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NUTRIENT PROFILES FOR DAIRY FOODS

According to the regulation no 1924/2006 on nutrition and health claims made on foods, nutrient profiles should be established for the sole purpose of deciding whether or not a product is eligible to bear a claim, so as not to mislead the consumers. Furthermore, consistent with this regulation the profiles should be based on generally accepted scientific evidence. They should take into account the content of different nutrients and substances with nutritional and/or physiological effects as well as the place and role in the overall diet of the different categories of foods. The profiles should also allow for product innovation and should take into consideration the variability of dietary habits and traditions in the European Union.

Considering the legal framework for nutrient profiles mentioned above and the latest working document presented by the Commission services from February 2009, the European Dairy Association (EDA) would like to stress the following in relation to the potential establishment of nutrient profiles for dairy foods:

Ü A balanced overall diet is the important determinant of health

It is the overall (habitual) diet that is the important determinant of health. Diets are composed of multiple foods. A "balanced" diet may be achieved through a complementation of foods with different nutrient profiles. It is therefore not necessary for individual foods to match the nutrient profile of a "balanced" diet. Furthermore, it is not possible to compose a balanced diet on the strict basis of avoiding negatively perceived nutrients. Focusing on the intake of positive nutrients is the key to a healthy, balanced diet, preferably via foods containing many essential macro and micronutrients and relatively little energy. Communication towards consumers on the nutrients present in dairy (and other basic food groups), and their health effects, should therefore remain possible.

Ü Dairy products provide us with many essential nutrients such as high quality protein, vitamins and minerals

Daily consumption of milk and milk products are recommended by dietary guidelines in all EU countries - and for a good reason. Dairy foods are naturally nutrient-rich and provide us with many essential nutrients such as high quality protein, vitamins and minerals. Dairy protein has an excellent nutritional value, a high digestibility and is rich in essential amino acids. In a Western diet, dairy products provide up to 70% of the recommended daily calcium intake and are also a very good source of many other important vitamins and minerals such as potassium, magnesium, zinc, selenium, iodine, vitamins B₂ and B₁₂. Dairy is also a good source of nutrients present in the fat fraction, such as vitamins A and D and omega 3 fatty acids. In the different EU countries, dairy contributes for at least 25% to the daily intake of up to 13 nutrients. Dairy products are, however, more than just the sum of these nutrients. The unique natural combination of nutrients and the 'interplay' between these nutrients are optimal for growth, development and maintenance of the body. For instance, the unique natural combination of calcium, high quality protein, phosphorus vitamins B₁₂ and D in dairy is an almost indispensable part of the diet to build and maintain strong bones and teeth. In addition, nutrients from dairy have an excellent bioavailability, meaning that these nutrients are taken up by our body very efficiently.

Ü Eating dairy has been associated with many beneficial health effects beyond pure nutritional value, especially in relation to the prevention of chronic diseases

Drinking milk is associated with a small but worthwhile reduction in heart disease and stroke risk¹. A recent systematic review showed a lower incidence of vascular disease and of diabetes in the subjects with the highest milk consumption -

¹ Elwood PC, Pickering JE, Hughes J, Fehily AM, Ness AR. Milk drinking, ischaemic heart disease and ischaemic stroke II. Evidence from cohort studies. Eur J Clin Nutr. 2004 May;58(5):718-24.

each by about 10-15%². Scientific evidence also suggests that calcium and dairy consumption have effects on maintenance of body weight and weight loss. People that consume more dairy are less likely to become overweight, to develop diabetes and the metabolic syndrome³. Not only in Europe, but also globally, dairy products play an important role in the daily diet. For the US population it has been estimated that adequate dairy intake (3-4 servings per day) will result in major health care savings (5 year cumulative savings in excess over 200 billion USD)⁴.

Ü Saturated fatty acids are not all the same

Milk fat in dairy consists of a large range of different fatty acids: 30% are unsaturated fatty acids and 70% are saturated fatty acids. Recent science shows that not all saturated fatty acids have negative health effects, some are neutral and some might even have beneficial effects. Only three of the saturated fatty acids in milk fat are now considered as having a negative impact on blood cholesterol, when consumed in excess.

