Early life nutrition associated with healthy life? And if not, what to do?

Obesity as well as other chronic diseases or other non-communicable diseases (NCD) are of multifactorial nature and typically begins during childhood and adolescence. Its etiology is the result of a complex interaction between genetics and the environment, where unbalanced diets play a very important role, even, during lactation and childhood. In the last 10 to 15 years there have been carried out several international projects to validate the hypothesis that health of the adult is base on the early life nutrition. However there is a big debate about how diet determines health status later and how it is related to macro or micronutrients, microbioma or genome. The objective of the keynote is to overview and present data that support the idea that some specific macronutrients such as protein can modulate gens from tissues to produce a bigger demand of energy intake or how tissues are affected to trigger adverse metabolic and health consequences. Other important factor is how to correlate the intake of baby food with the highest fat and protein percentage that produces a down-regulation of more or less number of genes. Such an effect should be further studied in human infants to learn more about the composition of beikost on early programming. Finally, the debate about infant development and how influences the risk of metabolic disorders in offspring with the suggestion that an early nutrition programming may have an epigenetic component such as DNA methylation or histone tail modifications that may provide a persistent memory of earlier nutritional states. Finally, the debate about infant development and how influences the risk of metabolic disorders in offspring with the suggestion that an early nutrition programming may have an epigenetic component such as DNA methylation or histone tail modifications that may provide a persistent memory of earlier nutritional states. Finally, since the overweight and obesity has increased to unexpected levels and if this changed have already taken place, the question is how we can change the already settled situation. Is there any possibility of rolling back?

Biography

Gaspar Ros Berruezo is a Professor of Human Nutrition and Food Science (including Food Safety) at the University of Murcia (UM), serving this Institution for more than 25 years. He has been Post-Doc Fulbright Scholar from 1989-90 at the University of Tennessee at Knoxville, USA. He is a Project Leader of the VITALIS Centre for Research in Food Science, Human Nutrition and Health in the Mediterranean area, under construction. His research interest is to functional foods and ingredients, the metabolism to nutritional functionality (including bioavailability and omics) for normal growth and development on infants and to prevent non-communicable diseases (NCDs) such as cardiovascular diseases or obesity.

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