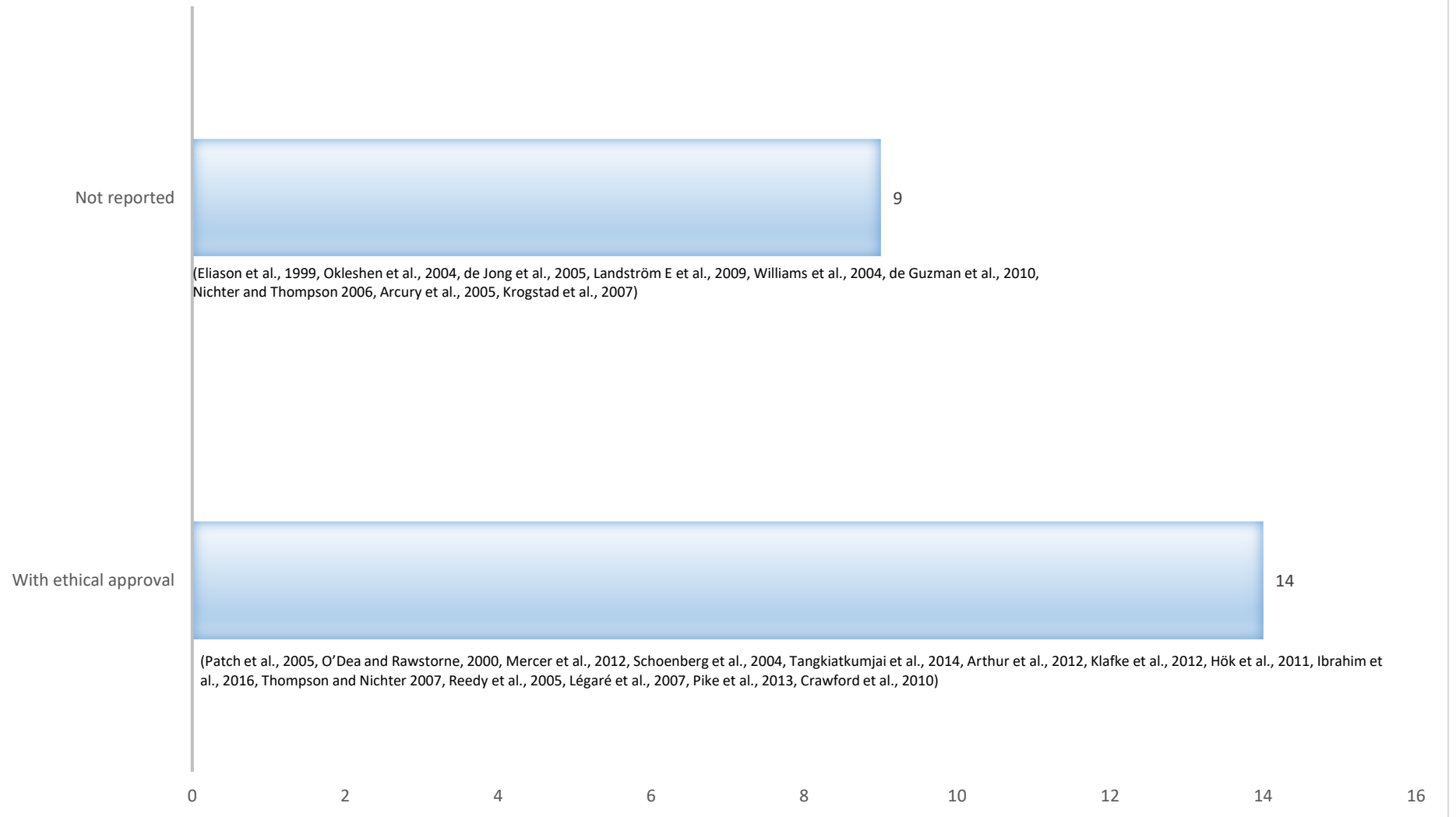
SAMPLING STRATEGY



SAMPLE SIZE



ETHICAL APPROVAL



Appendix S5. Quality assessment of questionnaire studies.

No.	1	2	
	Sample Selection (Max 2)		
Criteria assessed	Representative ness of the sample	Sample size	Total
United States of America			
Blendon 2001 (Blendon et al., 2001)	1	1	2
Blendon 2013 (Blendon et al., 2013)	1	1	2
Bruno 2005 (Bruno and Ellis, 2005)	1	1	2
Caldentey 2013 (Caldentey et al., 2013)	0	0	0
Carlisle 2005 (Carlisle and Shafir, 2005)	1	1	2
Dickinson 2014 (Dickinson et al., 2014)	1	1	2
Gardiner 2007 (Gardiner et al., 2007)	1	1	2
Hall 2003 (Hall et al., 2003)	1	0	1
Jazieh 2004 (Jazieh et al., 2004)	0	0	0
Milan 2008 (Milan et al., 2008)	1	1	2
Miller 2004 (Miller and Russell, 2004)	0	0	0
Murray 2008 (Murray et al., 2008)	0	0	0
Neuhouser 1999 (Neuhouser et al., 1999)	1	0	1
Ortiz 2006 (Ortiz and Clauson, 2006)	0	0	0

