

Supplementary Information

The particle sizes of the minced salmon and chewed (chopped) intact salmon were measured (Fig. S1). Over 80% of the minced salmon was 0.038 mm or under in size. The intact salmon was chopped and had a mean particle size distribution of between 0.425 and 0.5 mm, which is less than the maximum size required to induce swallowing (~ 1 mm).³¹

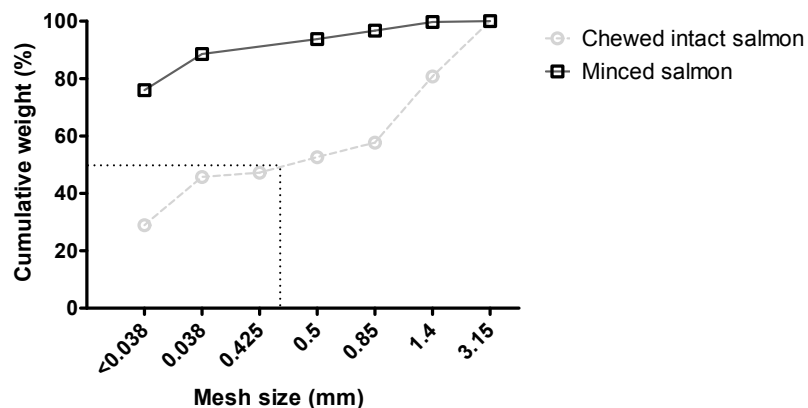


Fig. S1 Particle size cumulative weight percentage. The dashed line represents the mean

Table S1 Simulated salivary fluid (SSF) and simulated gastric fluid (SGF) stock solutions³⁰ used in the *in vitro* digestion experiments. The SGF was then adjusted to pH 1.5

Salt solution added	SSF (pH 7)				SGF (pH 7)	
	Stock concentrations		mL of Stock added to prepare 0.4 L (1.25x)	Final salt conc. in SSF	mL of Stock added to prepare 0.4 L (1.25x)	Final salt conc. in SGF
	g/L	mol/L	mL	mmol/L	mL	mmol/L
KCl	37.3	0.5	15.1	15.1	6.9	6.9
KH ₂ PO ₄	68	0.5	3.7	3.7	0.9	0.9
NaHCO ₃	84	1	6.8	13.6	12.5	25
NaCl	117	2	–	–	11.8	47.2
MgCl ₂ (H ₂ O) ₆	30.5	0.15	0.5	0.15	0.4	0.12
(NH ₄) ₂ CO ₃	48	0.5	0.06	0.06	0.5	0.5
CaCl ₂ (H ₂ O) ₂	44.1	0.3		1.5		0.15
HCl		6	0.09	1.1	–	–

Table S2 Number of participants with plasma samples collected per time point

Time point (h)	0	0.5	1	2	3	4	6
Intact salmon	13	12	13	13	13	13	13
Minced salmon	13	13	13	13	13	12	13
Defatted salmon + oil	13	13	13	13	13	13	13

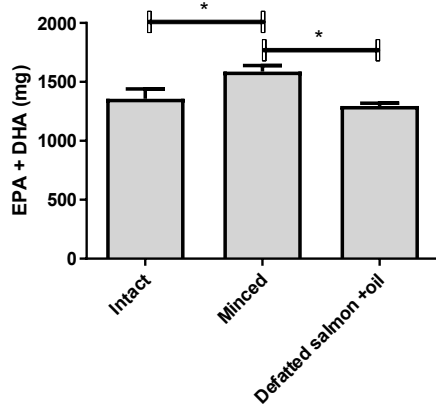


Fig. S2 Average EPA+DHA concentration in all meals used in the study. Intact salmon and minced salmon meal (n=13); defatted salmon + oil meal (n=11). * represents statistical significance ($p < 0.05$). All data represented as mean and SEM.

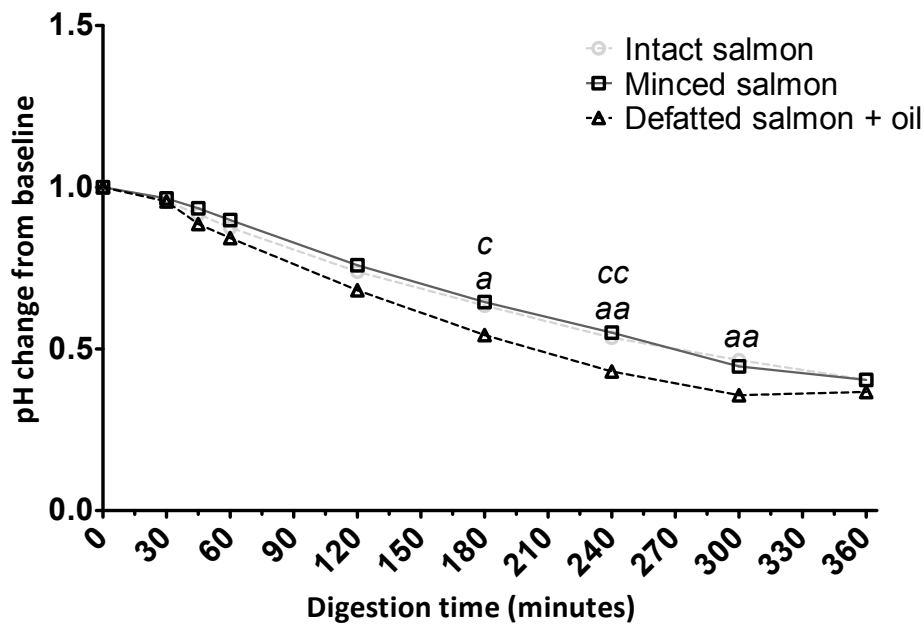


Fig. S3 pH of study meal samples during the *in vitro* digestion (n = 3). Statistical significance represented by: a for intact salmon meal versus defatted salmon + oil meal; b for intact salmon meal versus minced salmon meal; c for minced salmon meal versus defatted salmon + oil meal. a represents statistical significance ($p < 0.05$), aa ($p < 0.01$), aaa ($p < 0.001$). All data represented as mean and SEM.

