

Reaction from Product Board for Margarine, Fats and Oils, the Netherlands, on

Draft Scientific Opinion “Dietary reference values for fat”

of the EFSA Scientific Panel on Dietetic Products, Nutrition and Allergies on a request from the Commission related to dietary reference values for fats, including saturated fatty acids, polyunsaturated fatty acids, monounsaturated fatty acids, *trans* fatty acids, and cholesterol” (Request No. EFSA-Q-2008-466, March 13, 2009).

General remarks

- The Product Board for Margarine, Fats and Oils is of the opinion that the conclusions in the summary do not in all cases accurately reflect the content of the report. More precise, the nuance in the report is lacking in the summary. Therefore, it is not immediately obvious on what basis the conclusions are drawn. Since the summary is generally the part that policy makers will read, it is important that the summary reflects the scientific state of the art, including the recent developments and nuances.
- Recently, two WHO scientific updates have been published in the European Journal of Clinical Nutrition (vol. 63, supplement 2s, pp S1-S75) and Annals of Nutrition and Metabolism (vol.55, no. 1-3: pp 5-300). It seems logical to take these two updates into account in the document.

Total fat

What is the lower bound of the recommendation intake range of fat for children between 4-18 years? In line 50-55 no specific recommendation level is mentioned for children older than 4 years. In addition, in line 54 The Panel states that fat intakes below 25E% have been associated with low vitamin levels in some young children. Why then come to a lower bound of 20E% as stated in the table on line 2055 for children >4 years? It appears more prudent to recommend a total fat intake of at least 25E%.

Saturated fat

In the Summary in line 66,67 the following is written: ‘The Panel recommends that SFA intake should be as low as possible within the context of a nutritionally adequate diet’.

In the discussed scientific research in chapter 5 this recommendation is not supported. Furthermore, according to Table 5 (page 32), most countries and also the WHO/FAO do set maximum of SFA at 10 E%. In adults, average SFA intakes vary between less than 9 to nearly 17 E% and nearly 30% of the reported average intakes were 15 E% or higher (line 620-629).

In addition, in several economically developed countries where the SFA has fallen close to 10%, the capacity to decrease SFA much further is limited without major changes in dietary patterns, and is only likely to result in modest reductions in cholesterol levels. We therefore believe it is appropriate to set a goal for SFA at 10 E%.

In line 776 and in table 6 (line 2915) the dietary reference value in the Netherlands is mentioned. However, these are the values from 2001, whereas the Dutch Health Council updated its advice in 2006. Therefore we recommend to use the most recent dietary guidelines.

Trans fats

We would emphasize that The Panel states in the summary that the intake of TFA is close to the recommendation levels in most European countries TFA are not a public health issue anymore. The intake of total TFA is low because of the efforts made by the food industry in reducing the amount of industrial TFA in their products (and are still doing so).

We welcome and agree with the conclusion of the EFSA that there is insufficient evidence to establish whether there is a difference between ruminant and industrial TFA consumed in equal amounts on the risk of Cardiovascular Disease (CVD).

Additionally, The Panel states that TFA are not synthesized by the body (line 130, 1937, 2037), but this is not correct. CLA and vaccenic acid can be produced in small amounts in our body. We suggest to delete this sentence.

n-3 PUFA

Why has the Panel set the AI for α -linolenic acid on 0.5 E%, whereas again a higher intake is connected with the prevention of CVD. Cardiovascular Disease (CVD) is indisputably a major public health issue in Europe as it is the leading cause of mortality: 4.3 million deaths per year that make up 48% of all deaths in Europe (CVD statistics 2008). The WHO has set in her recent scientific update the AI of 0.5 E% of α -linolenic acid to prevent deficiency and between 0,5-2 E% (n-3 fatty acids including 0,1-0,9 E% n-3 LC PUFA) as part of a healthy heart diet probably preventing chronic diseases. A DRV for ALA of 1 E% would also be in line with the 2 g/day as ALA that EFSA recently recommended to the Commission as labelling reference intake values (Question No EFSA-Q-2009-00548, adopted on 30 June 2009). Two g ALA per day in a 2000 kcal/d diet corresponds to ~0.9E%. The Dutch Health Council have set the AI for α -linolenic acid on 1 E%. We suggest to set the AI for α -linoleic acid on at least 1 E% for preventing cardiovascular diseases.

n-6 PUFA

Why has The Panel set the AI for linoleic acid on 4 E%, whereas recent scientific evidence suggests an even higher intake based on protective effects of linoleic acid on CHD as is reviewed by Harris et al. and published this year in *Circulation* (vol 119. no. 6, pp 902-907)? We propose to take this review also into account in the document. The reduction in cardiovascular risk by replacement of SFA by n-6 PUFA (lines 1891-1894) is also supported by a recent pooled analysis of cohort studies (Jakobsen et al, *Am J Clin Nutr* 2009;89:1425-32). In the recent scientific update of the WHO, the WHO recommends an intake of PUFA acid between 6-11 E% as part of a healthy heart diet to prevent chronic diseases. Under the condition that our suggestion's AI for α -linolenic acid on 1 E% and The Panel's AI for long chain n-3 fatty acids on 0,1 E% is taken into consideration, it can be derived that the recommendation level for n-6 PUFA should be at least 4,9 E%. We suggest to set the AI for n-6 PUFA on at least 6 E% for preventing cardiovascular diseases.

Additionally, the text in line 454 is confusing: The sentence (454) 'Strictly speaking, only linoleic acid is essential, as the body can synthesize arachidonic acid from linoleic acid.' is (partly) inconsistent with the sentence in line 461 'The conversion of linoleic acid is very limited.'. We suggest to change line 454 in: 'Although linoleic acid is essential, the synthesis of AA from linoleic acid is very limited, making an additional intake of ARA, or GLA appropriate.'

Furthermore, the text in line 463 states that delta-5 desaturase activity is decreased in elderly women. In addition to that, there is evidence that (mainly) delta-6 desaturase activity decreases with age (Angela Liou and Innis, 2009; Choi and Sugano, 1988; Hrelia et al., 1990).