Pally 1984 (Pally et al., 1984)	0	0	0
Ranelli 1993 (Ranelli et al., 1993)	0	1	1
Rausch 2011 (Rausch et al., 2011)	0	0	0
Tyler 2008 (Tyler et al., 2008)	1	1	2
Tyler 2009 (Tyler Jr et al., 2009)	0	0	0
Yoon 2004 (Yoon and Horne, 2004)	0	0	0
Ziegler 2003 (Ziegler et al., 2003)	0	0	0
United Kingdom and European Countries			
Arranz 2012 (Spain) (Arranz et al., 2012)	0	0	0
Arvanitoyannis 2006 (Romania) (Arvanitoyannis and Krystallis, 2006)	0	0	0
David 2012 (Switzerland) (David et al., 2012)	0	0	0
Fabian 2011 (Austria) (Fabian et al., 2011)	0	0	0
Lowry 2015 (UK) (Lowry et al., 2015)	0	0	0
Nieper 2004 (UK) (Nieper, 2005)	1	1	2
Niva 2006 (Finland) (Niva, 2006)	1	1	2
Petroczi 2007 (UK) (Petróczi et al., 2007)	1	1	2
Sandman 2015 (Germany) (Sandmann et al., 2015)	1	1	2
Asia			

Chen and Lin 2011 (Taiwan) (Chen et al., 2011)	1	1	2
Lee 2013 (Singapore) (Lee et al., 2013)	1	1	2
Leung 2011 (Hong Kong) (Leung and Lum, 2011)	1	1	2
Lim 2006 (Singapore) (Lim et al., 2006)	0	0	0
Nakanishi 2014 (Japan) (Nakanishi, 2014)	0	0	0
Suryani 2015 (Indonesia) (Suryani, 2015)	1	0	1
Tangkiatkumjai 2013 (Thailand) (Tangkiatkumjai et al., 2013)	0	1	1
Tangkiatkumjai 2014 (a) (Thailand) (Tangkiatkumjai et al., 2014b)	0	1	1
Canada			
French 2008 (French et al., 2008)	0	0	0
Kristiansen 2005 (Kristiansen et al., 2005)	0	1	1
Krumbach 1999 (Krumbach et al., 1999)	1	1	2
Lemay 2011 (Lemay et al., 2011)	1	0	1
Page 2015 (Page et al., 2015)	0	0	0
Vella 2014 (Vella et al., 2014)	0	0	0
Middle-eastern countries			

Bilici 2012 (Turkey) (Bilici et al., 2012)	1	1	2
Ibrahim 2014 (Saudi Arabia) (Ibrahim et al., 2014)	0	0	0
Samuels 2012 (Israel) (Samuels et al., 2012)	0	0	0
Australia/New Zealand			
Barnes 2016 (Australia) (Barnes et al., 2016)	0	1	1
Downie 2015 (Australia) (Downie et al., 2015)	0	0	0
Holt 2010 (New Zealand) (Holt et al., 2010)	0	0	0
Schultz 2011 (New Zealand) (Schultz et al., 2011)	1	1	2
Sinha 2005 (Australia) (Sinha and Efron, 2005)	0	0	0
African countries			
Steele 2005 (South Africa) (Steele and Senekal, 2005)	1	1	2

Appendix S6. Quality assessment using The Joanna Briggs Institute Critical Appraisal tools for qualitative research.

No.	1	2	3	4	5	6	7	8	9	10	Total
Criteria assessed	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice-versa, addressed?	Are participants, and their voices, adequately represented?	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	
United States of America											
Arcury 2005 (Arcury et al., 2005)	1	1	1	1	1	0	0	1	0	1	7
Arthur 2012 (Arthur	1	1	1	1	1	0	0	1	1	1	8

et al., 2012)											
Eliason 1999 (Eliason et al., 1999)	1	1	1	1	1	0	0	1	0	1	7
Mercer 2012 (Mercer et al., 2012)	1	1	1	1	1	0	0	1	1	1	8
Nichter 2006 (Nichter and Thomps on, 2006)	1	1	1	1	1	0	0	1	0	1	7
Okleshe n Peters 2003 (Oklesh en Peters et al., 2004)	1	1	1	1	1	0	0	1	0	1	7

Reedy 2005 (Reedy et al., 2005)	1	1	1	1	1	0	0	1	1	1	8
Schoenberg 2004 (Schoenberg et al., 2004)	1	1	1	1	1	0	0	1	1	1	8
Thompson 2007 (Thompson and Nichter, 2007)	1	1	1	1	1	0	0	1	1	1	8
UK and European Countries											
Crawford 2010 (UK) (Crawford et al., 2010)	1	1	1	1	1	0	0	1	1	1	8
de Jong 2005 (Netherlands)	1	1	1	1	1	0	0	1	0	1	7

(de Jong et al., 2005)											
Hok 2011 (Sweden) (Hök et al., 2011)	1	1	1	1	1	0	0	1	1	1	8
Krogsta d 2007 (Norwa y) (Krogsta d et al., 2007)	1	1	1	1	1	0	0	1	0	1	7
Landstr om 2009 (Sweden) (Landstr öm et al., 2009)	1	1	1	1	1	0	0	1	0	1	7