Ü Specific categories for dairy and dairy products are needed

Dairy products represent a very heterogeneous group of foods. Separate nutrient profiles would need to be established for the different dairy food sub categories in order to take into account the diversity of dairy products, their broad variation in nutritional composition and their different usage.

Ü Nutrient profiles should allow for innovation and respect the traditions in the dairy sector

Dairy products are produced with a raw material given by nature which is difficult to modify. Traditional dairy products play a vital role in the European food culture and in the diet of the European consumer. Furthermore, many of these traditional products are governed by national, EU and/or international standards prescribing fat content, use of additives and organoleptic criteria. Nutrient profiles should take into account the specific characteristics of dairy and be set in a way that they stimulate innovation of dairy products and allow producers to communicate actively about their efforts.

Ü Potentially huge economic consequences for dairies and dairy farmers need to be taken into consideration

Nutrient profiles will determine whether or not a claim can be made on a dairy product and whether or not communication about the nutritional quality of dairy products is possible at all (in advertising, on the website, brochures, etc.). It is obvious that the choice of categories, nutrients and criteria will affect the future role of dairy in a healthy diet, which is not necessarily to the benefit of the consumer. In addition, the way nutrient profiles are set will have a major impact on innovation and the competitiveness of the dairy sector and thereby also huge economic consequences for both dairies and dairy farmers.

Conclusion

Considering the above, EDA is concerned by the nutrient profiles criteria as proposed in the latest working document presented by the Commission services from February 2009, as it does not take into due consideration the overall diet, which is the important determinant of health. Nevertheless, should the nutrient profiling system be established, dairy products should qualify for a special approach. Indeed dairy products have a fundamental and specific role in the European diet both in terms of their variety and the essential nutrients they provide. EFSA also acknowledged the possibility of a special approach for dairy in its scientific opinion on nutrient profiles of February 2008. If specific nutrient profiles for dairy are to be established, they should encourage consumption of dairy as part of a healthy diet, consider emerging science on the relation of dairy to health, respect the characteristics of dairy products, allow for innovation and communication and take into account potential economic consequences for dairies and dairy farmers.

In that context, and only for the sole purpose of deciding whether or not a product is eligible to bear a claim, EDA proposes the following categories and thresholds using the criteria of the Commission:

² Elwood PC, Givens DI, Beswick AD, Fehily AM, Pickering JE, Gallacher J (2008) The survival advantage of milk and dairy consumption: an overview of evidence from cohort studies of vascular diseases, diabetes and cancer. *J Am Coll Nutr* Dec;27(6):723S-34S.

³ Elwood PC. Time to value milk. *Int J Epidemiol*. 2005 Oct;34(5):1160-2. Major et al, *Obesity Reviews* 9(5), 2008, 428-445: Recent developments in calcium-related obesity research.

⁴ McCarron DA, Heaney RP. Estimated healthcare savings associated with adequate dairy food intake. *Am J Hypertens*. 2004 Jan;17(1):88-97.

EDA Proposal for threshold values for nutrient profiles for dairy products

Food Category		Specific Conditions	Sodium (mg/100g)	Saturated fat ⁵ (g/100g)	Sugars (g/100g)
Vegetable oils and spreadable fats as defined in Council Regulation (EC) No 1234/2007, Annex XV	Milk fat based spreads	-	1000	30	-
	Vegetable fats and oils				
Dairy products as defined in Council Regulation (EC) No 1234/2007, Annex XII	Dairy product, except cheese	-	300	3 ⁶	15
	Cheese		1000	20	15

The rationale for the proposed criteria for dairy products is outlined in Annex 1.



⁵ For the purpose of this document, «saturated fat» means saturated fatty acids

⁶ For cream products, a value of 15g is requested to allow claims on reduced fat creams and encourage innovation

Annex I. Rationale for the criteria for dairy products as proposed by EDA

Ü Milk fats based spreads (butter and other milk fat spreads)

Saturated fat:

A threshold of 30g saturated fat per 100g product allows claims for half-fat butter. This is necessary as an incentive for innovation. The threshold needs to be expressed on a weight basis in absolute amounts, i.e. in g per 100g product because of the constant ratio of fatty acid composition naturally present in the raw material milk (70% saturated vs. 30% unsaturated). A relative criterion on energy basis, i.e. % saturated fat on total fat (in kcal per 100 kcal), is not feasible because the ratio would always be the same, also in lower fat products.

