Evaluation of current food-based dietary guidelines for healthy eating in Ireland

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1. Introduction

Since 1993, the food pyramid has been widely used in Ireland for nutrition education and for health promotion. However, increasing rates of obesity, along with a new understanding of the role of nutrition in the prevention of chronic diseases, indicate the need to evaluate the current food pyramid.

2. Methods

- Appropriate goals for energy and nutrient intakes for the Irish population were selected based on internationally developed standards for nutrient requirements.
- Using the food pyramid, 4-day food intakes were developed for 11 normal weight theoretical subjects, representative of different age and gender groups from age 5-51+ years.
- The food intake patterns were analysed using NetWisp and compared to the established energy and nutrient goals to assess the nutrition quality.
- The appropriateness of advice on food choice as directed by the food pyramid was also evaluated.

3. Results

(a) Nutritional quality of food patterns derived from the food pyramids for 11 theoretical subjects

The graph shows the actual energy and nutrient intake levels provided by the food intake patterns compared with the goals. The range of energy and nutrient intakes achieved by the food patterns for 11 subjects compared to the recommended intakes (represented by 100%).

(b) Difficulties identified in food choice guidance

- Portion sizes from the bread, potato and cereal group provide a wide range of energy (0.3MJ - 1.0MJ).
- Portion size descriptors were specific in some areas and ambiguous in others, e.g. a ‘bowl of cereal’ versus ‘2oz meat’.
- Fat spreads and oils were placed in the same group as ‘other foods’ such as cakes, biscuits, chocolate and confectionary. This hindered clear guidance on types of fats and oils to choose for healthy eating.

4. Conclusions

(1) Dietary guidelines need to be revised to include guidance on energy.
(2) The portion sizes of foods from the bread, cereal and potato group need to be revised so the energy provided by different foods in this group are more equivalent.
(3) Revision should include advice on how to achieve adequate fibre and vitamin D intakes as these appear to be ‘problem’ nutrients.
(4) Fats and oils should be separated from ‘other foods’ such as cakes, biscuits, chocolate and confectionary to enable guidance on healthy choices.
(5) Cheeses should be placed solely in the dairy group.
(6) Pulses should be placed in both the meat and fruit and vegetable groups.

REFERENCES

5. Irish Heart Foundation Council (2007) Irish Heart Foundation, Dublin