With the New Knowledge, How Will Clinical Nutrition Respond?

Biography

Prof. David Cameron-Smith is Chair in Nutrition at University of Auckland, with conjoint appointments with AgResearch and the Riddet Institute. Previously, he was the Director of the National Science Challenge, High Value Nutrition and Research Director of the Liggins Institute. His molecular and clinical nutrition research focuses on the digestion, nutrient-gene interactions and cellular functions of dietary lipids and proteins, with the aim of improving the health of the ageing population. Prof. Cameron-Smith is the Principle Investigator of 19 internationally registered clinical trials and author of more than 230 scientific publications.

Abstract

Personalised nutrition aims to deliver nutritional interventions and therapies that are tailored to the unique needs of each individual. This level of tailored health delivery is increasingly possible with the gains being made with precision analyses, new technologies and opportunities presented with big data. There have been fundamental shifts in service provision questions and challenges abound. These include who will pay (and why), what will they get and is there greater likelihood of a sustained health benefit?

The scientific analysis of personalised nutrition is individuals with compromised health, due in part to personal inadequacies (unhealthy) eating habits. However, the benefits of personalised nutrition are most likely to be preferentially directed to those with the financial resources, who can make the considerable time (and emotional) investment required and who then have the motivation to adhere to the ‘evidence’ of the ‘best diet’ for their unique needs. Thus, at least for early adopters, personalised nutrition is the domain of the ‘worried well’ who will be seeking a wellness ‘edge’ that is defined by ‘feelings’ and perceptions, or miscellaneous health indicators (ie. sleep quality) that are marginally associated with variations in nutritional patterns. It is also not yet clear what health care practitioners currently understand of these current dilemmas, nor how they (and their accrediting organisations/professional bodies) will respond to this deluge of complexity and data. From this complexity, regulatory standards will be established, health care providers will adapt and opportunities for clinical specialisation will emerge.