

P54: DEVELOPMENT OF *IN VITRO* DIGESTION MODELS FOR FOOD COLLOIDS.

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This is a discussion on the staged development of an *in vitro* model as constructed during the course of five years at the Department of Food Technology, ATEI Thessaloniki. In its initial form, a direct probe of the interactions between mucin (the principal gastrointestinal mucus component) and sodium caseinate (a model food protein) studied the pH-dependence of the two components' interactions, which can be key to the protein's digestion and eventually its bioavailability. A further refinement includes linking up *in vitro* mouth and stomach components, aimed in studying the stability and flocculation of protein-stabilized oil-in-water emulsions moving from the model mouth to the stomach. A more recent development includes a set-up including a model mouth, followed by *in vitro* stomach and duodenum. This model has been used in order to study the kinetics of starch and gluten release from bread during a simulated digestion process.