

FCRN Summary of report:

**WHO Report on Diet, Nutrition and the Prevention of Chronic Diseases: Potential Impact on Consumption, Production and Trade of Selected Food Products. November 2003. Xavier Irz, Bhavani Shankar C.S. Srinivasan, University of Reading, UK. Report commissioned by the International Federation of Agricultural Producers**

Full report available at: <http://www.ifap.org/en/publications/documents/ifapReport-Whodiet.pdf>

This study looks at 35 countries (comprising for the most part West Europe and North America, as well as a few Middle Eastern and Eastern European countries) whose average per capita intakes of fat contribute more than 30% to daily calorie intake. This is of course not a global perspective and importantly the study does not look at what overall food production levels might look like were the twenty countries whose fat intakes fall below the minimum recommended fat intake threshold of 15% of calorie intake to increase to above 15%. It also excludes the majority of developing world countries whose fat intakes falls within the 15-30% acceptable intake range. It is also necessary to stress that nor does the report take into account future population growth – it is simply a snapshot of the situation today.

Having selected the countries according to their levels of fat intake the authors consider how consumption and production levels of the selected foods to change were these countries to meet the following WHO/FAO guidelines:

1. Total fat to energy ratio (share of energy derived from fat in the total supply of energy in kcal) 30% or below.
2. Total protein to energy ratio (share of energy derived from protein to the total supply of energy in kcal) does not exceed 15%.
3. Total sugar to energy ratio (share of energy derived from sugars and sweeteners to the total supply of energy in kcal) does not exceed 10%.
4. Consumption of alcoholic beverages should not increase compared to the observed baseline.
5. Total energy in kcal should not decline relative to the observed baseline.

The report concludes that changes in consumption and production in order to adhere to WHO/FAO guidelines are substantial. It observes that the 'general direction of the change is a shift away from human consumption of meats, vegetable oils, eggs and dairy products towards consumption of more cereal-based products, pulses, fruits and vegetables.'

The study authors calculate that meat consumption would need to decline by almost six million tons primarily due to reductions in demand for meat in the US, France and Germany. Five million tonnes of the reduction would come from pig meat (since this is classed as a high-fat meat), representing a cut of more than sixteen percent of current consumption in the group of countries studied. The impact of the change on mutton and goat meats is also substantial relative to their fairly low consumption levels, but the estimated impacts on poultry and beef consumption are small. Production of beef for example would decline by less than 4 percent since the fat content of beef is lower than that of pork and mutton.<sup>1</sup> The WHO/FAO recommendations would also lower consumption of dairy products. While milk consumption would be marginally affected, butter and cream consumption would decline by 35% and 25% of their current levels in the group of countries studied, with North America and the EU accounting for the bulk of the decline. Animal fat consumption would decrease 1.3 million tons (sic) representing thirty-one percent of current consumption in the countries studied, with the US, France and Germany accounting for most of the reduction.

For vegetable oils, adherence to nutritional guidelines would lead to an average reduction of 30-35% for the range of oils studied. The largest decline would be in soy production which would decline from 8.2 million tons in the 35 countries to 5.5 million tons. Other prominent oils in this set

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<sup>1</sup> this is because the fat content of these meats is lower than that of pork and the focus of the research is on fat and saturated fat content.

of countries are sunflower oil, olive oil and rape/mustard oil. These oils are commonly consumed in the EU, and the source of the reduction in their consumption is therefore also mostly the EU.

Human consumption of cereals would increase by about 30 million tons. However the report calculates that 'once the reduction in demand for feeds related to the decrease in meat consumption is netted out, the growth in demand for cereals due to the WHO/FAO norms becomes marginal at 5 million tons.'