Williams 2004 (UK/Ireland, Spain, Austria and Egypt) (Williams et al., 2004)	1	1	1	1	1	0	0	1	0	1	7
Asia											
de Guzman 2010 (Philippines) (de Guzman et al., 2010)	1	1	1	1	1	0	0	1	0	1	7
Tangkia 2014 (b) (Thailand) (Tangkia et al.)	1	1	1	1	1	0	0	1	1	1	8

et al., 2014a)											
Canada											
Legare 2007 (Légaré et al., 2007)	1	1	1	1	1	0	0	1	1	1	8
Pike 2013 (Pike et al., 2013)	1	1	1	1	1	0	0	1	1	1	8
Middle-eastern countries											
Ibrahim 2016 (Iraq) (Ibrahim et al., 2016)	1	1	1	1	1	0	0	1	1	1	8
Australia/New Zealand											

Klafke 2014 (Austral ia) (Klafke et al., 2012)	1	1	1	1	1	0	0	1	1	1	8
O'Dea 2000 (Austral ia) (O'Dea and Rawstor ne, 2000)	1	1	1	1	1	0	0	1	1	1	8
Patch 2005 (Austral ia) (Patch et al., 2005)	1	1	1	1	1	0	0	1	1	1	8

Appendix S7. Factors affecting consumer's decision on the use of nutraceuticals in detail.

Study	Factors in Details (as quoted from studies)	Factors
United States of America		
Arcury 2005 (Arcury et al., 2005)	<p>a) Healthcare professional's consultation- Often a doctor or nurse was presented as the ultimate authority for the use of a home remedy.</p> <p>b) Influence from mass media - Publications were the other source of authority often cited by these rural elders to justify the use of home remedies.</p>	<p>a) Healthcare professional's consultation</p> <p>b) Influence from mass media</p>
Arthur 2012 (Arthur et al., 2012)	<p>a) Safety - I did some research online and I found that it's ok to take it with chemotherapy. So I'm going to continue taking it.</p> <p>b) Health benefits - I don't know if it's working, but someone in the condition like me, just trying to do everything that you can. Ya know, just trying to get some cure.</p>	<p>a) Safety</p> <p>b) Health benefits</p>
Blendon 2001 (Blendon et al., 2001)	a) Health benefits - Many users felt so strongly about the potential health benefits of some of these products that they reported that they would continue to take them even if they were shown to be ineffective in scientifically conducted clinical studies.	a) Health benefits
Blendon 2013 (Blendon et al., 2013)	<p>a) Health benefits - Most dietary supplements users said that they would be minimally influenced by government statements contradicting the efficacy claims of supplement manufacturers.</p> <p>b) Healthcare provider consultation - Only 25.4% responded that they would cease their use of a supplement if public health authorities stated that it was ineffective.</p>	<p>a) Health benefits</p> <p>b) Healthcare provider's consultation</p>
Bruno 2005 (Bruno and Ellis, 2005)	<p>a) Health benefits - Natural herbs combined with conventional medical treatments would help you. 48.8%</p> <p>b) Healthcare professional's consultation- A conventional medical professional suggested you 17.9%</p>	<p>a) Health benefits</p> <p>b) Healthcare professional's consultation</p>

Study	Factors in Details (as quoted from studies)	Factors
Caldentey 2013 (Caldentey et al., 2013)	a) Healthcare professional's consultation- 78% agreed/strongly agreed with "If my physician told me to stop taking my vitamins and dietary supplements, I would accept the recommendation." b) Health benefits- Only 56% would stop if new research revealed therapeutic futility.	a) Healthcare professional's consultation b) Health benefits
Carlisle 2005 (Carlisle and Shafir, 2005)	a) Safety– Prefer natural products for over 40% as single reason.	a) Safety
Dickinson 2014 (Dickinson et al., 2014)	a) Health benefits - to fill nutrient gaps in the diet (42%).	a) Health benefits
Eliason 1999 (Eliason et al., 1999)	a) Improved knowledge - growing awareness of the lifestyle practices that might contribute to overall health. Responsibility of self-care taking - The customers in the health food stores wanted to take responsibility for their health. a) Safety - many participants believed that using natural dietary supplements was safer than using pharmaceuticals. They had great freedom in experimenting with supplements because they were natural, and thus not harmful, c) Health benefits - food supply could not adequately support their nutritional needs d) Cost - Although some of the participants would buy the least expensive product, overall cost did not seem to be a concern for most of them.	a) Improved knowledge b) Safety c) Health benefits d) Cost
Gardiner 2007 (Gardiner et al., 2007)	a) Cost - Using DS was because conventional medical treatments were too expensive and included being uninsured.	a) Cost

