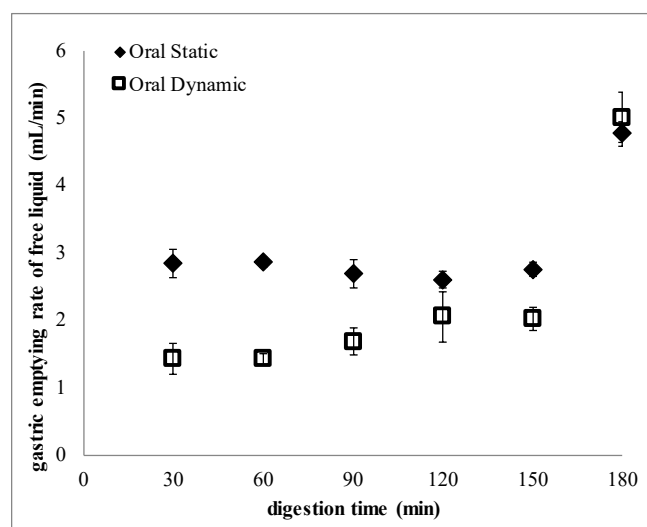


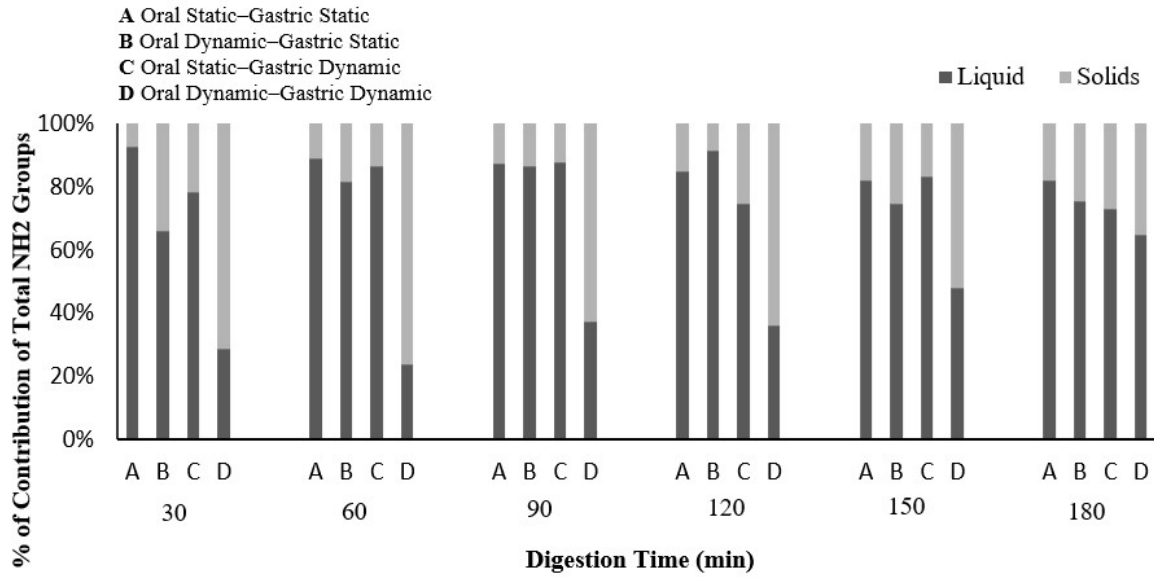
## Supplementary Material

**Supplemental Table 1.** Whole digesta moisture content (solid particles and liquids before separation) from both oral and gastric digestion models. Values represent averages ( $n = 3$ )  $\pm$  standard deviation. Different letters within each column (abcde) and within each row (zyx) represent means that are significantly different across either the row or column ( $p < 0.05$ ).

