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Insect based foods: Consumer perspective

The consumption of foods of animal origin poses some challenges in the present and for the future. The environmental impacts of producing animal protein are relevant, and they include the emission of gases with greenhouse effect (like methane, nitrous oxide, and carbon dioxide), the use of vast areas of land for animal rearing and for cultivation of pastures, consumption of high amounts of water, and pollution of the soil and water. Insects have been pointed out as a more sustainable alternative to conventional sources of meat, including by the FAO (Food and Agriculture Organization of the United Nations). Insects have a considerably lower environmental impact at many levels (lower emission of GHG, less consumption of feed and water, and lower needs of land), while also showing a high conversion ratio from feed to protein food. Additionally they provide high quality of proteins and amino acids, fat, +particularly unsaturated fatty acids, while being rich in a number of minerals and vitamins. Finally, insect farming is less subject to diseases and problems than conventional animal farming, and this implies lower use of hormones and antibiotics. However, to consume insects or insect base foods is not readily accepted in regions where entomophagy is not traditional, and many people in Western Societies experience disgust and neophobia towards edible insects. This is minimized when the insects are not consumed whole and are disguised within other familiar foods in the form of flour, for example. To understand consumer reactions, expectations, motivations and knowledge contributes for a better shaping of actions aiming at increasing acceptability of insect-based foods among western countries. The EISuFood project was dedicated to study the food habits and knowledge about edible insects as sustainable foods in a set of different countries, initially belonging to the consortium (Brazil, Cape Verde, Colombia, Croatia, Greece, Latvia, Lebanon, Lithuania, Mexico, Morocco, Nigeria, Poland, Romania, Serbia, Slovenia, Spain, Turkey).