

**Response to Proposal P293
Draft Standard 1.2.7 Nutrition, health and related claims
Feb 2012 Consultation Paper**

Prepared by Australian Nut Industry Council and Nuts for Life

Submitted to FSANZ 20th March 2012 (amended 18th April 2012)

This submission was authorised by Mr Richard Sampson Genest Chair Australian Nut Industry Council (ANIC) and Mr Christopher Joyce, Director ANIC and Chair Nuts for Life.

The Australian Nut Industry Council (ANIC) represents the Australian nut growing industries (almonds, chestnuts, hazelnuts, macadamias, pecans, pistachios and walnuts) and supports the activities of the Nuts for Life health education campaign.

Nuts for Life is a collective nutrition communications/ education initiative by the Australian Tree Nut Industry (Australian tree nut growers as well as processors, packers and importers of all tree nuts) to provide generic, useful, credible and up-to-date information about the nutrition and health benefits of eating nuts. It is funded through voluntary contributions from the Australian Tree Nut Industry as well as government matched funds for R&D activities through Horticulture Australia and has been in operation since 2003.

Nuts for Life is interested in health-related research and communication for all of the globally-traded and consumed tree nut varieties in Australia namely: almonds, Brazil nuts, cashews, chestnuts, hazelnuts, macadamias, pecans, pine nuts, pistachios and walnuts.

The Australian Nut Industry Council and Nuts for Life would like to raise the following issues in relation to P293 Draft Standard 1.2.7 Nutrition, Health and Related Claims March 2012 consultation paper.

Question 1

Does the revised drafting accurately capture the regulatory intent as provided in Attachment B? Please consider the clarity of drafting, any enforceability issues and the level of “user friendliness”.

For some time ANIC and Nuts for Life have raised with FSANZ, through our submissions, the fact that nuts and seeds have been removed from the food group definition in Clause 2 Interpretation. We have not been able to find an explanation for this decision in the consultation paper or accompanying document Attachment B Explanatory Information.

While we have provided the background and impact of this below ANIC and Nuts for Life would like to request that if this is outside the scope of the current consultation paper we would like resolution on the issue and request a meeting to discuss this further. Otherwise we request that nuts are returned to the “meat, fish, eggs and dried legumes” food group definition in Clause 2.

Background

In 2007 Preliminary Final Assessment report nuts and seeds appeared under the “meat, seafood, eggs, nuts, seeds and legumes” food group definition. But in the 2009 First Review Consultation papers nuts and seeds were removed from this food group and not located in any other food group. No other primary foods appear to have been removed from the food group definitions.

In Sept 2009 Nuts for Life was contacted by Jane Allen the then Manager Labelling Standards FSANZ to discuss where nuts should fit in the food groups. Jane requested we review a working paper (Appendix 1) she provided and provide some examples of comparative claims we may like to make. A submission was provided but no further correspondence was received.

After reviewing the associated documents, attachments and submissions to P293 from 2005-2011 on the FSANZ website, the only explanation for nuts removal that we could find was this paragraph over page noted in the FSANZ working paper on food groups (Appendix 1) and the associated comments made by some submitters as noted in Appendix 2.

“At P293 PFAR [Preliminary Final Assessment Report] nuts and seeds were included as part of food group (d), which also included meat, fish, eggs and legumes. Post P293 FAR [Final assessment Report] they were removed. **This was in response to some concern from submitters that comparisons between meat and nuts could be inappropriate (e.g. disadvantaging plant foods if comparing protein content).**” (Appendix 1)

After reviewing the Submission summaries for the Preliminary Final Assessment and the First Review report (<http://www.foodstandards.gov.au/foodstandards/proposals/proposalp293nutritionhealthandrelatedclaims/>) it appears some submitters (Appendix 2) were concerned about the inconsistencies in the food group definitions not only for nuts but also for fruits, vegetables, wholegrains, seeds and legumes. For example if wholegrains are also seeds could wholegrains make comparison claims with seeds i.e. across foods groups?

