Dairy is good for us

- How to reflect this in EU policies

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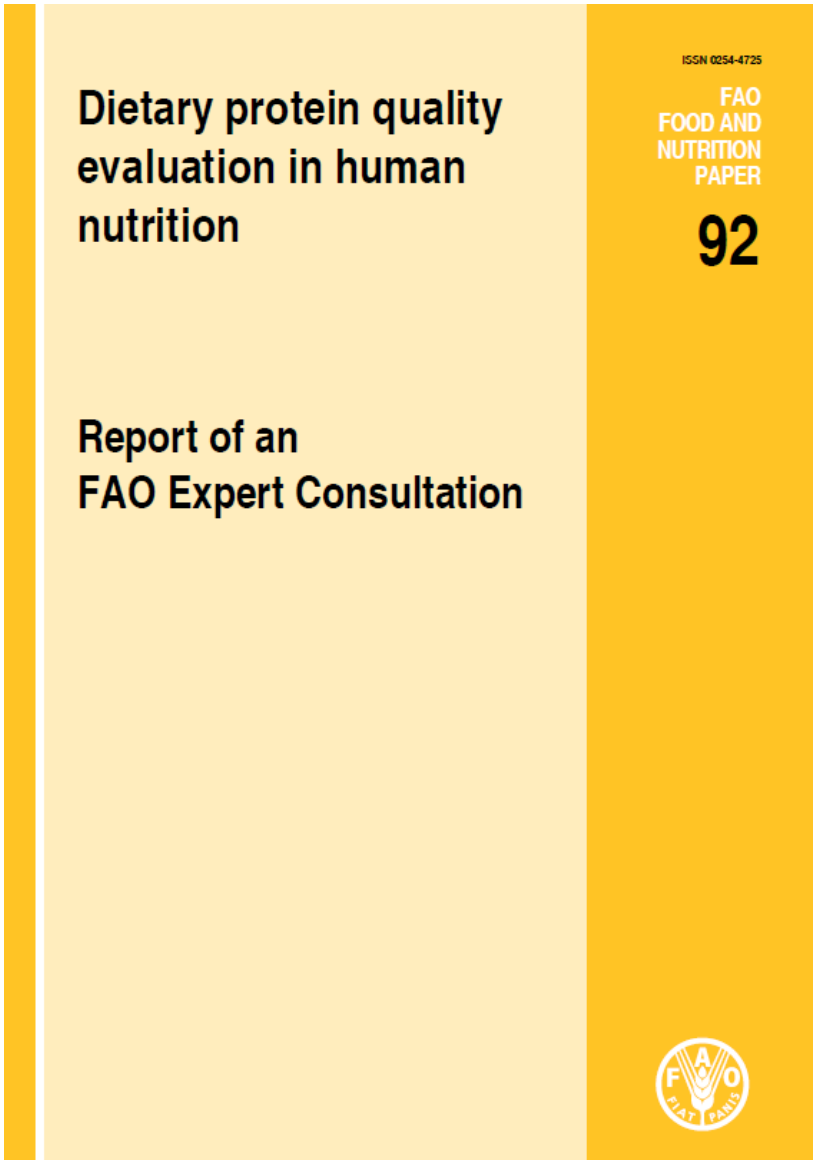
Milk – a food with a natural origin

