

**HEALTH SIGNIFICANCE OF FAT QUALITY OF THE DIET**  
BARCELONA, FEBRUARY 1-2 2009, INTERNATIONAL EXPERT MEETING

**Plenary discussion with speakers of the day**

Moderator:  
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**Participant's input:  
 Most important issues with regards to health significance of dietary fat**



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**Topics addressed by participants**


- Fat quantity, quality, and health outcomes
- Saturated fatty acids (SAFA)
- *Trans* fatty acids (TFA)
- Monounsaturated fatty acids (MUFA)
- Polyunsaturated fatty acids (PUFA)
- Countries in transition
- Improving practice
- Consumer understanding
- Any other issues



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**Fat quantity, quality and health**

- **What is most important, the quantity or the quality of the dietary fat?** (*Prof Perez-Jiminez*)
- **Only when you include foods with a high fat quality you can have a healthy diet: foods with a high fat quality are essential for healthy diets** (*Dr Hans Zevenbergen*)
- **Is replacement of high GI carbohydrate with saturated fat beneficial or harmful to overall health** (*Prof Clifton*)



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**Saturated fatty acids (SAFA) (1/2)**


- **Dietary intake of SAFA** (*Prof Villalpando*)
- **In Romania the most relevant issue with regard to fat consumption is the high amount of animal fats (SAFA) in the diet which lead to increased morbidity from cardiovascular causes** (*Prof Cheta*)
- **SAFA is still much higher than it should be, despite all campaigns in the past** (*Dr Zock*)



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**Saturated fatty acids (2/2)**

- **In Greece total fat and MUFA intake are adequate, SAFA intake is unexpectedly high and n-6 and n-3 fatty acid intake are below recommendations for the general population**
- **Evidence is coming not only from research in adults but also from research in children.**
- **In Greece, although morbidity and mortality rates from CVD was low a few decades ago according to results from the seven countries study, current evidence suggests that these rates are increasing** (*Dr Kapsekefalou*)



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## Trans fatty acids (TFA) (1/2)

- I think we should address the issue of *trans* fats and saturated fatty acids. What are their places in a healthy balanced diet (*Prof Dabadie*)
- In Hungary the most important issue is TFA. In consumer's and HCP's mind there is that TFA mainly comes from margarine, because of hydrogenization method. We communicated several times that the TFA content of our margarine is below on the dietary guidelines
- So from our side is the topic is TFA (good fatty acids) and margarine technology (*Prof Czinner*)

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## Trans fatty acids (TFA) (2/2)

- The most important issue globally is the *trans* fatty acid issue. Even though the intake of TFA is very low and has been documented in many countries such as Finland, the situation varies globally and ordinary people are still concerned everywhere, since this is not on the label. We get pleas to declare TFA on the label but thus far the EU has not decided to do so. I think it would be very helpful if the consumer could really see if the product contains them and how much (*Prof Pietinen*)

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## Monounsaturated FA (MUFA)

- In Greece MUFA intake is adequate (*Dr Kapsekefalou*)

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## Polyunsaturated FA (PUFA)

- Do we have information to define a limit for PUFA intake?
- Is the ratio omega-3:omega-6 relevant? (*Prof Perez Jiminez*)
- Should EPA, DHA, and ARA be classified as essential fatty acids, or is an adequate intake of ALN (AKA as ALA) and LA sufficient? (*Dr Meijer*)
- The physiological functions, capacity for biosynthesis in humans and sustainability in the diet, of long chain omega-3 PUFAs (*Prof Williams*)
- My one issue in terms of fat quality is does increasing omega 3 intake really reduce CHD rates in the community (*Prof Clifton*)

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## Countries in transition (1/3)

- In the existing life style and available food supply of Indians, low fat diets do not ensure recommended intake of essential fatty acids and LC-PUFA, and a balance of n-6 / n-3 PUFA for prevention of diet-related chronic diseases (*Prof Ghafoor*)
- In past two decades, one of the major nutrition transitions in Chinese people is to shift from a plant-based diet to an animal enriched diet with significantly increased fat content, accompanied by dramatically increased prevalence of metabolic diseases such as obesity and type 2 diabetes. It is critical to find out the role of the quantity and quality of dietary fat with people's health (*Prof. Lin*)

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## Countries in transition (2/3)

- From a developing population in transition viewpoint we think that a discussion about the criteria to decide on the "cut-points" for fat recommendations will be helpful. They will depend on the public health problems in a population, but are they the same for different populations? (*Prof. Vorste & Prof Smuts*)

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## Countries in transition (3/3)

- We have to look for a point where the nutritional needs (dietary quality) are met without an increase in the risk factors for non-communicable diseases.
- Which risk factors, e.g. serum lipids, or BMI? This is more difficult than what we thought previously: the positive highly significant relationships between fat intake and BMI that we see in Africans is at much lower levels of fat intake than what is associated with increased lipids and risk for CVD. So, what is the most important? BMI or serum cholesterol?
- One can argue that on a public health level we already have a problem with increased BMI in women and that in our African population at this point in time, mean serum cholesterol is still low, but increased incidences of CVD indicate that it is only a matter of time (Prof. Vorste & Prof Smuts)

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## Improving practice (1/2)

- Omega-3 fatty acids, saturated fats, trans-fatty acids = the good, the bad and the ugly...but which one is the most important from a public health's viewpoint?  
(Prof Brohet)

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## Improving practice (1/2)

- On the basis that the main sources of SFA in the diets of Irish adults, children and teens are fresh milk, fresh meat, meat products, sweet bakery goods and confectionery (Joyce et al, PHN 2008), the main issue for this country appears to be twofold: how to improve the fat quality of agricultural produce (i.e. fresh milk and meat) and how to reduce/improve the fat quality of processed food products that are consumed in high quantities such as meat products and baked goods.
- These questions require multi lateral concerted efforts from the agri-food sectors, the industry and scientists, and appear to be distinct from efforts in the area of nutrition education/ public awareness (Dr Mairead Kiely)

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## Consumer understanding (1/2)

- Developing a consensus among researchers and health care professionals with regard to recommended fatty acid intake. Too much confusion exists about CLA, ratio of omega's and saturated fat consumption  
(Connie Diekman, M.Ed, RD, LD, FADA)
- Consumers do not understand the differences between dietary fatty acids. They do not know via which foods they consume too much SAFA, and have misconceptions about some foods with (P)UFA that they should actually eat more  
(Dr Zock)

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## Consumer understanding (2/2)

- Some of the biggest health challenges for fats, are around consumer understanding of fats (both fat quality, quantity and now balance), and communication issues - messages around fats are not simple  
(Dr Wills)

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## Any other issues?



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