

Title Consumers and food choice: quality, nutrition and genes
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Abstract

The quantity and quality of food needed for reproduction differs from nutritional needs for health and longevity. The choice of food type and amount is driven by our genetic need for growth and reproduction, not for long term health. So, fast digestible food, rich in energy is searched for. We humans share that drive with almost all animals. The energy carrying nutrients in processed food are more accessible than in the same unprocessed food. That leads to an ever increasing level of processing, and an ever decreasing consumption of raw fruits/vegetables and home cooked meals. In the past, with alternating conditions of food shortage and food abundance, overeating in times of prosperity was a reproductive advantage. However, high energy food becomes a severe nuisance in the age of permanent food abundance. Obesity and heart diseases spread through the developed world. That behaviour is rooted in our genetic instincts. Cultural based sensorial preferences, induced mostly in childhood by an epigenetic mechanism, present a variation around the instinctive rooted preferences. Food choice based on reflective decisions appears of minor importance. Nevertheless, all government campaigns against over-eating appeal to reason, not to instinct. We are faced with a permanent dichotomy between what is good for reproduction and what is good for health. This occurs not only in what and how we eat, but also in all neighbouring areas on the edges of food science, biology, social science, medicine and ethics.