If plant foods are disadvantaged by comparing the protein content with meat why have only nuts and seeds been removed from the foods group and not legumes?

Peanuts are a legume and are able to make such comparative claims with animal protein foods, giving peanuts a marketing advantage over all the other tree nuts. Margarine spreads and edible oils made from nut oils would also be able to make comparative claims as they would be classified in the fat food group. Only whole tree nuts and seeds are disadvantaged by not being listed in any food group.

Implications of foods groups

The implications of not being defined under “food group” means not defined under “reference food” and so cannot make comparative claims under Clause 15 of draft Standard 1.2.7.

food group means any of the following groups –

- (a) bread (both leavened or unleavened), grains, rice, pasta and noodles;
- (b) fruit, vegetables, herbs, spices and fungi;
- (c) milk and milk products as standardised in Part 2.5 and analogues derived from legumes and cereals mentioned in Column 1 of the Table to clause 3 in Standard 1.3.2;
- (d) meat, fish, eggs and dried legumes;
- (e) fats including butter, edible oils and edible oil spreads.

reference food means a food that is –

- (a) of the same type as the food for which a claim is made and that has not been further processed, formulated, reformulated or modified to increase or decrease the energy value or the amount of the nutrient for which the claim is made; or
- (b) a dietary substitute for the food in the same food group as the food for which a claim is made.

15 Comparative claims

(1) In this clause, a comparative claim means a nutrition content claim that directly or indirectly compares the nutrition content of one food or brand of food with another, and includes claims using the following descriptors –

- (a) light or lite;
- (b) increased;
- (c) reduced;

or words of similar import.

(2) A nutrition content claim using the descriptor 'diet' is a comparative claim if it meets the conditions for making that claim by having at least 40% less energy than the same quantity of reference food.

(3) A comparative claim about a food (the claimed food) must include together with the claim –
(a) the identity of the reference food; and
(b) the difference between the amount of the property of food in the claimed food and the reference food.

Comparative claims

To make a comparative claim (whether highlighting nutritional differences or similarities) we understand requires both foods being compared to meet the nutrient content criteria for the nutrient in question. For instance if the protein content of meat and nuts were being compared, then both meat and nuts would need to contain at least 5g protein per serve. With the exception of chestnuts* a 35-55g serve of nuts of different varieties would contain 5g of protein which is similar to the protein content of a small short loin lamb chop or a small egg (45-55g). (Foodworks software)

(*Chestnuts are in fact more like a grain than a nut – they are lower in protein and fat, and contain low GI carbohydrates compared to all the other nuts which are higher in protein and fat. While all other nuts do not have a GI value, due to their low level of carbohydrate, they do cause a low GI effect by reducing postprandial glucose when eaten with carbohydrate foods).

While the range of amino acids will vary in protein foods and plant protein foods tend to have more limiting amino acids research has found that nuts such as pistachio and cashew have the highest limiting amino acids scores of nuts (92-100) similar to some legume varieties (100). The LAAS score for all nuts is in the range 47-100.(1)

The protein content of plant foods is relevant to vegetarians and omnivores who want to reduce their animal protein intake for health or environmental reasons. Research notes that adequate amino acids and hence protein can be obtained provided a variety of plant protein foods or animal and plant foods are consumed each day. There is no need to combine protein foods provided adequate variety of protein foods is achieved each day.(1,2)

There are numerous health benefits for plant protein foods and particularly nuts:

- Reduction in risk of early total mortality – substituting one serve of red meat with one serve of nuts reduced total mortality by 19% and stroke by 17%.(3,4)
- Reduced risk of developing heart disease - diets low in red meat, containing nuts, low-fat dairy, poultry or fish, were associated with a 13% to 30% lower risk of CHD compared with diets high in meat.(5) Although there are five other epidemiology studies which show that eating 30g of nuts at least five times a week reduces the risk of developing heart disease by 30-50%.
- Greater reduction in lowering blood cholesterol.(6)
- Reduced risk of diabetes -substituting of one serving of nuts, low-fat dairy, and whole grains per day for one serving of red meat per day were associated with a 16-35% lower risk of Type 2 Diabetes.(7,8)

Therefore if legumes are to remain in the “meat, fish, eggs and dried legumes” food group definition on the grounds that they provide adequate protein in comparison to animal protein foods then nuts should also be returned to this group.

