## **Supplementary material**

**Table S1.** Effects of yacon on morphometric parameters of HFD-fed rats

	SD	HFD	HFD Y340	HFD Y680
Final body weight (g)	429.8 ± 21.0	615.4 ± 28.8a	572.77±10.12 <sup>a,b</sup>	520.28±23.52a,b,c
BMI (%)	$0.71 \pm 0.09$	$0.95 \pm 0.02^{a}$	$0.98 \pm 0.05^{a}$	$0.81 \pm 0.03$ a,b
Lee index (g/cm)	$0.31 \pm 0.01$	$0.34 \pm 0.01^{a}$	0.35±0.01a	$0.32 \pm 0.01$ b
TC (cm)	$17.50 \pm 0.50$	$21.88 \pm 1.70^{a}$	$18.50 \pm 1.06$ <sup>b</sup>	$17.25 \pm 0.57$ a,b,c
AC (cm)	$17.33 \pm 1.04$	$22.20 \pm 1.24^{a}$	$19.33 \pm 0.71$ a,b	$17.75 \pm 0.57$ a,b,c
AC/TC	$1.01 \pm 0.02$	$1.09 \pm 0.05^{a}$	$1.04 \pm 0.03$	$0.98 \pm 0.01$ <sup>b</sup>

Values are means  $\pm$  standard deviation (n = 6 rats/group).  $^a$  p < 0.05 compared to the SD.  $^b$  p < 0.05 compared to the HFD. TC, thoracic circumference; AC, abdominal circumference

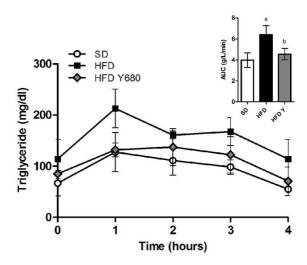


Figure S1. Effects of yacon flour on serum triglyceride after oral fat-loading in HFD-fed rats. Time course of triglycerides after a single yacon-tablet (680 mg FOS/kg body weight) followed of normal standard chow administration at 0,1,2,3 and 4 h (Insert: area under the curve of serum triglycerides following 2.5 ml/ kg b.w. of corn oil administration). Data are expressed as the mean  $\pm$  standard deviation (n = 6 / group).  $^{\rm a}$ p < 0.05 vs. SD,  $^{\rm b}$ p < 0.05 vs. HFD. SD: Standard-diet fed rats; HFD: High-fat diet- fed rats; HFD Y680: High-fat diet- fed rats supplemented with yacon flour (680 mg FOS/kg body weight).

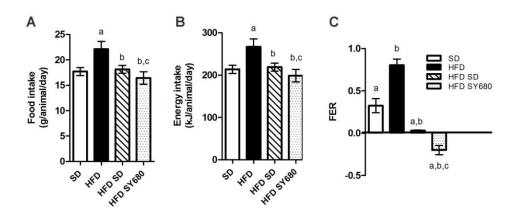


Figure S2. Effects of yacon supplement and the reversion to a SD diet on HFD-induced metabolic disease. A: Food intake. B: Energy intake. C: Feed efficiency ratio (FER). Data are mean  $\pm$  standard deviation (n= 6 / group).  $^ap$  < 0.05 vs. SD,  $^bp$  < 0.05 vs. HFD,  $^cp$  < 0.05 vs. HFD SD. SD: Standard-diet fed rats; HFD: High-fat diet- fed rats; HFD SD: High-fat diet- fed rats reversed to a SD diet; HFD SY680: High-fat diet- fed rats reversed to a SD diet and supplemented with yacon flour (680 mg FOS/kg b. w.).