Nutrient richness

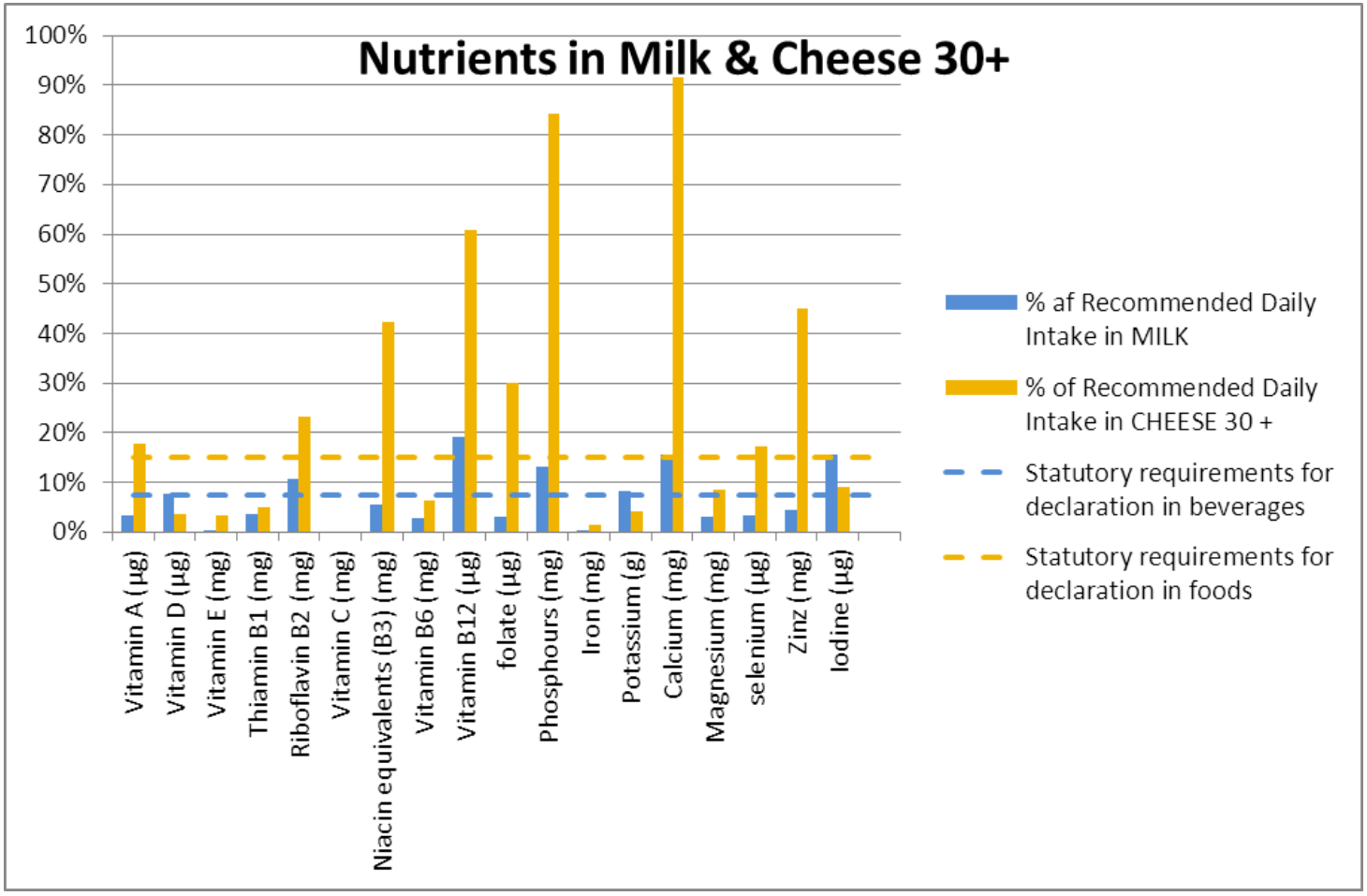
Milk contains protein of high quality

- **beneficial amino acid composition**
- **very high bioavailability**



Nutrient richness

Vitamins & minerals



Dietary recommendations

The dietary advice all over Europe recommends dairy products as a part of a healthy diet!

Consumer alternatives

Chocolate milk
- Too much fat
- Too much sugar

The alternative !

Which of these beverage choices will be for the benefit of the health status of the EU population

?

Wide range of dairy products

- **We have today a very broad variety of dairy products, with low fat or low sugar versions in almost all categories**
- **Milk with different fat content has existed for decades**
- **Most people in Europe drink semi-skimmed or skimmed milk**

Scientific results

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ORIGINAL ARTICLE

The Consumption of Milk and Dairy Foods and the Incidence of Vascular Disease and Diabetes: An Overview of the Evidence

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Abstract The health effects of milk and dairy food consumption would best be determined in randomised controlled trials. No adequately powered trial has been reported and none is likely because of the numbers required. The best evidence comes, therefore, from prospective cohort studies with disease events and death as outcomes. Medline was searched for prospective studies of dairy food consumption and incident vascular disease and Type 2 diabetes, based on representative population samples. Reports in which evaluation was in incident disease or death were selected. Meta-analyses of the adjusted estimates of relative risk for disease outcomes in these reports were conducted. Relevant case–control retrospective studies were also identified and the results are summarised in this article. Meta-analyses suggest a reduction in risk in the subjects with the highest dairy consumption relative to those with the lowest intake: 0.87 (0.77, 0.98) for all-cause deaths, 0.92 (0.80, 0.99) for ischaemic heart disease, 0.79 (0.68, 0.91) for stroke and 0.85 (0.75, 0.96) for incident diabetes. The number of cohort studies which give evidence on individual dairy food items is very small, but, again, there is no convincing evidence of harm from consumption of the separate food items. In conclusion, there appears to be an enormous mis-match between the evidence from long-term prospective studies and perceptions of harm from the consumption of dairy food items.