NOTE: The comparative claims developed by FSANZ in the Food group working paper (Appendix 1) used a serving size of just 10 nuts to compare with a 170g serve of meat. ANIC and Nuts for Life does not agree and feels these comparative claims between meat and nuts are not a fair comparison due to serving size. According to the draft Australian Guide to Healthy Eating Dec 2011 a serve of red meat is 65g and a serve of nuts 30g.

Regulations of comparative claims in other countries

In other countries comparison claims are regulated differently as summarised here:

Canada

Nuts are included in the "protein" food group along with meat and legumes.

http://www.inspection.gc.ca/english/fssa/labeti/guide/ch7e.shtml#a7_9

7.9 Comparative Claims

Comparative claims are those that compare the nutritional properties of two or more foods. Examples of comparative claims include:

"3 grams more fibre than 1 slice of Brand X bread"

"33% less sodium than our regular potato chips"

7.9.1 Conditions for Use of Comparative Claims

Only those comparative claims listed in the table following B.01.513 (and in the series of *Summary Tables* in this chapter of the Guide) may be used on food labels or in advertising. The tables (both in the *Food and Drug Regulations* and in this Guide) set out both the food conditions which must be met when making comparative claims (see column 2) and the labelling and advertising conditions (see column 3). In general, comparative claims must:

- involve similar foods, or foods of the same food group depending on the type of claim;
- clearly identify the foods being compared and the differences between them; and
- be based on differences which are both nutritionally and analytically significant.

7.9.2 Definitions

....."Food group" means one of the four following categories of foods:

- milk products and milk product alternatives such as fortified plant-based beverages;
- meat, poultry and fish, and alternatives such as legumes, eggs, tofu and peanut butter;
- bread and grain products; and
- vegetables and fruit.

These groups are similar to the four food groups presented in *Canada's Food Guide to Healthy Eating*.

"Reference food of the same food group" means a food which can be substituted in the diet for the food to which it is compared, and which belongs:

- to the same food group as the food to which it is compared (e.g., cheese as a reference food for milk, or chicken as a reference food for tofu);
- to the category of other foods, if the food to which it is compared also belongs to that category (e.g., pretzels as a reference food for potato chips); or
- to the category of combination foods, if the food to which it is compared also belongs to that category (e.g., pizza as a reference food for lasagna).

United States of America

Foods are not categorised into food groups but rather comparison claims can be made between foods that are interchangeable in the diet.

<http://www.fda.gov/downloads/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabelingNutrition/FoodLabelingGuide/UCM265446.pdf> page 75

N28. What is meant by "product category" when the regulation say that for "less," "fewer" and "more" claims, the reference food may be a dissimilar food within a product category that can generally be substituted for one another in the diet. Are these product category the same as the 139 product categories used to describe the RACCs for serving sizes?

Answer: These are not the same as the product categories established for serving sizes. The agency intentionally did not define "product category" in the final rule in order to allow for the use of a flexible standard. It intended that comparisons be made for foods that are interchangeable in the diet.

European Union

Food groups or categories are not defined but are thought to the foods belonging to a group of foods that are similar in terms of nutritional content.

http://www.fsai.ie/uploadedFiles/EU_guidance_ClaimsRegulation.pdf Page 7

II.1. Provisions of the Regulation

Comparative claims are governed by Article 9 of the Regulation.

1. Without prejudice to Directive 84/450/EEC, a comparison may only be made between foods of the same category, taking into consideration a range of foods of that category.

The difference in the quantity of a nutrient and/or the energy value shall be stated and the comparison shall relate to the same quantity of food.

II.2.1. Food category

Article 9, paragraph 1, limits the use of comparative claims between foods of the same category, in order to avoid that the comparison is established between foods having different nutritional content (e. g. between milk and butter). However, the Regulation does not provide a definition of food categories.