Study	Factors in Details (as quoted from studies)	Factors
Hall 2003 (Hall et al., 2003)	a) Health benefits - 28 (32%) answered that it made them feel better, while 21 (24%) believed that it improved the treatment or cure of their cancer. Fifteen (17%) believed that it slowed the growth of their cancer and 11 (12%) that this therapy relieved the side effects of their conventional therapy. Another six patients (7%) responded that they used CM because of medical or scientific information c) Healthcare professional's consultation- Of those patients using CM, 23 (26%) claimed that their physician was the greatest advocate of this approach	a) Health benefits b) Healthcare professional's consultation
Jazieh 2004 (Jazieh et al., 2004)	a) Health benefits - Food deficiency 4%	a) Health benefits
Mercer 2012 (Mercer et al., 2012)	a) Safety, b) Health benefits - Patients would weigh the risks and benefits of probiotics, their disease severity and satisfaction with current treatments when considering probiotic use.; Although patients hoped that probiotics would be effective, many expressed doubts that probiotic products could manage their disease as well as pharmaceutical drugs.	a) Safety b) Health benefits
Milan 2008 (Milan et al., 2008)	a) Health benefits - The most common reasons for supplement use is to treat the toxic effects of medications (8%).	a) Health benefits
Miller 2004 (Miller and Russell, 2004)	a) Influenced by family and friends, mass media - Recommended by family or friend (31.4%); Advertisement (13.7%)	a) Influenced by family and friends, mass media
Murray 2008 (Murray et al., 2008)	a) Healthcare professional's consultation- 20% of patients felt their physician was most influential for patient's decision to begin therapy with dietary supplements.	a) Healthcare professional's consultation

Study	Factors in Details (as quoted from studies)	Factors
Neuhouser 1999 (Neuhouser et al., 1999)	Reasons choosing supplements instead of food include: a) Lack of knowledge - A small amount of respondents were unsure which foods contain the vitamin or mineral needed or unsure of ideal levels of nutrient. b) Health benefits - Small amount of respondents took dietary supplements as a habit. Many found that foods do not supply enough nutrients even though there was a balanced diet consumption.	a) Lack of knowledge b) Health benefits
Nichter 2006 (Nichter and Thompson, 2006)	a) Safety - Think it is safer than drugs; Prefer natural products than drugs.	a) Safety
Okleshen Peters 2003 (Okleshen Peters et al., 2004)	a) Health benefits - To gain peace of mind. b) Healthcare professional's consultation- The advice of a physician underlies most dietary supplement consumption practices	a) Health benefits b) Healthcare professional's consultation
Ortiz 2006 (Ortiz and Clauson, 2006)	a) Safety and b) Influenced by family tradition- Major reasons cited for herb/herbal remedies use were family tradition (36%) and safety (17%).	a) Safety b) Influenced by family tradition
Pally 1984 (Pally et al., 1984)	a) Healthcare professional's consultation- Willing to modify supplement use on the basis of their physician's advice. (62 - 77%)	a) Healthcare professional's consultation
Ranelli 1993 (Ranelli et al., 1993)	a) Health benefits - The most common reasons for taking supplements were inadequate diet	a) Health benefits

Study	Factors in Details (as quoted from studies)	Factors
Rausch 2011 (Rausch et al., 2011)	a) Healthcare professional's consultation- The most common reason for use of vitamins and minerals was recommendation by a physician (33.0%).	a) Healthcare professional's consultation
Reedy 2005 (Reedy et al., 2005)	a) Safety - There were also questions about the safety of herbs and potential drug-herb interactions: c) Lack of knowledge - A lack of physician guidance in DS selection.	a) Safety c) Lack of knowledge
Schoenberg 2004 (Schoenberg et al., 2004)	a) Health benefits - But it didn't seem to make any difference. It seems like it was just a ten dollar waste. b) Healthcare professional's consultation- (The) only approaches I use are the ones that the doctors gave me and the nurse. Those are the only ones that I use. c) Ease of purchasing - because up here it's hard to find nopales (cactus) and all this stuff	a) Health benefits b) Healthcare professional's consultation c) Ease of purchasing
Thompson 2007 (Thompson and Nichter, 2007)	a) Influenced by family and friends - Trust in referrals from those they feel are like them b) Safety - Prefer natural products over antibiotics as breastfeeding	a) Influenced by family and friends b) Safety
Tyler 2008 (Tyler et al., 2008)	a) Lack of knowledge - in 55% (37 of 68) of respondents suggested a lack of basic knowledge about the importance of calcium, b) Health benefits - such as "I didn't realize it was necessary," 19% believed their diets alone provided sufficient calcium. c) Healthcare professional's consultation- or "my doctor never mentioned it." d) Cost, e) Ease of using, f) Taste - Only 8% referenced intrinsic difficulties with taking supplements such as cost, convenience, or taste. Interestingly,	a) Lack of knowledge b) Health benefits c) Healthcare professional's consultation d) Cost

