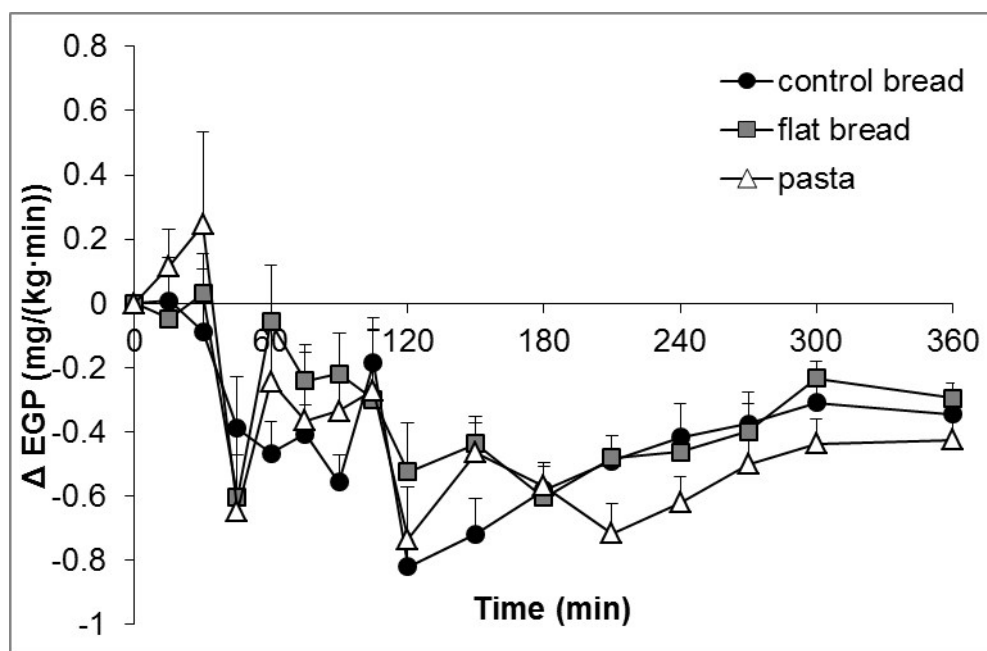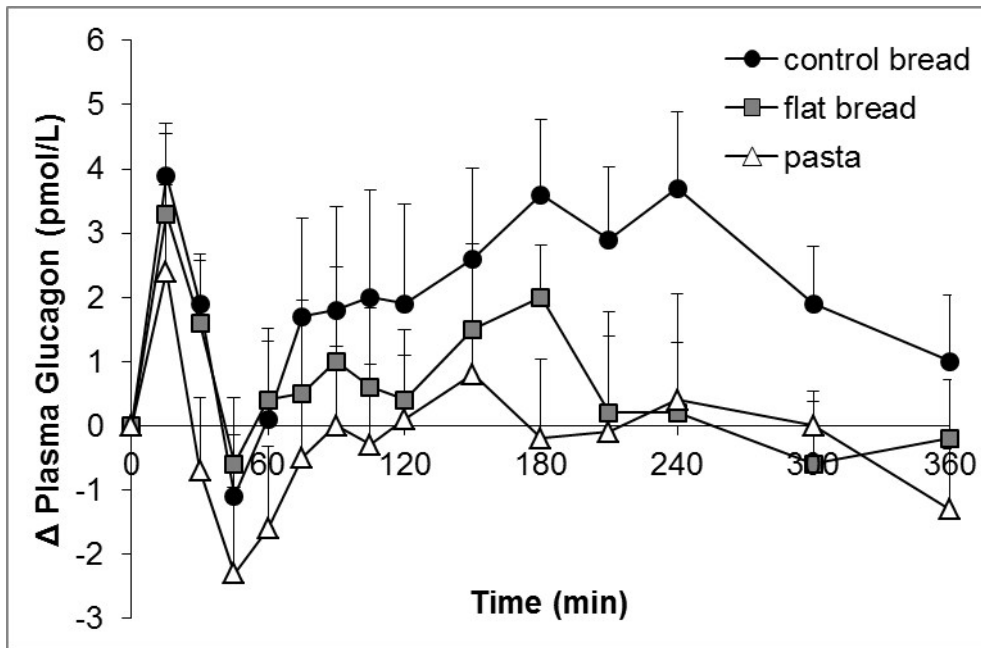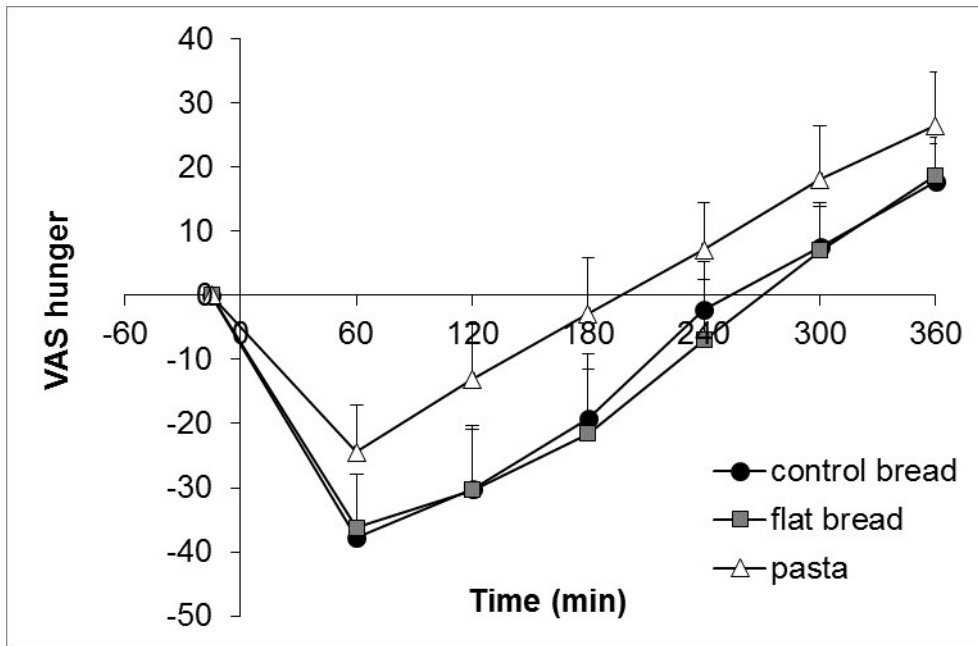Supplementary files