Products being compared should therefore be foods belonging to a group of foods that are similar in terms of nutritional content.

Consistency across Australian public health documents

In addition keeping nuts and seeds along with legumes in the “protein” food group would also be consistent with the draft Australian Dietary Guidelines and draft Australian Guide to Healthy Eating released in Dec 2011.

ANIC and Nuts for Life would like to request that if this is outside the scope of the current consultation paper we would like resolution on the issue and request a meeting to discuss this further. Otherwise we request that nuts are returned to the “meat, fish, eggs and dried legumes” food group definition in Clause 2.

In relation to the consultation paper:

Part 1 - Revised drafting

Draft Standard 1.2.7 is now more comprehensive than previous versions – making it easier to navigate. We would like to make the following suggestions however.

Page 18 Clause 1 heading

The heading and first line of Clause 1 “Purpose...This standard” should be moved to the top of page 19 for easier reading and layout.

Page 24 Clause 15 Comparative claims could be clarified

“A comparative claim means a nutrient content claim....” – the definition of “nutrient content claim” on page 20 includes vitamins and minerals. However Clause 8 page 22 specifically states that comparative claims comparing the vitamin and mineral content cannot be made. Clause 15 could be amended to state:

“A comparative claim means a nutrient content claim (excluding nutrient content claims for vitamins and minerals)....”.

Alternatively moving Clause 8 closer to Clause 15 in the document may help comprehension as one clause would flow to the other.

Page 32 Schedule 1 Protein claims – column 4 – spelling error

We note that for increased protein claims, part b) in column 4 has a spelling error for “for” third last line.

Part 2 - Fat Free and % Fat Free claims

While fat free and %fat free claims are not relevant to nuts given nuts contain fat, ANIC and Nuts for Life are concerned by the negative emphasis on the nutrient “fat” by these claims. Fat free and % fat free claims imply there is a health risk associated with consuming any fat and that a little fat as possible is desirable.

Chan and colleagues in 2005 (9) found that a small study of 33 Australian consumers were sceptical of fat claims yet still relied on them to make purchasing decisions. Fat free claims were considered by this group to be misleading since the NIP indicated the presence of some fat. Others felt low fat claims gave them license to eat more of the product. The authors stated:

“Of the fat claim formats, participants preferred ‘X% Fat Free’ because its accuracy could be checked easily against the NIP. Claims of ‘X% less fat’ were least understood and many participants were unsure about what the relevant reference products were. Participants preferred fat claims to be carried only on foods that they would normally expect to be high in fat, such as cheese, mayonnaise, milk and ice cream.”

Generally however “fat” was seen as a negative nutrient by these study participants.

A New Zealand study in 2010 (10) found that “up to 75% of Māori, Pacific, and Asian shoppers assumed that if a food carried a '97% fat free' claim it was therefore a healthy food. Similarly, low-income shoppers were significantly more likely than medium- or high-income shoppers to assume that the presence of a claim meant a food was definitely healthy.”

If %fat free claims confuse consumers and they are used as a measure of the overall healthiness of a food (without considering the level of negative nutrients and ingredients: added sweeteners, refined starches and sodium/salt), ANIC and Nuts for Life believe the option of removing “fat free” and “% fat free” claims from Standard 1.2.7 should also be considered. This is similar to the removal of “cholesterol free” claims from the standard due to the risk of misleading consumers. Fat free and %fat free claims also have that same inherent risk.

When **unsaturated** fats are required for cholesterol lowering and heart health, the promotion of *replacing* saturated fat with **unsaturated** fat instead of limiting all fat is preferred. In order to overcome the “fat” phobia and re-educate consumers that not all fats are unhealthy low in saturated fat claims are necessary.

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Appendix 1

PROPOSAL P293 – NUTRITION, HEALTH AND RELATED CLAIMS

Nuts included in food groups definitions – where do they fit?