Study	Factors in Details (as quoted from studies)	Factors
	g) Safety - 4% blamed side effects such as constipation or upset stomach for non-use, suggesting a previous trial of supplementation	e) Ease of using f) Taste g) Safety
Tyler 2009 (Tyler Jr et al., 2009)	a) Ease of using, b) Health benefits and c) Safety - On open-ended questioning, former users cited forgetfulness, disbelief in the necessity of supplementation, depletion of their supplement supply, and side effects as the most common reasons for discontinuing calcium. On open-ended questioning, women who had never taken calcium supplements most commonly cited: c) Lack of knowledge - as the reason for nonuse, often adding that; to report uncertainty about recommended calcium dose d) Healthcare professional's consultation- their physician had never recommended it.	a) Ease of using b) Health benefits c) Safety d) Lack of knowledge e) Healthcare professional's consultation
Yoon 2004 (Yoon and Horne, 2004)	a) Safety - fear of drug interaction (n=5) b) Healthcare professional's advice (n=5) c) Cost - Financial constraint (n=3) d) Health benefits - questionable effectiveness (n=6)	a) Safety b) Healthcare professional's consultation c) Cost d) Health benefits

Study	Factors in Details (as quoted from studies)	Factors
Ziegler 2003 (Ziegler et al., 2003)	a) Health benefits - to make up for an inadequate diet (28%).	a) Health benefits
UK and European Countries		
Arranz 2012 (Spain) (Arranz et al., 2012)	a) Healthcare professional's consultation- Seventy-four percentage of these patients used NS following advice from health	a) Healthcare professional's consultation
Arvanitoyannis 2006 (Romania) (Arvanitoyannis and Krystallis, 2006)	(more than 50% to be identified as significant factors): a) Health benefits - 96.8% for health, 82.2% positive b) Taste - 95.9% c) Environmental friendly - 70.9% d) Safety - 69.1% e) Ease of purchasing - 72.8%	a) Health benefits b) Taste c) Environmental friendly d) Safety e) Ease of purchasing
Crawford 2010 (UK) (Crawford et al., 2010)	a) Influenced by family and friends - These actions also reflect back onto the self because they make the giver, not only the receiver, feel 'better' in the moral sense. ; The perceived effects on the health of other family members represent a potent imperative.; Buying probiotics becomes part of a repertoire of 'caring' for others.	a) Influenced by family and friends
David 2012 (Switzerland) (David et al., 2012)	a) Safety - Because risk perception is generally low, supplements are often used on a misleading assumption that "if it doesn't help it won't harm."	a) Safety
de Jong 2005 (Netherlands)	a) Cost - buy it when on offer,	a) Cost

Study	Factors in Details (as quoted from studies)	Factors
(de Jong et al., 2005)	<p>b) Taste and c) Safety – Taste and safety appeared to be important stimulating factors or barriers for usage;</p> <p>d) Health benefits - Respondents often did not envisage FF use for themselves but acknowledged the usefulness of FF for certain groups in our society.</p>	<p>b) Taste</p> <p>c) Safety</p> <p>d) Health benefits</p>
Fabian 2011 (Austria) (Fabian et al., 2011)	a) Health benefits - For 9%, the intake of supplements was part of a balanced diet; Only 4% of surveyed patients were motivated to use complementary and alternative medicines remedies by the expectation of a positive effect on metabolic control/diabetes management.	a) Health benefits
Hok 2011 (Sweden) (Hök et al., 2011)	a) Safety - You might as well have a go and try it. The way I tend to think about it is that even if it doesn't help it won't do any harm anyway. That's what happened with the white radish juice. I didn't think it would do any harm. And then it actually helped in that case (providing symptomatic relief).	a) Safety
Krogstad 2007 (Norway) (Krogstad et al., 2007)	a) Influenced by family and friends, mass media, and health store - The parents in this study felt a strong pressure to try nutraceutical from advertisements, media and health stores. The families had been given advice from friends and relatives about giving natural products, and not following the advice ended up being an extra burden.	a) Influenced by family and friends, mass media, and health store
Landstrom 2009 (Sweden) (Landström et al., 2009)	a) Health benefits - Compensation for an unhealthy lifestyle. . It was commonly believed that if we would eat what is "right" and live a life that is "right" for us, we would not need functional food. Functional food products are produced for individuals with imperfect and unbalanced lives, who are ignorant of their health. Functional food is for people in indisputable need, those with health problems, an upset stomach, diabetes, high cholesterol, or other diet-related diseases.	a) Health benefits

Study	Factors in Details (as quoted from studies)	Factors
Lowry 2015 (UK) (Lowry et al., 2015)	a) Safety - The main reasons for supplement use were safety of supplements	a) Safety
Nieper 2004 (UK) (Nieper, 2005)	a) Health benefits and b) Lack of knowledge - The most frequent reasons for not taking supplements were lack of knowledge and no need for supplements (both 50%). c) Cost - Costs were less important (17%)	a) Health benefits b) Lack of knowledge c) Cost
Niva 2006 (Finland) (Niva, 2006)	Facilitators: a) Health benefits and b) Taste - reasons for the use of these products that were mentioned relatively often included general healthiness, functionality and good taste. Barriers: a) Lack of knowledge & b) Cost & c) Health benefits - the most common reasons for non-use were a general lack of interest in or knowledge about functional foods, high prices and not seeing any reasons to use the products.	a) Health benefits b) Taste c) Lack of knowledge d) Cost e) Health benefits
Petroczi 2007 (UK) (Petróczi et al., 2007)	a) Ease of using - No time preparing meals (20%) b) Healthcare professional's consultation- Doctor's advice (25%)	a) Ease of using b) Healthcare professional's consultation
Sandman 2015 (Germany) (Sandmann et al., 2015)	Reasons using: a) Health benefits- For balanced nutrition (73%); Part of modern diet (59%); Against: b) Cost - Too expensive (42%) c) Safety - Fear of artificial additive (37%); Prefer organic food (30%); Fear of side effects (24%); Concerns about novel food (22%)	a) Health benefits b) Cost c) Safety

