

The good, the bad and the ugly: The power of *in vitro* digestion models in elucidating food's digestive fates in different consumers

The global appetite for sustainable, diverse and high-quality foods requires control over their properties as well as digestive fate. This talk presents the utility of *in vitro* digestion models and proteomic analyses to elucidate the complexities of digestive proteolysis. First, we rationalize protein structuring to delineate its differential performance in men, women and seniors. Second, we link protein electrostatic interactions with anionic polysaccharides to hindered proteolysis in children. Last, we suggest tools to shape the colon microbiota of healthy men. Thus, this lecture will offer a menu of possibilities to shape foods and meet the distinct needs of consumers.