The purpose of the definition of ‘food group’ is to limit the scope for comparisons about dietary substitutes in order to prevent inappropriate comparisons between foods from a dietary perspective, for example, milk and fruit juice. At P293 PFAR nuts and seeds were included as part of food group (d), which also included meat, fish, eggs and legumes. Post P293 FAR they were removed. This was in response to some concern from submitters that comparisons between meat and nuts could be inappropriate (e.g. disadvantaging plant foods if comparing protein content).

Arguably nuts could also be considered in the fruit and vegetable group but at no stage has this been seen as appropriate for purposes of dietary comparisons.

The nutrient profile of nuts vs meat

Nuts, seeds and meats have very different nutrient profiles. Meat provides valuable sources of protein (containing all amino acids), iron and zinc as well as some other vitamins and minerals such as vit B12, selenium, phosphorus, niacin, vit B6 and riboflavin. Nuts are good sources of fibre, monounsaturated and polyunsaturated fatty acids and also, in the case of walnuts are also high in omega-3 fatty acids. Nuts are also good sources of vits and mins (e.g. vit E, folic acid, copper and magnesium) and they are low in saturated fat. Both foods have low GI.

Conditions for comparative claims

Reference: draft Standard 1.2.7 – Nutrition, Health and Related Claims, March 2009 Consultation Paper for First Review.

Draft Std 1.2.7 clause 24 (subclauses 1 and 2) defines a comparative claim. Subclause 24(3) outlines the wording conditions for comparative claims. Schedule 1 to the draft Standard includes specific conditions for making comparative claims about specific nutrients. These conditions refer to the term ‘reference food’ which is defined in clause 1. The definition of ‘reference food’ refers to the term ‘food group’ which is also defined in clause 1.

Comparative claims that could be made if nuts and meats were in the same category

Comparative claims can not be made for vitamins and minerals (ref Std 1.2.7 cl 14). They can be made for macronutrients, sodium and energy, and for protein and fibre, are restricted by the fact that the reference food must meet the minimum requirement for a claim about protein/fibre (ref Schedule 1).

The tables below compare nuts and seeds with meats. They are based on an examination of the following foods and their serving sizes (note that results may differ if different serving sizes are used):

Nuts -brazil nuts, peanuts, walnuts and almonds. A serving size of 10 nuts has been used.

Meat - Rump steak, lean & fat, trimmed and grilled. One serving = one steak (172g)

Mince, lean & fat (6%), fried. One serving = 1 c (170g).

Claims that compare nuts with meat

Claim	Criteria	Can a claim be made?
Nuts are higher in fibre than meat	Meat must contain ≥ 2 g of dietary fibre per serving; Nuts must contain $\geq 25\%$ fibre compared to the same quantity of meat	No. Meat, fish or chicken do not meet the reference minimum.
Walnuts are higher in omega-3 fatty acids than meat	Walnuts and meat must contain ≥ 200 mg ALA per serving or ≥ 30 mg total EPA and DHA per serving; AND both must contain ≤ 5 g per 100 g	Not sure. Probably yes. Walnuts have 6.28 g per 100 g C18:3 (undifferentiated), no EPA or DHA and 4.4 g per 100 g SFA, so is likely to pass the minimum requirement. Lean meats have more than 30 mg EPA +