Study	Factors in Details (as quoted from studies)	Factors
	d) Health benefits - no effect (27%); Don't feel ill (30%)	
Williams 2004 (UK/Ireland, Spain, Austria and Egypt) (Williams et al., 2004)	a) Safety and b) Health benefits - There was a general willingness to try mood-altering foods, although continued use would depend upon safety and efficacy. There was a perceived need for foods that are antidepressant, anti-fatigue and have calming properties. c) Cost, d) Taste, e) Ease of using - Although price appeared unimportant, it was generally agreed that functional foods should taste good. They should also come in small packages that are unambiguously labelled, easy to obtain and convenient to use, possibly in social situations.	a) Safety b) Health benefits c) Cost d) Taste e) Ease of using
Asia		
Chen and Lin 2011 (Chen et al., 2011)	a) Health benefits - Taking supplements was to supplement an unbalanced diet (40.3%),	a) Health benefits
de Guzman 2010 (de Guzman et al., 2010)	a) Health benefits - Participants' behaviour is driven by curiosity to try food supplements to discover whether they work or not.	a) Health benefits
Lee 2013 (Lee et al., 2013)	The 3 most important factors to consider before taking DS: a) Health benefits (35.9%) b) Healthcare professional's consultation- Doctor's advice (35.7%) c) Safety (25.5%)	a) Health benefits b) Healthcare professional's consultation c) Safety

Study	Factors in Details (as quoted from studies)	Factors
Leung 2011 (Leung and Lum, 2011)	a) Health benefits - Respondents believed that "It is useful/important for normal child development", "It is useful/important for immune function".	a) Health benefits
Lim 2006 (Lim et al., 2006)	a) Health benefits - most (85.7%) used it to supplement mainstream medicine, as a form of supportive therapy; To do everything possible for the child” was another frequently cited reason (42.9%).	a) Health benefits
Nakanishi 2014 (Nakanishi, 2014)	a) Influenced by mass media, friends and family - Most often, women started taking dietary supplements after seeing them on television or in magazines (30 women, 16.0%), after recommendation by friends (23 women, 12.3%), after recommendation by husbands (5 women, 2.7%)	a) Influenced by mass media, friends and family
Suryani 2015 (Suryani, 2015)	a) Influenced by friends and family - Main reason for supplement intake include parents' order (21%)	a) Influenced by friends and family
Tangkiatkumjai 2013 (Tangkiatkumjai et al., 2013)	The top three most often reported reasons why respondents used HDS were: a) Influenced by family and friends - family and friend's recommendation, b) Health benefits - followed by expecting to gain benefit from HDS	a) Influenced by family and friends b) Health benefits
Tangkiatkumjai 2014 (a) (Tangkiatkumjai et al., 2014b)	a) Health benefits, b) Safety - Respondents reported using dietary supplement due to their efficacy (28%) and safety concerns with conventional medicines (15%).	a) Health benefits b) Safety

Study	Factors in Details (as quoted from studies)	Factors
Tangkiatkumjai 2014 (b) (Tangkiatkumjai et al., 2014a)	a) Health benefits and b) Safety - Doubt about the benefits from dietary supplements or concerns about negative effects were frequently reported reasons for non-use (23%). Past experience - from using DS influenced patients to stop using them (19%). Non-use of dietary supplements was due to trust in effectiveness of conventional medicine (32%). c) Healthcare consultation - Non-use of dietary supplements was due to trust in a doctor (32%); Doctor's recommendation to avoid using dietary supplements was the main influence for non-users (19%) and for those who had stopped using dietary supplements (23%).	a) Health benefits b) Safety c) Healthcare consultation
Canada		
French 2008 (French et al., 2008)	a) Lack of knowledge - Unsure which supplements are best 53.8% b) Safety - 30% c) Ease of using nutraceuticals - Too much time required to prepare calcium foods (12%); Take too many pills (8%) d) Cost - 10% barrier	a) Lack of knowledge b) Safety c) Ease of using nutraceuticals d) Cost
Kristiansen 2005 (Kristiansen et al., 2005)	a) Health benefits and b) Taste were the most reported reasons by women for the use of protein supplements.	a) Health benefits b) Taste
Krumbach 1999 (Krumbach et al., 1999)	Barrier: a) Influenced by religion - 35% female; 37% male b) Cost - 14% female; 30% male (Too expensive) c) Health benefits - 26% female; 37% male (Diet adequate) Facilitator: d) Influenced by family and friends, coach - 48% female; 31% male (family member or friend) / 29% female; 31% male (coach/trainer) e) Healthcare professional's consultation- 25% females; 22% male (nutritionist/dietitian)/ female 25%;	a) Influenced by religion b) Cost c) Health benefits d) Influenced by family and friends, coach