Supplemental Figure 1 Mean (± SEM) changes from baseline of EGP, after ingestion of 138

g ^{13}C-enriched control bread (●), 119 g ^{13}C-enriched flat bread (■), and 127 g ^{13}C-enriched

pasta (Δ) in healthy men (n=10). EGP, endogenous glucose production.

Supplemental Figure 2 Mean (± SEM) changes from baseline in plasma glucagon

concentrations, after ingestion of 138 g ^{13}C-enriched control bread (●), 119 g ^{13}C-enriched flat

bread (■), and 127 g ^{13}C-enriched pasta (Δ) in healthy men (n=10).

Supplemental Figure 3 Mean (± SEM) changes from baseline in subjective rating of hunger using VAS after ingestion of 138 g ^{13}C-enriched control bread (●), 119 g ^{13}C-enriched flat bread (■), and 127 g ^{13}C-enriched pasta (Δ) in healthy men (n=10). VAS, visual analogue scale.

Supplemental Table 1 Image analysis parameters from 3D XRT data[1]

	Average cell wall thickness (µm)	Average cell diameter (µm)	Porosity (%)
Control bread	143 ± 7[a]	900± 143[a]	83± 3[a]
Flat bread	278 ± 22[b]	476 ± 68[b]	47 ± 3[b]
Pasta	188 ± 36[c]	25 ± 1[c]	3 ± 1[c]

[1]Data are presented as means ± SD, n=3. Values followed by different letters in a column are significantly different ($P < 0.05$; LSD test). XRT, X-ray microtomography

Supplemental Table 2 Post hoc analyses of insulin sensitivity after ingestion of 138 g ^{13}C-enriched control bread, 119 g ^{13}C-enriched flat bread and 127 g ^{13}C-enriched pasta (uncooked weight) using GCR and insulin data[1]

	0-2h	0-3h	0-6h
CB	11.0[a]	18.4[a,b]	26.3[a]
FB	11.4[a]	**19.9[a]**	29.4[a]
PA	9.5[a]	**15.6[b]**	26.7[a]

[1]A higher relative value indicates increased insulin sensitivity. Values followed by different letters in a column are significantly different ($P < 0.05$; t-test). CB, control bread; FB, flat bread; PA, pasta.