Design of healthy foods: strategies and perspectives

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While in ancient markets consumers could only take available commodities, now most of them can choose exactly what they want among an enormous variety of products. The main drivers of the consumers’ decision are price, pleasure, convenience and, particularly in the last years, also healthiness.

The proper development of a food product should take into account all the quality parameters that will contribute to its success, therefore it is a very complex matter. To tackle this issue at FQD group the food chain approach was developed. With this strategy the various steps of product development, starting from the selection of raw material through the definition of suitable processing and the possible formulation, can be segmented and combined with several human factors such as the physiological effects, the consumers perception and the decision taken by people working on the food chains.

This talk will focus on healthy foods targeting the gut health which is by far the largest sector for healthy food products. A number of recent scientific discoveries about the functioning of human gastro intestinal system, suggested several possible targets for healthy foods design. They can be aimed at triggering different biochemical pathways and physiological functions.

The need to properly feed our microbiota is a real nutritional priority and, as food scientists, our objective should be to provide the knowledge and the tools to design affordable and delicious foods for the benefit of the gut microbiota. In this lecture some examples of how this can be realized by formulation, encapsulation and processing strategies will be provided.

*Further readings*

Vitaglione, P; Fogliano, V; Pellegrini, N. Coffee, colon function and colorectal cancer, *Food and Function* 2012, 3, 916-922