Within The International Network on Food Digestion (INFOGEST), **Working Group 3** is focused **on Intestinal Barrier Models**. This working group is led by **Linda Giblin** – Teagasc; Ireland.

The specific objectives of WG3 are:

- To establish a series of recommendations for the treatment of intestinal barriers models with digested food.
- Compare and contrast food permeability data generated from cellular models with *in vivo* food bioavailability data.

WG3 was established in 2019 in response to knowledge gaps identified by conference participants at the 6th International Conference on Food Digestion, Granada, Spain. The WG3 is subdivided into 7 subgroups each with its's own leader.

Harmonizing approaches, between research groups working with intestinal models, will help the scientific community and industry design new foods with improved nutritional and functional properties.

WG3 subgroups:

A. **Food digesta detoxification for cellular models:** Establish protocols to prepare/detoxify digested food samples for addition to intestinal barrier models. Led by Alina Kondrashina – H&H Group, Ireland

WG3 subgroups cont'd:

B. **Inclusion of Brush border enzymes:** How to incorporate brush border enzymes within standardized *in vitro* protocols of food digestion. Led by Gianfranco Mamone - CNR, Italy

C. **Allergenic sensitization/inflammation:** Define critical features that an *in vitro* intestinal barrier model must meet to test the allergenic sensitization/inflammatory activity of food components. Led by Shanna Bastiaan-Net – WUR, The Netherlands

D. **Permeability ring trial:** Perform a ring trial to validate standardized protocols of sample preparation and cell treatments. Led by Beatriz Miralles – CSIC-CIAL, Spain

E. **Fecal/Colonic fermentation detoxification:** Detoxification of fecal/colonic fermentation samples for cell culture research. This subgroup also aims to collate/define protocols to test microbial metabolite bioactivities. Led by Lidia Tomás – AINIA, Spain

F. **Cellular bioassays:** Standardize cellular bioassay protocols to test digested food samples for bioactivity. Led by Elena Arranz UAM, Spain.

G. **Compare & contrast *in vivo* and in *vitro* models of nutrient bioavailability:** What is the correlation of *in vitro* models of nutrient to real life? Leader to be assigned.

If you would like to join our working group, please email Dr. Elena Arranz (elena.arranz@uam.es) with 'INFOGEST-WG3' in the subject heading