Electronic Supplementary Material (ESI) for Food & Function.

Dilutied concentration calculation

The calculated values is based on assuming that sample is homogeneously distributed in the stomach throughout the entire digestion process.

Emptying time /min	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240
Emptying volume /ml		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SGF addition volume /ml	/	37.5	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
C_{before}, concentration before dilution		100%	84%	70%	58%	47%	38%	30%	23%	17%	12%	9%	6%	4%	2%	1%	0%
V_{before} volume before dilution /ml		200	188	175	163	150	138	125	113	100	88	75	63	50	38	25	13
V_{after} volume after dilution /ml	200	237.5	225	213	200	188	175	163	150	138	125	113	100	88	75	63	50
C_{after}, concentration after dilution	100%	84%	70%	58%	47%	38%	30%	23%	17%	12%	9%	6%	4%	2%	1%	0%	0%

$$C_{after} = C_{before} \times \frac{V_{before}}{V_{after}}$$

Where C_{after} is the concentration of sample after dilution; C_{before} is the concentration of sample before dilution, it equals to C_{after} at the previous emptying time point, e.g. C_{before} at 30 min =C_{after} at 15 min; V_{before} is the volume of sample inside of the stomach before dilution, V_{before} equals to V_{after} at the previous time point minus the gastric emptying volume, e.g. V_{before} at 30 min=V_{after} at 15 min-50 ml; V_{after} is the volume of sample inside of the stomach after dilution, i.e. V_{after} =V_{before}+SGF addition volume