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Beyond nutrients: classification of foods to identify dietary patterns for weight management

Sara Grafenauer

University of Wollongong, sarag@uow.edu.au

Linda Tapsell

University of Wollongong, ltapsell@uow.edu.au

Eleanor Beck

University of Wollongong, eleanor@uow.edu.au

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Abstract

Abstract of a poster presentation.

Keywords

management, beyond, weight, patterns, classification, foods, identify, dietary, nutrients

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Beyond nutrients: Classification of foods to identify dietary patterns for weight management.

Sara Grafenauer¹, Linda Tapsell¹, Eleanor Beck¹.

¹ *The University of Wollongong, Australia*

In weight loss research the effects of isolated nutrients have been studied with little success. Whole-of-diet studies may be more informative, where unique, complementary combinations of foods may result in food synergy achieving weight management goals. However, there is difficulty in defining ideal diets due to problems classifying foods and establishing the relationships between food groupings within a diet model. The latter can be achieved with cluster analysis, but first food categories need to be formed. The aim of this study was to establish food categories from dietary data available from weight loss clinical trial records. A clinical practice tool, a 'ready-reckoner' of foods based on macronutrient composition, provided the reference point for categorisation. Seventeen food categories were defined, including additional categories to allow exploration of foods embedded in broader food groups for example nuts and legumes, often categorised together with meats. Data from diet history records were categorised to provide the number of food groupings consumed over one week for each participant. The categorisation process revealed practice issues concerning the quantification of serving size. The tabulated food category data now lends itself to a more detailed, investigative approach using cluster analysis to provide outputs that are more directly related to the food based consumer advice used in dietetic practice. Through exploring patterns of foods within whole diets, relationships between food choices to promote weight management may be revealed. This study also highlights the importance of exploring dietary patterns alongside nutrient composition relevant to both clinical research and dietetic practice.

Contact author: Sara Grafenauer sarag@uow.edu.au