Study	Factors in Details (as quoted from studies)	Factors
	male 5% (physician/pharmacist) f) Health benefits - female (24%); male (18%)(inadequate diet)	e) Healthcare professional's consultation
Legare 2007 (Légaré et al., 2007)	The main sources of difficulty in making these decisions in using dietary supplements were: a) Lack of knowledge - Inadequate knowledge and unrealistic expectations associated with dietary supplements; Confusion arose due to conflicting opinions of others; To facilitate decision making, participants suggested the need for information about available choices b) Healthcare professional's consultation- Closed-mindedness of physicians to discussion about dietary supplements; To facilitate decision making, participants suggested the need of access to healthcare professionals conversant in DS and medical options. c) Cost- Lack of finance to support decision-making of dietary supplements use	a) Lack of knowledge b) Healthcare professional's consultation c) Cost
Lemay 2011 (Lemay et al., 2011)	Reasons for not using complementary and alternative medicine were: a) Lack of knowledge b) Health benefits - Nonusers cited satisfaction with current diabetes treatment.	a) Lack of knowledge b) Health benefits
Page 2015 (Page et al., 2015)	a) Healthcare professional's consultation- Consumers were most supportive of doctors of chiropractic selling products they perceived to be directly related to musculoskeletal care. One of the primary reasons for DS purchase included the doctor's recommendations. b) Health benefits - Consumers preferred the products had to have some demonstrated level of effectiveness. >50% perceived that DS would work. c) Ease of using nutraceuticals - Convenient to purchase was the reasons for DS purchase.	a) Healthcare professional's consultation b) Health benefits

Study	Factors in Details (as quoted from studies)	Factors
		c) Ease of using nutraceuticals
Pike 2013 (Pike et al., 2013)	a) Healthcare professional's consultation- Before I picked out which one, I talked to a pharmacist at the drugstore. b) Influenced by family and friends - (friends and family) I think it was through friends actually, and a relative too who had been taking it [cod-liver oil] for years ...so I thought I would try it. ; As a child myself, my mother gave us the same thing—multivitamins, cod-liver oil, halibut-liver oil tablets—that's what I give my children.	a) Healthcare professional's consultation b) Influenced by family and friends
Vella 2014 (Vella et al., 2014)	a) Improved knowledge- The most commonly reported factor that would promote functional food consumption (85.5%)	a) Improved knowledge
Middle-eastern countries		
Bilici 2012 (Turkey) (Bilici et al., 2012)	a) Health benefits - Almost all of the participants stated that they consume kefir because of positive health effects (95.2%) b) Lack of knowledge - while the most reason for not consuming kefir was lack of knowledge (71.0%).	a) Health benefits b) Lack of knowledge
Ibrahim 2016 (Iraq) (Ibrahim et al., 2016)	a) Influenced by religion, b) Cost c) Safety - Natural products are not manufactured by the human; it is found in the nature by Allah for our benefit since the beginning of life. They are like our food, they are also cheap and not like manufactured drugs which are very expensive and may result in harm to the patients	a) Influenced by religion b) Cost c) Safety

Study	Factors in Details (as quoted from studies)	Factors
Ibrahim 2014 (Saudi Arabia) (Ibrahim et al., 2014)	a) Influenced by religion - The majority of patients (91%) used the remedies for religious nature.	a) Influenced by religion
Samuels 2012 (Israel) (Samuels et al., 2012)	a) Healthcare professional's consultation- The most common factor influencing NVNM supplement use was a physician's recommendation.	a) Healthcare professional's consultation
Australia/New Zealand		
Barnes 2016 (Australia) (Barnes et al., 2016)	a) Influenced by family and friends - Because I was told to 37.7%	a) Influenced by family and friends
Downie 2015 (Australia) (Downie et al., 2015)	<p>Barrier:</p> <p>a) Health benefits - Current vitamin intake from dietary sources sufficient (%) 84.0; Lack of evidence to support nutritional supplements (%) 62.8</p> <p>b) Safety - Preference for dietary sources as it is "natural" (%) 75.2</p> <p>c) Cost - Cost of vitamins/supplements (%) 45.5</p> <p>Facilitator:</p> <p>a) Health benefits- The two most important factors that were identified by respondents to underlie both their initial and ongoing decisions to take these products were scientific evidence for their therapeutic benefit and a perceived insufficient intake from dietary sources; a medically established deficiency (80.2%) and scientific evidence for therapeutic benefit; The decision to continue taking the product was primarily due to a perceived lessening of the respondents' own symptoms</p>	<p>a) Health benefits</p> <p>b) Safety</p> <p>c) Cost</p> <p>d) Ease of using nutraceuticals</p>

