

Supplementary material

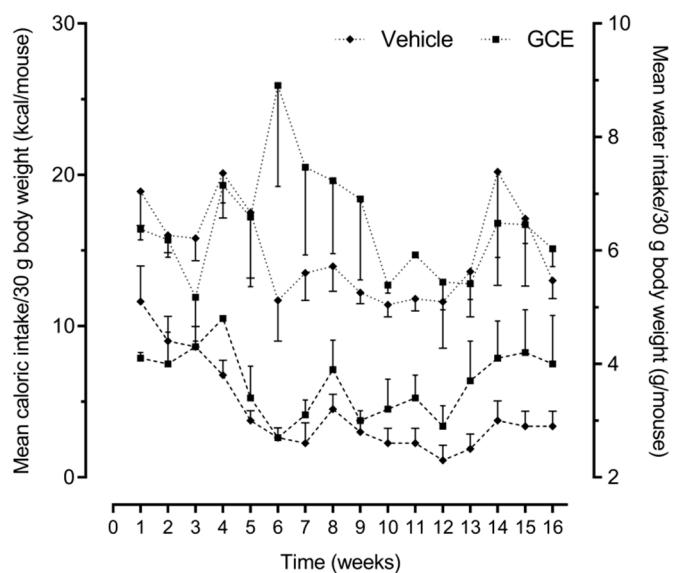


Figure S1. Average intake of calories (dotted line, left Y axis) and water (dashed lines, right Y axis), adjusted for mean body weight and measured over a 20 h window as the difference in the weight between the food/water put into the cage and the remaining food/water at the end of the observation period. Data are expressed as the mean \pm SEM.

Table S1. Mass spectral parameters used for catecholamine and metanephrine analyses.

Compound	RT (min)	MRM transitions (m/z)	Cone voltage (V)	Collision energy (V)
Dopamine (u)	1.32	154→91* 154→119	22 22	20 18
Dopamine-d4 (s)	1.32	158.01→94.72	22	30
3-Methoxytyramine (u)	0.89	168.1→91* 168.1→119	22 22	24 18
3-Methoxytyramine-d4 (s)	0.89	172.03→94.90	20	34
Norepinephrine (u)	2.12	170→152* 170→107	14 14	6 20
Norepinephrine-d6 (s)	2.10	176.03→158.07	16	10
Epinephrine (u)	1.54	184.1→166* 184.1→107.0	20 20	8 20
Epinephrine-d6 (s)	1.54	190.04→172.03	20	18
Normetanephrine (u)	1.24	184.1→166* 184.1→134.1	20 12	8 18
Normetanephrine-d3 (s)	1.24	187.02→169.07	14	10
Metanephrine (u)	0.97	198.1→180* 198.1→165.1	18 18	8 18
Metanephrine-d3 (s)	0.97	201.03→183.03	18	16

(u): compounds detected in urine samples (s): spiked at 80 ng/mL in urine samples. *SRM was used for quantification purposes

Table S2. Histological analysis scores for steatosis and fibrosis in the liver.

Lipid content assessment (Oil Red O)			Fibrosis assessment (Picosirius Red)		
Parameter	Stage	Score	Parameter	Stage	Score
Vacuolization	Absent	0	Periportal	No fibrosis	0
	Small and scattered	1		Scattered (incomplete lamellae)	1
	Abundant	2		Fibrosis (complete lamellae)	2
Lipid inclusions size	Absent	0	Perisinusoidal	Portal-portal septa	3
	Microvesicles	1		No fibrosis	0
	Intermediate-vesicles	2		Mild (5-50%)	1
	Macrovesicles	3		Severe (>50%)	2
Area	< 5%	0			
	25%	1			
	50%	2			
	75%	3			
	>75%	4			

Table S3. GC/MS analysis conditions for free fatty acids, triglycerides and total cholesterol in liver samples

