

Table S1. Inflammatory status in mice fed with a high-fat diet (HFD) and a standard diet (SD) with and without supplementation of FGM and mixes

Groups	TNF- α	MCP-1	IL-6	IL-10
Control	12.23 \pm 9.75 ^a	8.60 \pm 8.60 ^a	14.77 \pm 1.24 ^a	8.08 \pm 0.16 ^a
Control+FGM	12.90 \pm 3.20 ^a	5.55 \pm 5.55 ^a	50.98 \pm 4.93 ^{ab}	8.28 \pm 0.02 ^a
Ob+ FGM	43.90 \pm 10.16 ^b	58.97 \pm 10.85 ^b	320.61 \pm 85.23 ^c	8.38 \pm 0.16 ^a
Ob+FGM+Mix1	21.90 \pm 10.90 ^{ab}	19.20 \pm 19.20 ^{ab}	122.50 \pm 9.20 ^b	8.29 \pm 0.04 ^a
Ob+FGM+Mix2	24.95 \pm 9.15 ^{ab}	13.37 \pm 9.60 ^a	43.93 \pm 6.06 ^{ab}	8.26 \pm 0.18 ^a
Ob+FGM+Mix3	35.25 \pm 1.15 ^{ab}	18.75 \pm 2.95 ^{ab}	38.43 \pm 19.76 ^{ab}	8.39 \pm 0.06 ^a
Ob+FGM+Mix4	31.10 \pm 8.70 ^{ab}	37.10 \pm 21.05 ^{ab}	55.65 \pm 17.25 ^{ab}	8.28 \pm 0.02 ^a

Cytokines (pg mL⁻¹). Data values (n=6) are shown as mean \pm standard error (SEM). Values with different superscript letters in the same column are significantly different (p < 0.05) as assessed by Tukey's test.

Table S2. Biochemical parameters of mice fed with a high-fat diet (HFD) or a standard diet (SD) with and without supplementation of FGM and mixes

Groups	Leptin	Glucose	TG	TC	LDL-c	HDL-c
Control	92.71 \pm 3,41 ^a	0.94 \pm 0.04 ^{abc}	0.26 \pm 0.04 ^a	0.38 \pm 0.02 ^a	0.26 \pm 0.02 ^a	0.10 \pm 0.01 ^a
Control+FGM	180.9 \pm 37,67 ^a	1.13 \pm 0.18 ^{bcd}	0.24 \pm 0.02 ^a	0.46 \pm 0.01 ^{ab}	0.32 \pm 0.02 ^{ab}	0.13 \pm 0.01 ^b
Ob+ FGM	1567 \pm 133,80 ^{cd}	1.61 \pm 0.16 ^e	0.44 \pm 0.05 ^c	0.54 \pm 0.03 ^b	0.38 \pm 0.03 ^{ab}	0.10 \pm 0.01 ^a
Ob+FGM+Mix1	1819 \pm 106,30 ^{de}	1.22 \pm 0.06 ^d	0.50 \pm 0.05 ^c	0.57 \pm 0.03 ^b	0.36 \pm 0.05 ^{ab}	0.15 \pm 0.01 ^b ^c
Ob+FGM+Mix2	1444 \pm 76.15 ^{bc}	0.92 \pm 0.07 ^{ab}	0.29 \pm 0.03 ^{ab}	0.57 \pm 0.07 ^b	0.32 \pm 0.08 ^{ab}	0.16 \pm 0.01 ^c
Ob+FGM+Mix3	1225 \pm 55.38 ^b	0.83 \pm 0.04 ^a	0.39 \pm 0.04 ^{bc}	0.59 \pm 0.04 ^b	0.37 \pm 0.05 ^{ab}	0.16 \pm 0.01 ^c
Ob+FGM+Mix4	1967 \pm 96,25 ^e	1.19 \pm 0.06 ^{cd}	0.46 \pm 0.04 ^c	0.57 \pm 0.04 ^b	0.40 \pm 0.04 ^b	0.13 \pm 0.01 ^b

Leptin (pg mL⁻¹); Glucose; TG: triglycerides; TC: total cholesterol; LDL-c: low-density lipoprotein cholesterol; HDL-c: high-density cholesterol; (g L⁻¹). Data values (n=6) are shown as mean \pm standard error (SEM). Values with different superscript letters in the same column are significantly different (p < 0.05) as assessed by Tukey's test.