

P32: GENETIC FACTORS BEHIND FOOD PREFERENCES AND PREVENTION OF MODERN WORLD DISEASES

Daniela Pires¹; Marta Silva¹; Micaela Ângelo¹; Célia Alcobia Gomes²

¹ESTeSC – Coimbra Health School, Dietética e Nutrição do Instituto Politécnico de Coimbra

²ESTeSC – Coimbra Health School, Ciências Complementares do Instituto Politécnico de Coimbra

INTRODUCTION: Human beings need to be fed in order to survive, thus, each individual has dietary habits. Some food preferences are innate, but others can be developed after birth, as individuals experience and perceive food flavours. Flavours perception is a complex process, which involves the senses of sight, smell and taste. The sense that allows us to differentiate between bitter, sweet, fat, umami, sour, acid and salty is the taste.

OBJECTIVES: Our aim is to understand how genetic factors affect flavours perception and its influence on dietary choices.

METHODOLOGY: Literature review was conducted through database Pubmed, using as keywords “food preferences”, “nutrigenomic” and “nutrigenetic”.

RESULTS: There are several recent studies that identify genes involved in the physiological mechanisms of food preferences, determining the choice of one food over another, enhancing the development of certain diseases. Genetic variability plays an important role in food preferences. For example, people who are more sensitive to the bitter taste of food (supertasters and tasters) reject bitter vegetables that are rich in antioxidants, consuming larger amounts of processed foods. Excessive consumption of this type of products contributes to the development of co-morbidities such as obesity. On the other hand, nontasters consume more vegetables that promote satiety and are rich in vitamins and minerals.

CONCLUSIONS: Therefore, it's crucial that health professionals recognize the importance of genetics in food choices, equating this factor in the prevention of pathologies, promoting a better nutritional status and also a better quality of life.