Keywords Dairy · Milk · Butter · Cheese · Heart disease · Stroke · Diabetes · Cohort studies

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Introduction

Milk and dairy foods contain saturated fats, and their consumption often leads to a rise in plasma cholesterol level. This, together with the belief that milk is 'fattening', appears to have led to the widespread conviction that milk and dairy foods are a factor in obesity and in heart disease, and that their consumption should be limited.

At least ten hypotheses have been defined in attempts to explain the supposed harm from milk and dairy consumption [1]. The mechanism most frequently quoted is, undoubtedly, a rise in plasma cholesterol concentration following the ingestion of milk or a dairy food item. The drawing of conclusions about milk from its effect upon a single 'intermediate' variate, such as cholesterol level, is, however, quite unreasonable, as it ignores the fact that milk, being a complex food with a host of nutrients, is likely to affect many mechanisms relevant to the development of vascular and other diseases. The only valid basis

…'there is no evidence that dairy foods as a group are associated with harm to health, either in terms of death, heart disease, stroke or diabetes, but are probably beneficial in relation to these disease outcomes.'

... And how is this reflected in EU policies?

- Food regulation vs Consumer needs
- Regulation on nutrition and health claims
- Nutrient profiles
- Reformulation

Food regulation

Consumer needs

- Negative focus on single nutrients
- Focus on items to avoid
- General perspectives

- Consumers eat foods, not nutrients
- Focus on positives: taste, enjoyment and health
- Individual needs

Regulation on nutrition and health claims

Nutrients:

Many accepted nutrition and health claims regarding nutrient content of dairy products, e.g.:

- **Protein contributes to the maintenance of muscle mass**
- **Calcium is needed for the maintenance of normal bones**

Products:

No health claims on dairy products
Very strict EFSA criteria:

- **Dairy products cannot be sufficiently characterized**
- **The specific cause and effect relationship cannot be easily established**
- **The underlaying mechanisms may not be easily distinguised, but may be related to the complex matrix of dairy products**
- **The wealth of epidemiological studies is not well accepted as documentation**

Paradox: We are able to claim that calcium is good for bones, but not that milk is good for bones !

The Danish milk campaign ‘Morningmilk’ (2009-2011)

- A milk campaign emphasizing different ways to include dairy products in breakfast.
- Print advertisements, booklet, homepage etc.
- A number of serious messages on dairy, based on recent research results.
- Complaints regarding a number of messages on the homepage.
- The homepage was changed accordingly.

→ The messages were not wrong or undocumented, however, since they were connected to products, they were not allowed !

Nutrient profiles

Proposed criteria:

- Focus on negatively perceived nutrients (saturated fat, sugar, salt)
- No vitamins and minerals or protein considered
- Foods not meeting the profile will not be able to communciate on nutrient content or health benefits

We must also consider:

- Overall nutrient composition of the food
- Importance of the food group in the diet
- Overall health benefits of consuming the foods

Reformulation

- **The nutrient composition of dairy products are based on its natural raw material, milk**
- **Dairy products are minimally processed foods**
- **Be careful with a focus on negatively perceived nutrients (salt, saturated fat, fat, sugar, salt)**
- **Overall nutrient composition must be taken into account**
- **Impact of matrix must also be considered**
- **New reseach results must be taken into account, e.g. saturated fat from dairy such as cheese does not impact CVD risk**
- **Consider techncial constraints and consumer acceptance of reformulated products**

Conclusion

Dairy intake is important throughout life

- Natural and nutrient rich foods
- Dairy is recommended in dietary guidelines all over Europe
- Scientific results show positive associations between dairy and health

Change the focus from single nutrients to whole foods

- Consumers eat whole foods, not single nutrients
- The total composition af nutrients in foods needs to be considered

EU health policy needs to convey useful messages to the consumers

- Positive messages (what is good for me) more useful than messages on what to avoid
- Consumer education
- New scientific results need to be considered