consumption in unrestrained rats.
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FOOD SECURITY, ACCESS AND QUALITY AMONG CHARITABLE FOOD PROGRAMS SERVING THE HOMELESS IN THE AUSTRALIAN CAPITAL TERRITORY REGION

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Background/Aims: This poster describes the current published literature relating to provision of food by charitable food programs. It focuses on the type food provided and the use of these charitable programs by homeless people.
Methods: A descriptive exploratory literature review was conducted with papers sought from: Medline, Google Scholar, PubMed Central, and CINAHL, for the period 2000-2015. Search terms included: homeless nutrition, homeless food charities, homeless diet, food insecurity homeless, and food homeless. Inclusion criteria were papers that involved charitable food provision to the homeless and were published in English
Results: A total of 38 studies met the inclusion criteria. International studies showed that between 63-96% of homeless participants used charitable food services regularly. Barriers to accessing these programs included embarrassment, operation hours, charity environment, crowds, line-ups and religious influences. The programs described limited food access and availability, with a heavy reliance on food donations. Charities reported that demand exceeded supply. Four international studies reported the nutrient content of charity meals, finding a lack of zinc, vitamin A, magnesium and calcium, yet having excess saturated fat and sodium. These findings raise concern for the long-term health of those homeless people who rely on charitable meals. Studies found a recent hunger-obesity paradox within the homeless population, which increases the likelihood of chronic disease development.
Conclusions: In Australia, research is limited regarding charitable food programs, and how these programs influence the diet and health of the homeless individuals that rely upon charitable services.
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CAN YOU DISTINGUISH NATURALLY OCCURRING FROM REFINED DIETARY FIBRE?

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Background/Aims: In 2011, an independent panel undertook a review of Australian food labelling law and policy. Recommendation 14 of the review stated that total and naturally occurring fibre contents should be considered as mandatory requirements for the Nutrition Information Panel (NIP). Australian and New Zealand health ministers asked FSANZ to provide technical evaluation and advice on this recommendation. In developing our response, we needed to distinguish 'naturally occurring' from 'refined' dietary fibre.
Methods: FSANZ's evaluation included the following: General review of the literature on defining and analysing the dietary fibre content. Survey of label information on 100 foods from a single outlet of a major Australian supermarket chain, to identify statements about the fibre present in the food. Literature review on the physiological effects of dietary fibre.
Results: Naturally occurring dietary fibre can often be found together with refined dietary fibres in the same food. There is no available method of analysis that clearly distinguishes naturally occurring from refined dietary fibre, where both fibres are present. Non-analytical alternatives, such as calculations from food composition data, are not feasible due to a lack of information. Differences in physiological effects cannot be used to distinguish naturally occurring from refined dietary fibres.
Conclusions: There is no simple means by which naturally occurring dietary fibre can be distinguished from refined dietary fibre. To separately declare naturally occurring from total dietary fibre in the NIP would be difficult and impractical to implement.
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SNACKING ON NIGHTSHIFT: GLUCOSE RESPONSE TO A STANDARD BREAKFAST MEAL FOLLOWING LARGE VS SMALL SNACKS DURING THE NIGHT

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Background/Aims: Shift-workers often eat at night when the body is primed for sleep, which may have implications for health. This study examined the impact of consuming a large versus small snack at night on glucose response to breakfast.
Methods: A total of 29 healthy subjects (21-35 y; 18 females) participated in a simulated nightshift laboratory study including one baseline sleep (BL; 22:00h-07:00h) and one night awake with allocation to a large snack (2100 kJ; 18 g total fat, 20 g protein, 63 g carbohydrate) or small snack (840 kJ; 6 g total fat, 7 g protein, 31 g carbohydrate) using a parallel study design. Snacks were consumed between 00:00h-00:30h. A mixed meal breakfast (2100 kJ) was consumed at 08:30h the following morning. Interstitial glucose was measured continuously using Medtronic Glucose Monitors and was averaged into 5-minute bins. Area under the curve (AUC) for 90-minutes post-breakfast was compared following sleeping at night and a night awake for each snack group.
Results: Pre-breakfast, glucose levels did not significantly differ between BL and post-nightshift ($p > 0.05$), nor did they differ between snack groups ($p > 0.05$). A snack group*day interaction was found [$F_{(1,17)}5.36$, $p = 0.03$] such that in the large snack group, AUC response to breakfast was significantly higher post-nightshift (+17.8 ± 6.7%) compared to BL ($p = 0.003$). AUC did not significantly differ ($p > 0.05$) between days in the small snack group.
Conclusions: Compared to a small snack, consumption of a large snack at 00:00h impaired the glucose response to breakfast for up to 90-minutes. Further research into optimal quantity and content of snacks will inform dietary recommendations for shift workers.
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IODINE STATUS NOT ASSOCIATED WITH COGNITIVE FUNCTIONING IN OLDER AUSTRALIANS

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Background/Aims: Iodine plays a key role in thyroid functioning. Poor thyroid functioning has been linked to cognitive decline. This study aims to investigate whether iodine status is associated with cognitive functioning and mood state in a sample of healthy older Australians.
Methods: Eighty-four men and women aged 60-95 years with normal cognitive function participated in this cross-sectional study. Three repeated fasting urine samples were collected a week apart to assess median urinary iodine concentration for the group. Usual dietary iodine intake was measured using an iodine-specific food frequency questionnaire and three repeated 24-hour dietary recalls while nutritional status was assessed using the Mini Nutritional Assessment (MNA). Cognitive function was assessed by the CogState battery of tests and the Rey Auditory Verbal Learning Task (RAVLT) and mood state determined by the Geriatric Depression Scale (GDS). Associations between iodine status and cognitive tests were assessed by Wilcoxon signed-rank, Pearson, and Spearman rank correlation tests.
Results: Median urinary iodine concentration (MUIC) indicated mild iodine deficiency (71 μg/L; IQR = 55 − 102 μg/L). Iodine status was not significantly associated with any domains of cognitive function. Memory was negatively correlated with mood state (r = -0.375; $p < 0.05$) and