

Editorial

Dietary guidelines and goal-setting

Every five years the US Department of Health and Human Services and the Department of Agriculture issue a report containing 'nutritional and dietary information and guidelines for the general public'⁽¹⁾, meant to help individuals select nutritious, health-promoting diets. At the writing of this editorial, the 2010 Dietary Guidelines Advisory Committee (DGAC) has just completed its last meeting before finalizing the report that will serve as the basis for the *Dietary Guidelines for Americans 2010*, due out later this year. Among the anticipated changes in the guidelines are: (i) a greater emphasis on plant-based diets; (ii) a more specific focus on added sugar, fats and refined carbohydrates instead of the more general 'discretionary calories'; and (iii) an emphasis on decreasing sodium intake to 2300 mg per 8368 kJ (2000 kcal) diet or 1500 mg for individuals with hypertension⁽²⁾.

Goals (and applications) of dietary guidelines

It is worth remembering what the primary goal of dietary guidelines is. The stated goal is 'to provide science-based advice to promote health and to reduce risk for major chronic diseases through diet and physical activity'⁽¹⁾. Besides providing individual dietary advice, the US dietary guidelines also serve as the basis for national food, nutrition education and information programmes, including the National School Lunch Program, the Special Supplemental Nutrition Program for Women, Infants, and Children, and the US Healthy People Objectives⁽¹⁾. Put most simply, the goal of the dietary guidelines is the setting of goals: personal goals, as well as goals at the school, local and national levels.

In this issue, we highlight several studies that have made use of national dietary guidelines in such ways. In a study conducted in Reykjavik, Iceland, Kristjansdottir *et al.*⁽³⁾ evaluated an intervention to promote fruit and vegetable intake among second graders. A previous baseline study had indicated that most of the 7-year-olds evaluated did not meet Iceland's food-based dietary guidelines for fruits and vegetables⁽⁴⁾. The intervention resulted in an impressive 47% increase in fruit and vegetable intake – although most children still did not meet dietary guidelines for fruit and vegetable intake even at the end of the intervention. Despite the success of the trial, there is still a long way to go, if meeting national guidelines is the goal.

Next, in a survey of school-aged children in Greenland, Niclasen and Schnohr⁽⁵⁾ found substantial differences in compliance with national dietary guidelines, depending

on the guideline, with the poorest compliance (<20%) for guidelines on fruit intake, and candy and soft drink intake. One issue raised by their work is the importance, and difficulty, of operationalizing dietary guidelines into a useful metric. Having a varied diet (dietary guideline #1) is important, but defining and quantifying it is the subject of an entire literature on its own.

A third study serves as an example of a common operationalization of the US dietary guidelines, in the form of the Healthy Eating Index-2005 (HEI-2005)⁽⁶⁾. Using the HEI-2005 to compare the diet quality of individuals with and without rheumatoid arthritis, Grimstvedt *et al.*⁽⁶⁾ found poorer diet quality in individuals with the condition, with potential implications for disease activity and for their risk of other chronic diseases. Their application of the HEI-2005, based on 2005 US dietary guidelines, demonstrates the use of a common metric to compare diet quality between populations.

Shortcomings

While a laudable effort, national dietary guidelines have a shortcoming that merits some discussion: they are typically delivered without consideration of individuals' social, cultural or economic contexts. Indeed, the existence of dietary guidelines rests on the fact that eating is no longer a culturally or traditionally grounded occasion, but rather an activity that we need some sort of a roadmap (with benchmarks, or goals) to navigate through safely. The delivery of dietary guidelines in a social vacuum is bound to limit the feasibility of meeting these dietary goals, whether at the level of the individual or the population.

In their survey of Greenlandic schoolchildren, Niclasen and Schnohr⁽⁵⁾ found considerable differences in compliance with dietary guidelines by family socio-economic position and place of residence (village, town, capital). And in a uniquely insightful analysis combining nutritional and economic perspectives, Maillot *et al.*⁽⁷⁾ in this issue have demonstrated that food plans designed both to meet dietary guidelines and to minimize costs deviated substantially from social norms – in other words, they were less socially and culturally acceptable, and hence less feasible. Geoffrey Cannon has very neatly summed up the problem with dietary guidelines⁽⁸⁾:

When discussing nutrition and food policy, scientists tend to think in terms of diets, lifestyles, and individual choices. This misunderstands the real

world. [...] What the vast majority of people habitually consume is a function of supply, not of demand, and the way they live is in general a matter of necessity, not of choice. [...] No strategy designed to prevent food-related diseases that focuses on dietary habits or on food consumption, can be effective. In isolation, dietary guidelines are a distraction and part of the problem, not part of the solution. The issue is not what we eat, it is why we eat what we eat.

Goals for the guidelines

A positive step is the news that changing the food environment has emerged as an 'overarching issue' in DGAC meetings in considering how to help individuals meet the dietary guidelines – recognition, finally, of the influence of the food supply and food availability on what people eat. The Swedish National Food Administration has taken the idea of dietary guidelines-in-context to a different level: last year it proposed new guidelines that gave equal weight to the health of people and the health of the environment⁽⁹⁾.

Here is another idea worth considering. In the spirit of providing dietary guidelines to improve dietary intake, we might consider food supply guidelines for industry and governing agencies to improve the supply and sustainability of foods available for people to eat. These could be guidelines broken down into components, as the dietary guidelines are – benchmarks by which to evaluate the food supply. They might include, for example, 'Increase the variety and affordability of fruits and vegetables' or 'Reduce sodium in prepared foods'. True, these would be difficult guidelines to formulate and, given past evidence of industry seeking to influence the US Farm Bill as well as US dietary guidelines, the

effort may ultimately be futile. Still, the US dietary guidelines had their start from somewhere. And as one motivational sports saying goes: 'It's a dream until you write it down – then it's a goal'.

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References

1. US Department of Health and Human Services & US Department of Agriculture (2005) Nutrition and Your Health: Dietary Guidelines for Americans. http://www.health.gov/dietaryguidelines/dga2005/report/HTML/A_ExecSummary.htm (accessed June 2010).
2. American Society for Nutrition (2010) *ASN Health and Nutrition Public Policy Newsletter*, 22 April.
3. Kristjansdottir AG, Johannsson E & Thorsdottir I (2010) Effects of a school-based intervention on adherence of 7–9-year-olds to food-based dietary guidelines and intake of nutrients. *Public Health Nutr* **13**, 1151–1161.
4. Kristjansdottir AG & Thorsdottir I (2009) Adherence to food-based dietary guidelines and evaluation of nutrient intake in 7-year-old children. *Public Health Nutr* **12**, 1999–2008.
5. Niclsen B & Schnohr CW (2010) Greenlandic school-children's compliance with national dietary guidelines. *Public Health Nutr* **13**, 1162–1169.
6. Grimstvedt ME, Woolf K, Milliron B-J *et al.* (2010) Lower Healthy Eating Index-2005 dietary quality scores in older women with rheumatoid arthritis *v.* healthy controls. *Public Health Nutr* **13**, 1170–1177.
7. Maillot M, Darmon N & Drewnowski A (2010) Are the lowest-cost healthful food plans culturally and socially acceptable? *Public Health Nutr* **13**, 1178–1185.
8. Cannon G (2002) Nutrition: the new world disorder. *Asia Pac J Clin Nutr* **11**, Suppl. 3, S498–S509.
9. Rosenthal E (2009) To cut global warming, Swedes study their plates. *The New York Times* **5**, 22 October.