Tackling weighty issues

Weighing up food in a new way

Are there nutritional products that help maintain a healthy body weight? Do certain foods help to suppress hunger? How do you validate a satiety or other food claim?

New Zealand’s only purpose-designed long-stay residential nutrition trials unit is based at The University of Auckland.

The Human Nutrition Unit (HNU) is a facility where food companies can commission product trials that meet FDA standards, ensuring that results can be used to make claims to international regulatory authorities.

HNU provides independent research and consulting for the food industry across a wide range of products from whole foods to food components, bioactives and nutraceuticals.

Trials

With the help of healthy volunteers or patient groups, HNU conducts a range of studies that investigate the relationships between food components and health and wellness issues including:

- obesity
- weight control and appetite regulation
- dyslipidaemias and metabolic syndrome
- contributors to cardiovascular and diabetic risk

Studies may take 1 day, several days or several weeks to complete; and participants may visit the HNU for assessments or may live at the Unit throughout the study – depending on the trial requirements.

Using its GCP-compliant standards, the Human Nutrition Unit can support companies developing new products, from trial design through to validating health claims that meet FDA health claim standards

The big issue

Obesity is a major focus for the unit, given that one in four New Zealand adults and one in 12 children are classed as obese.

HNU researches how nutrition might help prevent and treat diet-related diseases including:

- Causes of obesity – identifying dietary components to modify hunger, satiety and appetite
- Consequences of obesity such as metabolic syndrome, cardiovascular disease and type II diabetes - identifying dietary components to control high cholesterol, blood glucose, inflammation and blood pressure

Until recently, treatment has been seen as the answer, but identifying food-based products that prevent these effects are becoming increasingly important.

*Trials conducted by The Human Nutrition Unit at The University of Auckland confers credibility to a global standard*
Finding the answers with science

New knowledge
Recent studies have included:

• Screening for food components which suppress appetite and energy intake
• Novel lipids for cholesterol lowering
• Dietary fibres for weight loss
• Omega-3 fish oils for improvements in blood lipids and other cardiovascular outcomes

Key market implications

• Validated food claims give access to crucial international markets, including the USA and Europe
• We are heading towards a better understanding of foods that control appetite and encourage satiety, suggesting huge new market opportunities here and overseas
• Obesity is a metabolic and inflammatory disease, so foods that enhance weight loss or ameliorate these effects will be very attractive

HNU

• Consultancy on nutrition regulatory issues, including health claims
• Consultancy, design and development of trial protocols
• Recruitment and screening of volunteer participants
• Trial management and co-ordination
• Data collection, analysis and interpretation
• Publication of peer reviewed scientific articles

Associate Professor Sally Poppitt
Associate Professor in the School of Biological Sciences and Founder/ Director of the Human Nutrition Unit at The University of Auckland.

Sally’s research interests include the control of body weight, appetite regulation, obesity and the metabolic dysregulation accompanying weight gain. She has extensive experience in conducting nutrition intervention trials in developed and developing countries.

Sally Poppitt heads the Human Nutrition Unit, Australasia’s only long-stay residential trials facility, conducting both nutrition and pharmaceutical intervention trials. She is originally from the Dunn Nutrition Unit in Cambridge, United Kingdom. From 2006-2008, Sally was also director of clinical trials development at Protemix Corporation developing therapeutics for obesity-related conditions.

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