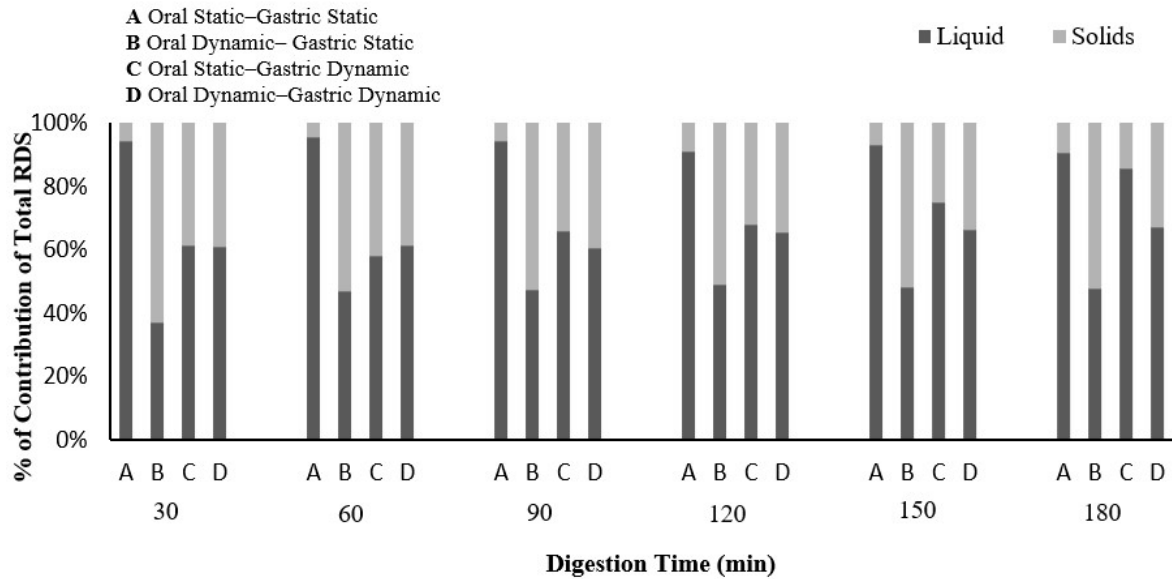
	Digestion time (min)	Oral Static		Oral Dynamic	
		Gastric Static	Gastric Dynamic	Gastric Static	Gastric Dynamic
<b>Whole Digesta Moisture Content</b> (g H <sub>2</sub> O/g dry matter)	30	9.71 <sup>a,zy</sup> $\pm$ 2.07	7.98 <sup>b,y</sup> $\pm$ 0.87	10.94 <sup>a,z</sup> $\pm$ 2.61	4.55 <sup>d,x</sup> $\pm$ 0.46
	60	10.44 <sup>a,x</sup> $\pm$ 2.00	7.79 <sup>b,y</sup> $\pm$ 0.52	10.40 <sup>a,x</sup> $\pm$ 2.09	4.15 <sup>d,z</sup> $\pm$ 0.14
	90	9.41 <sup>a,z</sup> $\pm$ 0.95	8.28 <sup>b,z</sup> $\pm$ 0.21	9.49 <sup>ab,z</sup> $\pm$ 1.65	4.87 <sup>d,y</sup> $\pm$ 0.18
	120	9.74 <sup>a,z</sup> $\pm$ 0.85	9.07 <sup>b,z</sup> $\pm$ 0.19	8.32 <sup>b,zy</sup> $\pm$ 1.96	6.66 <sup>c,y</sup> $\pm$ 1.26
	150	9.44 <sup>a,zy</sup> $\pm$ 0.52	10.62 <sup>a,z</sup> $\pm$ 1.48	8.76 <sup>b,zy</sup> $\pm$ 1.35	8.01 <sup>b,y</sup> $\pm$ 0.68
	180	9.23 <sup>a,y</sup> $\pm$ 1.37	11.79 <sup>a,z</sup> $\pm$ 1.92	8.06 <sup>b,y</sup> $\pm$ 0.92	12.63 <sup>a,z</sup> $\pm$ 1.49



**Supplementary Fig. 1** Gastric emptying rate of free liquid during dynamic gastric digestion after oral static digestion (filled symbols) and oral dynamic digestion (unfilled symbols). Values represent the average ( $n = 3$ )  $\pm$  standard deviation.



**Supplementary Fig. 2** Liquid and solid contribution to the total amino group content of the whole digesta along gastric digestion of all treatments. Values represent the average (n = 3 digestion replicates).



**Supplementary Fig. 3** Liquid and solids contribution to the total reducing sugar content of the whole digesta along gastric digestion of all treatments. Values represent the average (n = 3).