	Free fatty acids	Triglycerides	Cholesterol
Sample preparation:	50 μ L of pyridine + 50 μ L of BSTFA 70°C for 2 h, injected directly	Dissolved in 100 μ L of hexane	Dissolved in 100 μ L of hexane
Column:	Capillary column HP5; 30 m, 0.25 mm i.d., film thickness 0.25 μ m, J&W Scientific	Capillary column CPTAB Triglyceride analysis; 25 m, 0.25 mm i.d., film thickness 0.1 μ m, J&W Scientific	Capillary column HP5; 30 m, 0.25 mm i.d., film thickness 0.25 μ m, J&W Scientific
Injection inlet	280°C, 1 μ L	380°C, 1 μ L	280°C, 1 μ L
Oven:	120°C (5 min), 180°C (7°C/min, 5 min), 200°C (10°C/min, 5 min), 300° (10°C/min, 5 min), 310°C (10°C/min, 5 min)	180°C (1 min), 350°C (8°C/min, 1 min), 360°C (2°C/min, 4 min).	240°C (1 min), 310°C (15°C/min, 5 min)
Carrier:	Helium, 1 mL/min	Carrier: Hydrogen, 1 ml /min	Carrier: Helium, 1 ml /min
Detection:	Mass selective detector (MS) Ionization chamber: 230°C Quadrupole: 150°C 7.40 scan $^{-1}$, 40–700 m/z Ionization energy 70 eV	Flame Ionization Detector (FID)	MS/SIM ions (Single Ion Monitoring) Ionization chamber: 230°C Quadrupole: 150°C Ionization energy 70 eV SIM Cholesterol Ions: 145 (quantifier) and 275, 255, and 105 (identifier) SIM ISTD ions: 314(quantifier) and 145 and 105 (identifier).
Quantitation:	C19:0 standard (5–200 μ g/mL response factor; Signal deconvoluted for identification and quantitation by NIST AMDIS V. 2.68 software	Response factors of cocoa butter triglycerides standard (5–30 μ g/mL).	Cholesterol standard (150–500 μ g/mL).

Table S4. Triglycerides, free fatty acids and total cholesterol in liver samples

Triglycerides (mg/g)	Vehicle	GCE	Free fatty acids and cholesterol (mg/g)	Vehicle	GCE
PPP	0.32 ± 0.15	0.23 ± 0.07	Myristic acid	0.09 ± 0.01	0.10 ± 0.01
MOP	1.62 ± 1.24	0.82 ± 0.64	Pentadecanoic acid	0.03 ± 0.01	0.04 ± 0.00
PPS	6.98 ± 2.76	2.50 ± 1.17*	Palmitoleic acid	0.51 ± 0.15	0.30 ± 0.10
POP	6.66 ± 3.11	6.68 ± 2.67	Palmitic acid	1.45 ± 0.33	1.58 ± 0.21
PLP	1.84 ± 1.41	1.07 ± 0.69	Linoleic acid	0.17 ± 0.04	0.17 ± 0.04
PSS	5.99 ± 7.70	7.70 ± 2.77	Oleic acid	2.62 ± 0.31	2.23 ± 0.36
POS	15.92 ± 10.47	8.84 ± 4.33***	Elaidic acid	0.63 ± 0.69	0.33 ± 0.06
POO	6.20 ± 7.28	0.41 ± 0.24**	Stearic acid	0.37 ± 0.07	0.50 ± 0.08
PLS	1.72 ± 1.04	0.65 ± 0.35	Arachidonic acid	0.14 ± 0.06	0.12 ± 0.05
PLO	0.61 ± 0.22	0.47 ± 0.21	Eicosatrienoic acid	0.03 ± 0.01	0.03 ± 0.01
SOS	34.30 ± 13.83	22.90 ± 10.23**	Eicosadienoic acid	0.07 ± 0.01	0.07 ± 0.01
SOO	3.45 ± 2.86	1.64 ± 0.79	cis-11-Eicosenoic acid	0.06 ± 0.01	0.06 ± 0.01
SLS+OOO	5.12 ± 2.81	3.88 ± 1.90	Arachidic acid	0.02 ± 0.01	0.02 ± 0.00
SLO	0.91 ± 0.37	0.87 ± 0.29	Docosahexaenoic acid	0.16 ± 0.15	0.07 ± 0.05
SOA	6.55 ± 3.74	3.84 ± 1.76	Total FFAs	6.36 ± 0.69	5.61 ± 0.67
Total TG	98.82 ± 39.30	66.99 ± 21.66*	Total cholesterol	1.94 ± 0.74	2.05 ± 0.47

PPP: tripalmitin, MOP: 1-margaroyl-2-oleoyl-3-palmitoylglycerol, PPS: 1,2-dipalmitoyl-3-stearoylglycerol, POP: 1,3-dipalmitoyl-2-oleoylglycerol, PLP: 1,3-dipalmitoyl-2-linoleoylglycerol, PSS: 1-palmitoyl-2,3-distearoylglycerol, POS: 1-palmitoyl-2-oleoyl-3-stearoylglycerol, POO: 1-palmitoyl-2,3-dioleoylglycerol, PLS: 1-palmitoyl-2-linoleoyl-3-stearoylglycerol, PLO: 1-palmitoyl-2-linoleoyl-3-oleoylglycerol, SOS: 1,3-distearoyl-2-oleoylglycerol, SOO: 1-stearoyl-2,3-dioleoylglycerol, SLS: 1,3-distearoyl-2-linoleoyl glycerol, OOO: triolein, SLO: 1-stearoyl-2-linoleoyl-3-oleoylglycerol, SOA: 1-stearoyl-2-oleoyl-arachidoylglycerol

*p<0.05; **p<0.01; ***p<0.001