

Conclusions: Even at the level of a pilot study, the novel interdisciplinary approach was more effective at achieving weight loss in the short term compared with usual care. The research provided a sound basis for the longer term 12 month trial.

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EVALUATING THE USABILITY OF A SMARTPHONE MEALS DIARY

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Background/Aims: Common dietary assessment methods are limited in their ability to assess meal patterns or contextual factors such as location or social interaction whilst eating. This study aimed to test the usability of a method of assessing meal patterns using ecological momentary assessment principles via a Smartphone meals diary app known as “FoodNow”.

Methods: Participants used the FoodNow app over four non-consecutive days recording all food and beverages consumed using a combination of written text, voice recorded messages and photographs. At each eating or drinking occasion, a series of contextual questions were completed. These questions included the time, place, social company and activities during consumption, a description of the eating occasion, and information surrounding the purchasing and preparation of the food ingredients. After using the FoodNow app participants completed a short questionnaire on its functionality.

Results: Twelve participants (10 females, 2 males) with a mean (SD) age of 25.5 (7.9) years provided 38 days of data covering 171 eating occasions. Feedback identified the need to reorder and provide additional responses within the app, and these have been adjusted prior to further testing. The total amount of questions asked has also been adjusted to reflect concern for high participant burden.

Conclusions: This pilot study supports the usability of the FoodNow app in the assessment of meal patterns. The FoodNow app is currently being used in a validation study to investigate its ability to adequately measure overall energy intake.

Funding source(s): Deakin University.

THE EVALUATION OF A SMARTPHONE APPLICATION AIMED AT IMPROVING IRON INTAKE IN PREMENOPAUSAL WOMEN

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Background/Aims: To evaluate the content, usability and acceptability of a smartphone app designed to improve intake of bioavailable dietary iron.

Methods: Semi-structured focus group were conducted following a two week period whereby participants used the app. Participants were females aged 18–50 years who owned an android smartphone. Focus group discussions were audio recorded and analysed via an inductive open-coding method using the qualitative analysis software NVivo. Frequency of code occurrence was calculated.

Results: Three focus groups ($n = 19$) were conducted (age 19–36 years). The following themes and their numerical occurrence were identified: suggestions for improvements (246), interface and design (103), dislikes (80), usability (38), technology issues (34), likes (35), pictures (7) and specific components of the app including goal tracker (108), facts (58), photo diary (33) and games (31) were discussed. Overall, participants enjoyed the idea of the app and the facts provided within the app. Suggestions for improvement included the addition of a back button and inclusion of more colours and pictures to help decrease the ‘clunkiness’ and to improve the interface and design of the app. Including more facts with the option of being able to go to a ‘read more information’ section was another suggestion.

Conclusions: Usability testing is an important step in refining the app. Suggestions from participants will be taken into consideration during the redevelopment of the app. This will aid the usability and functionality of the app, potentially leading to an increased acceptability.

Funding source(s): Meat and Livestock Limited Australia, I-Nex Corporation.

DOES SKIPPING BREAKFAST PREDICT ACADEMIC PERFORMANCE TWO YEARS LATER IN AUSTRALIAN CHILDREN?

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Background/Aims: Skipping breakfast, habitually and in randomized controlled trials (RCTs), has been linked to poorer academic performance in children but little is known about the longer-term effects. This study examined whether skipping breakfast predicted poorer academic performance two years later.

Methods: A national sample of 2,335 8–9 year-old children who participated in the 2008 and 2010 follow-ups of the Longitudinal Study of Australian Children were included in the analysis. In 2008, breakfast consumption was reported by a parent/guardian in three 24-hour food frequency diaries, completed within four weeks. Children who skipped breakfast on at least one occasion were classified as breakfast skippers. In 2010, the child’s teacher compared their reading, maths and overall achievement to other children of the same grade (below average/average/above average). Grade 5 National Assessment Program – Literacy And Numeracy (NAPLAN) results were linked. Differences between skippers and non-skippers were calculated using ordinal regression for teacher-reported academic performance, and linear regression for differences in mean NAPLAN results. Analyses were adjusted for sex, age and socioeconomic position.

Results: In 2008, 250 (10.7%) children were classified as breakfast skippers. In 2010, breakfast skippers were slightly more likely to be in lower teacher-reported reading (adjusted RR 1.12; 95%CI: 1.02, 1.24) and overall academic achievement (adjusted RR 1.11; 95%CI: 1.01, 1.23) categories than non-skippers. Skippers had lower mean NAPLAN scores than non-skippers for all five domains but the differences were small (< 2%) and not statistically significant.

Conclusions: Skipping breakfast predicted poorer academic performance two years later compared to non-skippers but the differences were small.

Funding source(s): NHF.

WHAT DO SCHOOL-LEAVERS NEED TO KNOW ABOUT NUTRITION AND FOOD SYSTEMS? VIEWS OF PROMINENT FOOD-RELATED EXPERTS IN IRAN

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Background/Aims: The current study investigated food experts’ views on what they considered important areas of nutrition and food systems knowledge for school-leavers in Iran.

Methods: Face-to-face or telephone semi-structured interviews were conducted with 28 Iranian experts acknowledged in their field of food and nutrition, including five public health nutritionists, five nutritionists, five dietitians, four food scientists, two environmental scientists, two veterinary physicians, one agriculture scientist and four high school teachers (health teacher, home economics teacher, agriculture science teacher and food science teacher). Participants were drawn from academics in recognised universities and practitioners from professional, governmental and non-governmental organizations. Interviews were transcribed in Farsi and translated into English for analysis.

Results: Experts considered nutrition and food systems knowledge to be important for school-leavers as it is embedded within people’s routine life. A nutrition and food systems knowledge framework to assist Iranian school-leavers to make informed decisions in food-related areas was developed, comprising five major clusters and several sub-clusters. Major clusters included knowledge of: nutrition basics; food production; food selection, preparation, storage and wastage; prevalent nutrition problems