

Abstract

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Title of Presentation:

The international Breakfast Research Initiative: Toward objectively derived nutrient guidelines for breakfast

1. **Abstract**

The most popular approach to the development of quantitative nutrient guidelines for breakfast is the application of a blanket value of about 20% of the Recommended Daily Allowance (RDA), based on the contribution of breakfast energy to daily energy intake (ca. 20%). This approach takes no account of prevailing nutrient intakes at breakfast or of any association between breakfast nutrient quality and overall daily nutrient quality. The International Breakfast Research Initiative (IBRI) set out to develop breakfast nutrient guidelines to take account both of breakfast and daily nutrient intakes and of the association between the two. The project involved harmonised analysis of national nutrition databases in Canada, Denmark, France, Spain, the UK and the US. The first step in the strategy to define quantitative nutrient guidelines for breakfast was to apply the Nutrient Rich Food (NRF) diet score to each individual in each survey database. This assigns positive values to an individual's total daily intake of: protein, fibre, vitamin A, vitamin C, vitamin D, calcium, iron, potassium and magnesium and negative values to added sugar, saturated fat and sodium. For each nutrient, intakes were expressed

as a % of regional values used for nutritional labelling. Thus, the higher the NRF score, the closer to optimal the daily nutrient intake. The second step was to rank the individual NRF scores in each country to identify the upper tertile of this score. This sub-set represented that third of the population with the highest overall quality of daily nutrient intakes. Within this sub-sample, breakfast nutrient intakes were defined for each country. A series of five guiding principles were established to use the values from across the 6 centres to derive a proposed recommendation for breakfast nutrient intake. These values will help policy makers, dietitians and industry shape educational and reformulation programmes to allow consumers to enjoy healthier breakfast.

2. Key references

- 1) Gibney et al. Breakfast in Human Nutrition: The International Breakfast Research Initiative.. Nutrients. 2018;10(5).
- 2) Institute of Medicine. 2010. School Meals: Building Blocks for Healthy Children. Washington DC: National Academies Press.
- 3) O'Neil et al. The role of breakfast in health: definition and criteria for a quality breakfast. J Acad Nutr Diet. 2014;114(12 Suppl): S8-S26.

3. Key messages

- 1) Breakfast remains one of the most important meals of the day and ensures a good supply of nutrients each day as well as a potential role in the regulation of weight and both cardiac and cognitive health.
- 2) The development of nutritional guidelines using objective data from multiple international databases will help both policy makers, industry and dietitians formulate strategies for both consumer education and product reformulation leading ultimately to more widespread access to healthy breakfasts.
- 3) Once a procedure to define optimal nutrient guidelines for breakfast has been adopted, each individual country can begin to develop evidence-based food guidelines for healthy breakfasts.