

Table S-1. Composition of simulated fluids used in the *in vitro* GIT simulation.

Constituent	SSF	SGF	SIF
	pH 7	pH 3	pH 7
	Conc. in SSF	Conc. in SGF	Conc. in SIF
	mmol L ⁻¹	mmol L ⁻¹	mmol L ⁻¹
KCl	15.1	6.9	6.8
KH ₂ PO ₄	3.7	0.9	0.8
NaHCO ₃	13.6	25	-
NaCl	-	47.2	38.4
MgCl ₂ (H ₂ O) ₆	0.15	0.1	0.33
(NH ₄) ₂ CO ₃	0.06	0.5	-
CaCl ₂ (H ₂ O) ₂	1.5	0.15	0.6

Detailed composition of SSF (simulated salivary fluid), SGF (simulated gastric fluid) and SIF (simulated intestinal fluid). CaCl₂(H₂O)₂ is added shortly prior the experiment into the final mixture of simulated fluids due to precipitation that may occur. For pH adjustment HCL 1M and NaOH 1M were used. During gastric phase the pH was adjusted to 2 for fasted state and 4 for fed state. In the final volume of SGF the concentration of pepsin (from porcine gastric mucosa) is 2000 U mL⁻¹. In duodenal phase, pancreatin (from porcine pancreas) is added based on the trypsin activity *i. e.* 40 U mL⁻¹ for fasted state and 100 U mL⁻¹ for fed state, and bile salts are added reaching a concentration of 4 mM for fasted state and 10 mM for fed state.

Table adapted from Minekus *et al.* (2014) ¹.

- 1 M. Minekus, M. Alminger, P. Alvito, S. Ballance, T. Bohn, C. Bourlieu, F. Carrière, R. Boutrou, M. Corredig, D. Dupont, C. Dufour, L. Egger, M. Golding, S. Karakaya, B. Kirkhus, S. Le Feunteun, U. Lesmes, A. Macierzanka, A. Mackie, S. Marze, D. J. McClements, O. Ménard, I. Recio, C. N. Santos, R. P. Singh, G. E. Vegarud, M. S. J. Wickham, W. Weitschies and A. Brodkorb, A standardised static *in vitro* digestion method suitable for food - an international consensus., *Food Funct.*, 2014, **5**, 1113–24.