	of SFA + TFA or as a proportion of the total fatty acids content, \leq 28% SFA + TFA; AND Walnuts must contain 25% or more omega-3 fatty acids than the same quantity of meat	DHA per serving and can contain \leq 5 g per 100 g of SFA + TFA, so can pass the minimum requirement. Walnut is likely to have more omega-3 fatty acids than lean meats due to the high ALA content. (NB low fat, dry fried beef mince has 187 mg/serve ALA + 350mg/serve EPA + DHA = 537 mg /serve).
Nuts are lower in SFA + TFA than meat	Nuts must contain \leq 25% SFA + TFA than the same amount of meat; SFA + TFA in nuts are reduced relative to the same amount of meat	Yes, certain nuts could be compared with certain types of meat. SFA + TFA content varies widely within the meat category, as it does within the nut group. Some claims could be possible.
Nuts are lower in SFA than meat	Nuts contains \leq 25% SFA than the same amount of meat; AND Contain no more TFA than the same amount of meat	Yes, same as above.
Nuts are higher in PUFA than meat	Nuts and meat must contain, as a proportion of the total fatty acid content \leq 28% SFA + TFA; and \geq 40% PUFA; AND Nuts must contain \geq 25% PUFA compared to the same amount of meat.	No. Meat does not meet the minimum requirement for PUFA.
Nuts are higher in MUFA than meat	Nuts and meat must contain, as a proportion of the total fatty acid content \leq 28% SFA + TFA; and \geq 40% MUFA; AND Meat must contain \geq 25% MUFA compared to the same amount of nuts.	No. Meat does not meet the minimum requirement for MUFA.

Claims that compare meat

Claim	Criteria	Can a claim be made?
Meat is higher in protein than nuts	Nuts and meat must contain \geq 5 g of protein per serving; Meat must contain \geq 25% more protein than the same quantity of nuts	Not if a serving of almonds, brazil nuts and peanuts is 10 nuts, as they do not meet the reference minimum. Walnuts may pass the minimum, although data between NUTTAB and NZ Food Comp tables vary widely. Yes , a claim could be made if meat is compared to the following amounts of nuts: 41.3 g brazil nuts (11 brazil nuts), 24 g of almonds (20 almonds), 19.2 g walnuts (4 walnuts? Data is unreliable).
Meat is lower in SFA + TFA than nuts	Meat must contain \leq 25% SFA + TFA than the same amount of nuts; AND SFA + TFA in nuts are reduced relative to the same amount of meat	No. Meat is not reduced in TFA compared to nuts.
Meat is lower in SFA than nuts	Meat contains \leq 25% SFA than the same amount of meat; AND Contain no more TFA than the same amount of nuts	No. Meat is higher in TFA than nuts.

Working paper
Food Standards Australia New Zealand
July 2009

Appendix 2

Date and Document	Statement	Response
April 2007 PRELIMINARY FINAL ASSESSMENT REPORT PROPOSAL P293 NUTRITION, HEALTH AND RELATED CLAIMS	<p>Page 153:</p> <p>food group means, in this Standard, any of the following groups –</p> <p>(a) bread (both leavened or unleavened) and other cereal products; or</p> <p>(b) fruit, vegetables, herbs, spices and fungi (fresh, cooked, frozen, preserved, pickled, pureed, or dried; or</p> <p>(c) milk, milk products and milk alternatives; or</p> <p>(d) meat, seafood, eggs, nuts, seeds and legumes; or</p> <p>(e) fats and oils.</p>	<p>Reviewing Attachment 13 - Submission Summary – Preliminary Final Assessment Report</p> <p>Page 81 – Response from The Dietitians Association of Australia questioned the definition of a “reference food” noting that “there are inconsistencies in food groupings throughout the Food Standard which may make the selection of an appropriate reference food difficult”</p> <p>Specifically for nuts: “In the nutrient profiling method, fruit and vegetable points are awarded for content of fruits, vegetables, nuts, coconut, spices, herbs, fungi, seeds and legumes. In this instance, the similar nutritional profile/benefits of nuts, legumes and seeds have been recognized, yet the food group definitions combine nuts, seeds and legumes with meat, seafood and eggs.”</p> <p>Page 82 National Heart Foundation of Australia Raises the issue in relation to meat and meat alternative groups which encompasses protein rich foods from animal and plants. States this may be disadvantageous to plant – based foods with respect to comparative statements as their protein is often lower than animal-based foods. Recommends that the food group for meat and meat alternatives be re-examined.</p> <p>Page 85 response from Department of Health and Human Services - Tasmania “Notes that the food groupings in the Standard may make the selection of an appropriate reference food difficult (refer to proposed definition of ‘food groups’). The determination of appropriate dietary substitutes is still very subjective. Comparison</p>