Sodium:

EDA does not see any rationale for a sodium threshold for butter due to the low contribution of butter to total sodium intake in Europe, for example 0.3% in France. In some EU regions, consumers traditionally eat mostly the salty dairy fats spreads. However, should a threshold be established, 1000mg for dairy fat spreads is needed to allow claims for traditional half-fat butter. When reducing the fat content of dairy fat spreads, the structure of the product needs to be reinforced and more salt is then needed to maintain a comparable feeling of "salty". This limits the possibility of decrease of the salt content. Salted dairy fats spreads in France, for instance, usually contain up to 1600mg of sodium. For half-fat products, there is a limit to decrease the sodium to 1000mg to preserve the organoleptic perception of the product in order to encourage consumption of fat reduced dairy spreads.

Ü Dairy products

Saturated fat:

The saturated fat value should include whole milk products and therefore needs to be 3g based on the fact that the saturated fat content of raw milk varies due to different factors (e.g. season, geographic location, type of cow...).

Sodium:

Milk naturally contains low amounts of sodium (up to 45mg per 100ml). Based on the the latest working document presented by the Commission services from February 2009, a level of sodium of 300mg per 100g/ml seems reasonable.

Sugars:

The EFSA panel did not recommend sugars as the nutrient of choice for nutrient profiles. However, if nutrient profiles are established for sugars a differentiation between naturally occurring and added sugars needs to be made. According to EFSA the intrinsic lactose should not be considered for nutrient profiling. If a differentiation between naturally occurring and added sugars is not feasible, the sugar criterion has to have a higher limit to cover naturally occurring lactose in dairy products. In milk, the milk sugar (lactose) is naturally occurring in around 4.7g per 100ml. For the production of a wide variety of dairy products fruit, nuts and sometimes vegetables containing natural sugars are used as ingredients (e.g. fruit yoghurts). Therefore a value of 15g sugars for dairy products is justified.

Cream:

Cream is consumed in small quantities. The average intake varies between 10-20g per day. Cream is usually used for cooking and always consumed as a supplement such as coffee cream or sour cream. It is therefore related to the consumption of other foods.

Cream is an intermediate group between milk products and cheese of which the composition is specified according to national and international standards. Cream should have a separate category otherwise cream products will be excluded from bearing any claims. However, in order to limit the number of dairy subcategories it is proposed to integrate cream in the category of "dairy products, except cheese". So as to at least allow for reduced-fat creams to bear claims, a threshold of 15g saturated fat should be implemented for cream. Reduced-fat cream products will thus be able to bear claims as opposed to full-fat creams products. The

incentive for innovation via reformulation is more likely to take place with the certainty that claims on reduced-fat cream are allowed.

Ü Cheese

Saturated fat:

EDA considers that a value of 20g saturated fat per 100g food is the minimum acceptable for the cheese category. A lower threshold will not allow consumers to be informed about the nutrient richness of the most representative cheeses. On the other hand, this value is sufficiently discriminatory to exclude the full fat cheeses with 48% fat in dry matter or more. As an example, at least 80% of the household market of Dutch type semi-hard cheese (e.g. Gouda) consumed in the Netherlands would be excluded. The proposed criterion is in line with the nutritional relevance of cheese as important calcium contributor to the diet and the dietary recommendation of several EU Member States to eat cheese daily.

Sodium:

During cheese production, it is necessary to add sodium for technological purposes to achieve the specific properties of cheese (e.g. quality, texture, structure and taste) as well as for food safety reasons (to avoid food borne diseases). Sodium should therefore not be considered for nutrient profiling of cheese. However, if established, the sodium criterion for cheese should be high enough to cover the sodium needed for cheese production. A sodium limit value of 1000mg per 100g is therefore required for technological purposes and food safety reasons. A lower sodium threshold is not feasible for many cheeses and would hinder innovation in cheese making.

Sugars:

Most cheeses contain only very limited amount of sugars. In the cheese-making process the naturally occurring sugar, the lactose is converted into lactic acid. By the time a cheese is made, most or all of the lactose and thereby the sugar that had been present in the milk no longer remains. However, some fresh cheeses still contain lactose and often fruit and nuts containing natural sugars are added. In parallel to dairy products, a value of 15g sugars for these cheeses is justified.