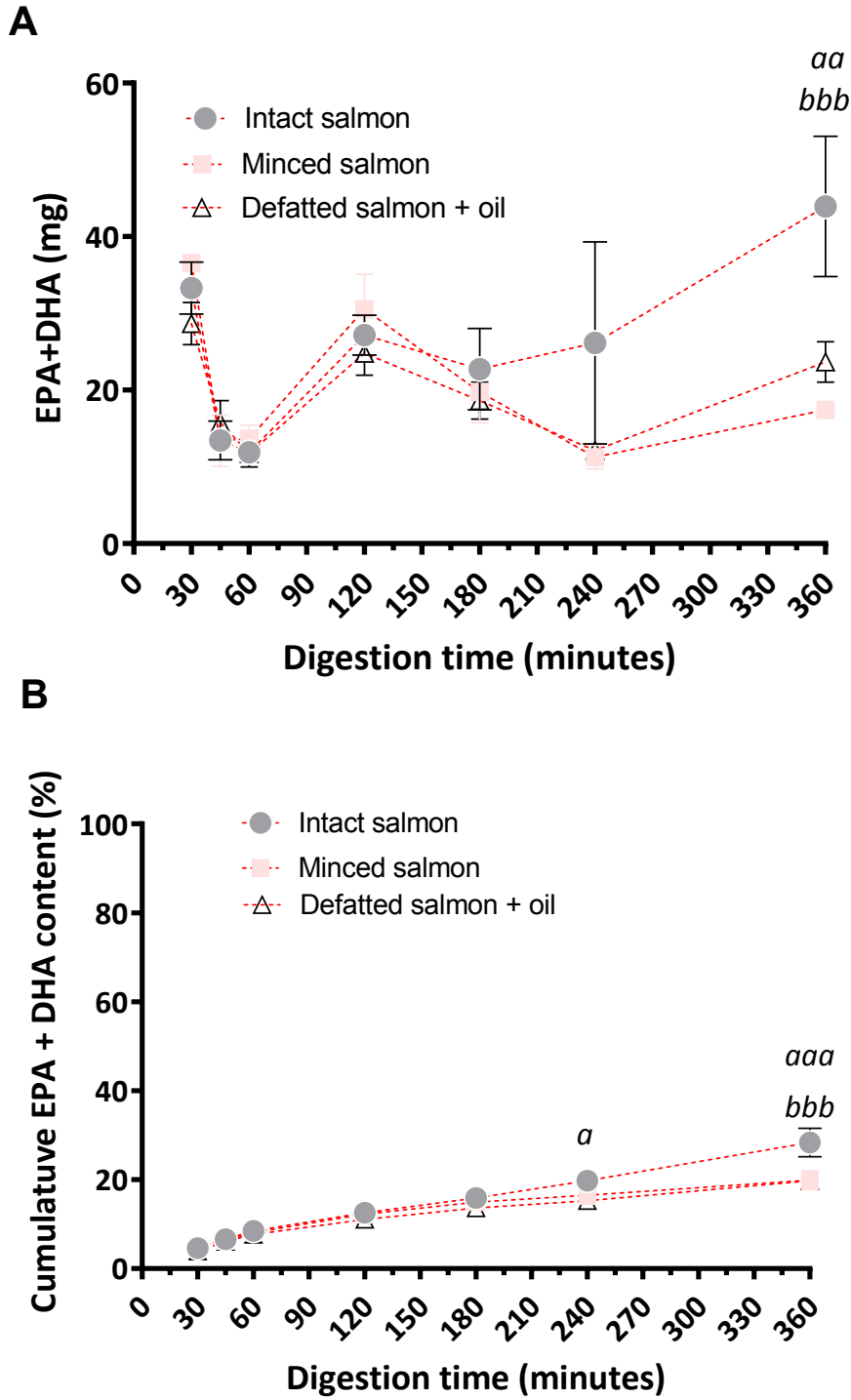


Fig. S4 EPA+DHA emptied from the HGS during the 6 h of the study meal digestion ($n = 3$). (a) Raw data (b) Cumulative percentage of theoretical recovery of EPA+DHA. Statistical significance represented by: *a* for intact salmon meal versus defatted salmon + oil meal; *b* for intact salmon meal versus minced salmon meal; *c* for minced salmon meal versus defatted salmon + oil meal. *a* represents statistical significance ($p < 0.05$), *aa* ($p < 0.01$), *aaa* ($p < 0.001$). All data represented as mean and SEM.

Table S3. Proximate analysis of a typical study meal containing 117 g salmon, 108 ml cream, 30 g potato flakes and 72 g water.

Moisture %	Protein %	Fat %	Carbohydrate %
63.4	8.9	18.9	7.8