		<p>particularly within the (d) meat, seafood, eggs, nuts, seeds and legumes group could support inappropriate comparisons. Believes that more guidance is required in this area.”</p> <p>Page 176 response from DAA “Comments: ‘technically peanuts are a legume, and the DAA wishes for clarification is it the intention of FSANZ that peanuts/ nuts are included in the vegetable definition or alternatively should legumes have their own definition. This is particularly important and relevant with use of the high level health claim for fruits and vegetables and heart disease.”</p> <p>Page 176 response from Food Technology Association of Victoria Inc “States that the definitions for fruits and vegetables are presented separately and are not consistent with the definition in Standard 2.3.1. States that 2.3.1 includes nuts, seeds and legumes whereas the Draft Standard includes these within the food group with meat, seafood, eggs. Believes this approach is inconsistent, confusing and needs revision.”</p>
<p>20 March 2009 [4-09] PROPOSAL P293 NUTRITION, HEALTH & RELATED CLAIMS CONSULTATION PAPER FOR FIRST REVIEW</p>	<p>The 27th page of the total document or page 2 of Attachment 1 Draft variations to the <i>Australia New Zealand Food Standards Code</i> food group means any of the following groups – (a) bread (both leavened or unleavened), grains, rice, pasta and noodles; or (b) fruit, vegetables, herbs, spices and fungi; or (c) milk and milk products as standardised in Part 2.5 and analogues derived from legumes and cereals mentioned in column 1 of the Table to clause 3 in Standard 1.3.2; or (d) meat, fish, eggs and legumes; or (e) fats including butter, edible oils and edible oil spreads.</p>	<p>Part 2 of Attachment 5 for discussion on the development of the definition. Page 39 Section 11. Comparative claims – definition of reference food provides no rationale for the removal of nuts from the “meat, seafood, eggs, nuts, seeds and legumes” food group as noted above. Nor does it explain where nuts should be placed.</p>

<p>In September 2009 FSANZ contacted Nuts for Life to further discuss one aspect of the Final Review – Clause 1 Definition of food groups. FSANZ requested that ANIC/ Nuts for Life consider where we would like nuts to fit in the definition of food groups. A working paper was provided by Jane Allen Manager Labelling FSANZ which outlined FSANZ' current thinking.</p> <p>“At P293 PFAR nuts and seeds were included as part of food group (d), which also included meat, fish, eggs and legumes. Post P293 FAR they were removed. This was in response to some concern from submitters that comparisons between meat and nuts could be inappropriate (e.g. disadvantaging plant foods if comparing protein content).”</p>	<p>ANIC and Nuts for Life responded by providing a range of comparative claims we could make</p>	<p>No further response from FSANZ on the issue</p>

