



Conference Report

Scientific evidence and daily food for a better life: Milan, 19 June 2015

ABSTRACT

This paper presents a report of a nutrition conference held at EXPO 2015 in Milan. Over the course of a day, seven speakers from four continents discussed the evidence and scientific processes that underpin the development of dietary guidelines, highlighting issues and challenges at each stage. These include the quality of studies associating disease outcomes with diet, specifically a reliance on observational studies, short duration of intervention trials, low statistical power and lack of follow-up. Concerns were raised over the oversimplification of dietary messages which promote carbohydrates in general without evidence of benefit, while restricting fats when meta-analyses suggests that different fatty acids have different effects on disease risk. The merits of food-based dietary guidelines and holistic dietary patterns were described, whereas the impact of increasing or reducing consumption of individual food groups or macronutrients remains unclear. The meeting ended with a restatement of the importance of dietary guidelines, and associated education, to improve public health, but a plea was made to ensure that the process of setting guidelines is evidence based, responsive and considers the impact of the whole diet.

Keywords:

Dietary guidelines
Sugar
Fat
Saturated fat

Delivering nutrient-based targets for populations is an important aspect of public health policy, with guidelines produced by expert bodies at global,¹ European² and country levels.^{3,4} Typically, macronutrient-specific guidelines, with a focus on sugar and fat, underpin food and health policy, encompassing food-based dietary guidelines, nutrient profiling of foods, food labelling and health claims.⁵

There have always been nutrition controversies, some which were resolved fairly easily (e.g. the role of starchy carbohydrates in weight management), while others continue to polarize opinion (e.g. saturated fat and heart disease). Dietary advice has evolved over time in response to advancements in nutrition science although the pace of change is slow.

Populations often receive contradictory or confusing dietary advice via stories in the popular media, e.g., in relation to sugar and fat where there has been considerable debate on the roles of these nutrients in chronic disease. This has led to re-evaluation of advice to follow diets low in fat and saturated fat

driven, e.g., by analyses which report a lack of impact on total or cardiovascular disease (CVD) mortality.⁶

Further re-evaluation has been prompted by rising obesity levels (e.g. in the USA from 42% in 1971 to 66% in 2011⁷) which coincided with a reduction in fat consumption from 45% to 34% total energy. This suggests that blanket population advice to reduce fat intake was ineffective as a means to control body weight rises.

Sugar has attracted attention in recent months with the World Health Organization (WHO)⁸ calling for a reduction in the added sugars guideline from 10% to 5% daily energy, based on evidence from ecological studies on dental caries. A similar recommendation of 5% energy from free sugars was adopted by the UK Scientific Advisory Committee on Nutrition.⁹ These positions conflict with an earlier opinion of the European Food Safety Authority which declined to set an upper limit for sugars due to a lack of consistent, high-quality evidence.²