

***In vitro* Bioaccessibility of Food Packaging Contaminants of Emerging Concern in Foods: a Tool for Human Dietary-Exposome Assessment – BACFood4Expo**

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Human dietary exposure to chemicals is a priority issue for public health authorities and constitutes a key step in risk evaluations.

The safety of food contact materials, such as food packaging, is a main topic in the field of food safety in the EU and requires the evaluation of the chemical substances that can migrate from the material into the food. Among the potential migrants that can be found in packaging materials, the Endocrine disrupting compounds (EDCs) remain a group of chemicals with implications in the occurrence of metabolic diseases with a high prevalence such as Diabetes and Obesity ^{1, 2}. The safety evaluation of these chemical substances that could migrate into food and be absorbed in the gut is very important from a toxicological point of view since foodstuffs undergo a series of processes before being absorbed into the body, such as the gastrointestinal digestion.

BACFood4Expo project intend to address the problem of chemical contamination of food from packaging materials and contribute with relevant information related with the bioaccessibility of chemicals substances and their potential degradation products during the gastrointestinal digestion after the oral intake to assess the impact of human dietary exposure and contribute to their risk assessment.

The *in vitro* bioaccessibility approach proposed, will provide new insights on dietary exposure through the consumption of foods in the Spanish population and may be valuable to help consumers to make wiser food choices, as well as it will enable food safety and health authorities to integrate this information in risk assessment and communication activities.

The BACFood4Expo project findings will also contribute to ensuring the distribution of healthy and safe foods along the food supply chain with economic and social implications since the consumption of healthy and safer foods reduce risk of diseases and therefore reduce the economic costs of national healthcare institutions.

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