Study	Factors in Details (as quoted from studies)	Factors
	b) Ease of using nutraceuticals - 25% identified that supplements were a more convenient form of consumption than dietary sources	
Holt 2010 (New Zealand) (Holt et al., 2010)	<p>a) Cost - 43% of respondents not taking DS because of cost; 62% were concerned that money may be waster if DS were not effective.; 44% felt that price was somewhat important and 19% felt that was extremely important.</p> <p>b) Health benefits - 30% of respondents did not take because they thought DS did not help. 64% agreed strongly if there is good evidence of clinical efficacy, they would take DS; 56% felt that clinical evidence was extremely important.</p> <p>c) Lack of knowledge - 54% did not take because they were not sure what to take; 49% agreed or strongly agreed that they lack of knowledge on which DS to take; 65% agreed or strongly agreed that they were confused by varieties of DS; 61% were concerned that lack of information lead to not taking DS.</p> <p>d) Health benefits - 0.07% reported they did not take because they already had a balanced diet.</p> <p>e) Manufacturer country/Preference - 59% agreed strongly that this was important</p> <p>f) Healthcare professional's consultation- 56% felt advice from doctor was extremely important.</p>	<p>a) Cost</p> <p>b) Health benefits</p> <p>c) Lack of knowledge</p> <p>d) Health benefits</p> <p>e) Manufacturer country/Preference</p> <p>f) Healthcare professional's consultation</p>
Klafke 2014 (Australia) (Klafke et al., 2012)	<p>a) Influenced by family and friends - My father-in-law had lung cancer and... he was taking it, and he and his wife were very pleased with the results and they were convinced that it had a positive effect, so they basically encouraged me to take it...</p> <p>b) Healthcare professional's consultation- I spoke to my doctor about it and he said that it couldn't do me any harm...</p> <p>c) Safety & d) Health benefits - I just think it just gives you peace of mind, that they' re certainly not doing you any harm, and if they' re doing minimal benefit, well that' s good; so it' s really just a matter of trying to keep it under control for as long as possible</p>	<p>a) Influenced by family and friends</p> <p>b) Healthcare professional's consultation</p> <p>c) Safety</p> <p>d) Health benefits</p>
O'Dea 2000 (Australia) (O'Dea and	<p>a) Health benefits - poor diet; do something positive for self</p> <p>b) Influenced by family and friends - Don't know – Mum/brother/parents gives it/ coaches' preference</p> <p>c) Taste</p> <p>d) Other product features- Attractive packaging</p>	<p>a) Health benefits</p> <p>b) Influenced by family and friends, coach</p>

Study	Factors in Details (as quoted from studies)	Factors
Rawstorne, 2000)		c) Taste d) Other product features
Patch 2005 (Australia) (Patch et al., 2005)	<p>a) Health benefits - Think it's effective</p> <p>b) Influenced by family and friends - affected by family and friends & c) Healthcare professional's advice- If a doctor or medical person said that it would improve my health, I'd have a serious look at it. Sceptical towards advertisement</p> <p>d) Ease of purchasing nutraceuticals - (Place) I do most of my shopping at Woolies or Coles, and if it's not there, I'm not going to buy it, am I? (Knowledge) I honestly don't have time to get there and read labels and decipher all this stuff as you say and every time you buy a product</p> <p>e) Taste - No! [I would not eat these products] because of my fish hate; I'd be turned off [laughter]. Supposing Group 1, F I didn't have that fish taste, maybe, yes, I'd buy it</p> <p>f) Lack of knowledge - I'd like to know the difference. If I was going to start taking some omega-3 tablets... I want to know what my benefits are going to be. If I don't feel any different next week, how long will it take?</p> <p>g) Cost - expensive</p>	<p>a) Health benefits</p> <p>b) Influenced by family and friends</p> <p>c) Healthcare professional's consultation</p> <p>d) Ease of purchasing</p> <p>e) Taste</p> <p>f) Lack of knowledge</p> <p>g) Cost</p>
Schultz 2011 (New Zealand) (Schultz et al., 2011)	a) Healthcare professional's consultation- 80.5% of non-users said they would consider taking a probiotic if it was recommended by the GP.	a) Healthcare professional's consultation
Sinha 2005 (Australia) (Sinha and Efron, 2005)	<p>a) Influenced by mass media b) Influenced by family/friends c) Health benefits - (Mass media) Advertisements (e.g. magazines, television) (14.3%); Culture (14.3%); You or other family members have used therapies with success (32.5%); Hope for a cure (66.7%); Wanted more control over treatment (50%); Additional benefit to doctor's treatment (69.7%); Benefit in place of doctor's treatment (30.0%)</p> <p>d) Safety - Wanted a 'natural' therapy (63.4%); Avoid side-effects of prescribed medications (67.4%)</p>	<p>a) Influenced by mass media</p> <p>b) Influenced by family/friends</p> <p>c) Health benefits</p>

Study	Factors in Details (as quoted from studies)	Factors
		d) Safety
African countries		
Steele 2005 (South Africa) (Steele and Senekal, 2005)	Barriers: a) Health benefits - Not necessary (26%); Adequate diet (13%); I am healthy (7%) b) Ease of using nutraceuticals - Effort (10%) c) Cost (7%) Facilitators: d) Health benefits - Most popular reasons included physical health, 'inadequate diet', 'ensure adequate intake', 'food low in nutrients'	a) Health benefits b) Ease of using nutraceuticals c) Cost