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Categorisation of non-core foods and drinks consumed by a clinical sample in an intervention trial

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Abstract

Non-core foods are discouraged in favour of core foods in dietary guidelines. Australian data indicates that consumption of non-core foods and drinks, or 'extra' foods, exceeds 20% of energy, the recommended limit for the healthy population. While energy-dense, nutrient poor choices are associated with excessive energy intake and weight, we found that trial participants who reported consuming greater amounts of non-core foods and drinks at baseline, lost more weight at 3 months than those consuming foods closer to guideline recommended foods. However, more detail about the types of non-core foods is required to give effective dietary advice.

Keywords

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P05

Categorisation of non-core foods and drinks consumed by a clinical sample in an intervention trial

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Background

Non-core foods are discouraged in favour of core foods in dietary guidelines. Australian data indicates that consumption of non-core foods and drinks, or 'extra' foods, exceeds 20% of energy, the recommended limit for the healthy population. While energy-dense, nutrient poor choices are associated with excessive energy intake and weight, we found that trial participants who reported consuming greater amounts of non-core foods and drinks at baseline, lost more weight at 3 months than those consuming foods closer to guideline recommended foods. However, more detail about the types of non-core foods is required to give effective dietary advice.

Objective

The aim of this study was to categorise non-core foods and drinks from reported food consumption patterns of participants in a clinical weight loss trial.

Design

All baseline and 3 month diet history data from participants in two clinical trials (n=231) was first categorised into food groups referencing core foods (fruit, vegetables, cereal foods, lean meat or equivalent, low fat dairy foods) and non-core foods. A further 29 categories were created from the non-core group with reference to published research.

Outcomes

At baseline non-core foods and drinks contributed 29% of dietary energy. The median value (2096kJ/day) equated to 3.5 serves/day. At baseline, snack foods (biscuits, chocolate, fried potato chips, cake, ice cream, crisps and lollies), takeaway meals and drinks (soft drink and cordial) were amongst the top ten contributors of energy. Biscuits (sweet and savoury), take away meals, cake and chocolate remained after 3 months of dietary counselling, although the median intake value dropped to 573kJ, equivalent to <1 serve.

Conclusion

In this research context, non-core foods and drinks contributed excess energy in the study population. Targeting non-core foods and drinks may result in greater weight loss, however, this may only be possible if the specific choices of individuals are properly assessed to enable relevant guidance on alternative choices and serve sizes.

Source of funding

P06

Development of a diet quality index to assess eating patterns among Australian preschool-aged children

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Background

The use of Diet Quality Indices in the dietary assessment of young children has been limited.

Objective

The aim of this study was to develop a comprehensive Diet Quality Index (DQI) for use in assessing dietary habits among Australian preschool-aged children. Adherence to key recommendations using the Australian Guide to Health Eating and dietary guidelines for children was evaluated.

Design

The DQI consists of 14 components representing diet and behavioural components essential for establishing healthy eating habits throughout life. Scores from 0 to 5 were assigned to each component of the index. The overall scoring tool ranged from 0 (minimum) to 70 (maximum), with the score for each child being determined by the level of adherence to key dietary and lifestyle recommendations. Repeatability of the tool was assessed using data from a short FFQ (sFFQ) that was completed by parents of 62 children with mean age of 3.7 (SD 0.91) years within a two week period. Preliminary analysis was assessed using Pearson's correlation coefficient and Bland-Altman method assessment.

Outcomes

Mean total DQI score in sFFQ1 =52.5 (SD 7.2) and in sFFQ2=53.6 (SD 5.6), with high correlation between DQI scores (r=0.822, p<0.0005). 59/62 (95%) of data points lie within 2SD of the mean difference on the Bland-Altman plot of the data. The DQI showed good reliability for all scoring tool components i.e. no significant differences for each individual component

Conclusion

The DQI is valuable in determining dietary patterns of preschool-aged children and has good reliability. However, its validity remains to be established and may strengthen the use of this tool in discerning meaningful health outcomes.

Source of funding