

Abstract

The Use of Technology in Nutrition Research †

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Good nutrition is essential for health, equity and prosperity. Dietary risk factors such as high sodium and sugar intakes, overweight/obesity, and low fruit and vegetable intakes, are leading causes of poor health and mortality worldwide. Improving diets is a current global priority and it is accepted that both population-level and individual-level approaches are required.

New technologies provide the opportunity to deliver personalised dietary interventions in a way that is also scalable and cost-effective. They also offer exciting potential to monitor population diets objectively and continuously, and assess the impact of natural experiments and new food policies on our food supply.

In this presentation, I will describe a range of technologies used in our DIET research programme, including electronic food purchase data, smartphone apps to promote healthier food choices, and automated wearable cameras that capture images from the perspective of the wearer.

These technologies are being used to deliver and evaluate a range of important dietary research questions including: (1) How is the New Zealand packaged food supply changing over time?; (2) What effects do interpretive front-of-pack nutrition labels have on consumer food choices and industry reformulation efforts?; (3) What impact do smartphone apps promoting healthy eating have on diets?; (4) Do wearable cameras improve the accuracy of dietary assessment?; and (5) What is the frequency and nature of New Zealand children's exposure to unhealthy food and beverage marketing?

Supplementary Material: The presentation is available online at www.mdpi.com/2504-3900/8/1/5/s1.



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