Appendix 3 Amino acid content of protein foods per 100g

Amino acid (mg)	Almond raw with skin	Brazil nut Raw*	Cashew roasted	Chestnut roasted	Hazelnut raw	Macadamia raw	Peanut with skin raw	Pecan raw	Pine nut raw	Pistachio raw	Walnut raw	Mixed nut raw average	Kidney bean canned drained	Lamb, leg roast trimmed	Beef topside roast trimmed	Chicken BBQ with skim	Egg whole hard boiled	Milk reduced fat	Shark/flake steamed
TOTAL Protein content	19.5	14.4	17.0	3.4	14.8	9.2	24.7	9.8	13.0	19.7	14.4	13.4	6.6	29.7	32.1	27.5	13.0	4.0	30.3
Alanine Non-essential	976	577	758	212	730	388	1119	n/a	n/a	n/a	680	680	285	1210	1966	1734	750	139	1411
Arginine Non-essential	2254	2148	2006	227	2211	1402	3198	n/a	n/a	n/a	2312	1979	400	1344	2135	1835	843	148	1402
Aspartic Acid Non-essential	2190	1346	1843	549	1679	1099	3311	n/a	n/a	n/a	1523	1693	767	1912	3100	2834	1328	314	2186
Cystine + Cysteine Non-essential	324	367	404	101	277	6	394	n/a	n/a	n/a	263	267	61	238	400	326	344	35	272
Glutamic Acid Non-essential	5779	3147	3932	410	3710	2267	5268	n/a	n/a	n/a	3043	3445	948	3073	4964	4242	1688	839	3191
Glycine Non-essential	1414	718	806	164	724	454	1590	n/a	n/a	n/a	770	830	267	1018	1612	1373	441	82	1193
Histidine Essential	539	386	427	88	432	195	652	n/a	n/a	n/a	428	393	208	630	1186	942	352	122	587
Isoleucine Essential	886	516	742	125	545	314	924	n/a	n/a	n/a	669	590	357	933	1566	1470	815	233	1348
Leucine Essential	1508	1155	1326	188	1063	602	1735	n/a	n/a	n/a	1141	1090	579	1628	2690	2314	1178	394	1833
Lysine Essential	675	492	918	188	420	18	1019	n/a	n/a	n/a	450	523	446	1882	2936	2662	953	333	2086
Methionine Essential	211	1008	308	75	221	23	322	n/a	n/a	n/a	252	303	70	480	801	678	442	97	660
Phenylalanine Essential	1157	630	838	134	663	665	1441	n/a	n/a	n/a	707	779	405	812	1299	1148	716	199	955
Proline Non-essential	844	657	703	167	561	468	1182	n/a	n/a	n/a	545	641	248	917	1417	1170	403	401	844
Serine Non-essential	988	683	1066	159	735	419	1549	n/a	n/a	n/a	889	811	441	904	1458	1272	1053	255	994
Threonine Essential	822	362	716	113	497	370	811	n/a	n/a	n/a	634	541	355	959	1560	1346	805	203	1276

Amino acid (mg)	Almond raw with skin	Brazil nut Raw*	Cashew roasted	Chestnut roasted	Hazelnut raw	Macadamia raw	Peanut with skin raw	Pecan raw	Pine nut raw	Pistachio raw	Walnut raw	Mixed nut raw average	Kidney bean canned drained	Lamb, leg roast trimmed	Beef topside roast trimmed	Chicken BBQ with skim	Egg whole hard boiled	Milk reduced fat	Shark/flake steamed
Tryptophan Essential	226	141	324	35	193	67	281	n/a	n/a	n/a	214	185	80	274	390	374	209	50	301
Tyrosine Non-essential	648	420	603	88	362	511	1078	n/a	n/a	n/a	512	528	214	750	1211	1038	540	194	795
Valine Essential	1037	756	1066	178	701	363	1191	n/a	n/a	n/a	794	761	400	1041	1725	1544	932	273	1387

Source: NUTTAB 2006 nutrient database online cited 11.02.09 (note NUTTAB 06 mixed bean entry does not include amino acid content)

* USDA Nutrient Database Release 21, 2008 (note not mixed bean entry in USDA database)

Protein content per serve

	Almond raw with skin 30g	Brazil nut Raw* 30g	Cashew Roasted 30g	Chestnut Roasted 30g	Hazelnut raw 30g	Macadamia raw 30g	Peanut with skin Raw 30g	Pecan raw 30g	Pine nut Raw 30g	Pistachio raw 30g	Walnut raw 30g	Mixed nut raw average 30g	Kidney bean canned drained 170g	Lamb, leg roast trimmed 120g	Beef topside roast trimmed 120g	Chicken BBQ with skim 120g	Egg whole hard Boiled (1 55g egg)	Milk reduced fat 250ml	Shark/flake Steamed 120g
TOTAL Protein content per 100g	19.5	14.4	17.0	3.4	14.8	9.2	24.7	9.8	13.0	19.7	14.4	13.4	6.6	29.7	32.1	27.5	13.0	4.0	30.3
TOTAL Protein content per serve	5.9	4.3	5.1	1.0	4.4	2.8	7.4	2.9	3.9	5.9	4.3	4.0	11.2	35.6	38.5	33.0	7.2	10.0	36.4
Limiting Amino Acid Score	58	65	92					65		100	47		100						