

1 **Supplementary materials**

2

3 **Effects of Medium Chain Triglycerides on Lipid Metabolism**

4 **in High-fat Diet Induced Obese Rats**

5 Jiaheng Xia^{a,b,c}, Ping Yu^{a,b,c}, Zengling Zeng^{a,b,c,*}, Maomao Ma^{a,b,d}, Xianghui Yan^{a,b,c},

6 Junxin Zhao^{a,b,d}, Deming Gong^{a,b,c}, Guohua Zhang^{a,b,d}, Jun Wang^{a,b,c}

7 ^aState Key Laboratory of Food Science and Technology, Nanchang University,

8 Nanchang 330047, China.

9 ^bJiangxi Province Key Laboratory of Edible and Medicinal Resources Exploitation,

10 Nanchang University, Nanchang 330031, China.

11 ^cSchool of Resource and Environmental and Chemical Engineering, Nanchang

12 University, Nanchang 330031, China.

13 ^dSchool of Food Science and Technology, Nanchang University, Nanchang 330031,

14 China.

15 ^eNew Zealand Institute of Natural Medicine Research, 8 Ha Crescent, Auckland 2104,

16 New Zealand.

17 *Corresponding authors:

18 Professor Zheling Zeng, PhD, E-mail: zljengjx@hotmail.com; zljengjx@163.com

19 Tel.: +86-791-88510806, Fax: +86-791-88510806

20 2. Materials and methods

21 2.4. Obesity Markers

22 The body weight (BW), food and energy consumption were monitored weekly. At the
23 end of 24 weeks' experimental period, the rats were sacrificed, the BW, the weights of
24 abdominal fats (mesenteric, epididymal, retroperitoneal) and main organs (heart, liver,
25 spleen and kidney) were measured. Body mass index (BMI), Lee's index, abdominal
26 fat index and organ index were calculated.

$$27 \quad BMI = \frac{\text{body weight (g)}}{(\text{body length (cm)})^2} \quad (1)$$

$$28 \quad \text{Lee's index} = \frac{\sqrt[3]{(\text{body weight (g)})}}{\text{nasal - anal length (cm)}} \quad (2)$$

29

$$30 \quad \text{abdominal fat index (\%)} = \frac{\text{abdominal fat weight (g)}}{\text{body weight (g)}} \times 100\% \quad (3)$$

31

$$32 \quad \text{organ index (\%)} = \frac{\text{organ weight (g)}}{\text{body weight (g)}} \times 100\% \quad (4)$$

Table S1. Primary antibody information

Antibodies	Details	Dilution
SREBP-1c	Affinity,Rabbit Polyclonal, AF4728	1:1000
PPAR γ	Servicebio, Rabbit Polyclonal, GB11164	1:1000
ACC1	Proteintech,Rabbit Polyclonal, 21923-1-AP	1:500
FASN	Proteintech,Rabbit Polyclonal, 10624-2-AP	1:500
ATGL	Proteintech,Rabbit Polyclonal, 55190-1-AP	1:1000
HSL	Affinity, Rabbit Polyclonal, AF6403	1:1000
LPL	Affinity, Rabbit Polyclonal, DF6225	1:800
PPAR α	Bioss, Rabbit Polyclonal, bs-23398R	1:1000
CPT-1a	Proteintech, Rabbit Polyclonal, 15184-1-AP	1:1000
HMGCR	Bioss, Rabbit Polyclonal, bs-5068R	1:500
SR-B1	Proteintech, Rabbit Polyclonal, 21277-1-AP	1:500
LDLR	Proteintech, Rabbit Polyclonal, 10785-1-AP	1:2000
PCSK9	Proteintech, Rabbit Polyclonal, 55206-1-AP	1:1000
ABCA1	Abcam, Rabbit Polyclonal, ab66217	1 μ g/ml
ABCG1	Abcam, Rabbit Polyclonal, ab52617	1:1000
ABCG5	Proteintech, Rabbit Polyclonal, 66369-1-Ig	1:2500
ABCG8	Proteintech, Rabbit Polyclonal, 15184-1-AP	1:1000
FXR	Proteintech, Rabbit Polyclonal, 25055-1-AP	1:1000
CYP7A1	Bioss, Rabbit Polyclonal, bs-2399R	1:1000
CYP27A1	Proteintech, Rabbit Polyclonal,14739-1-AP	1:500
CYP8B1	Santa Cruz Biotechnology, Mouse Monoclonal, sc-101387	1:1000
NPC1L1	Santa Cruz Biotechnology, Mouse Monoclonal, sc-166802	1:1000
TGR5	Abcam, Rabbit Polyclonal, ab72608	1:1000
Goat anti- mouse	Proteintech, HRP conjugate, SA00001-1	1:5000
Goat Anti-Rabbit	Proteintech, HRP conjugate, SA00001-2	1:5000

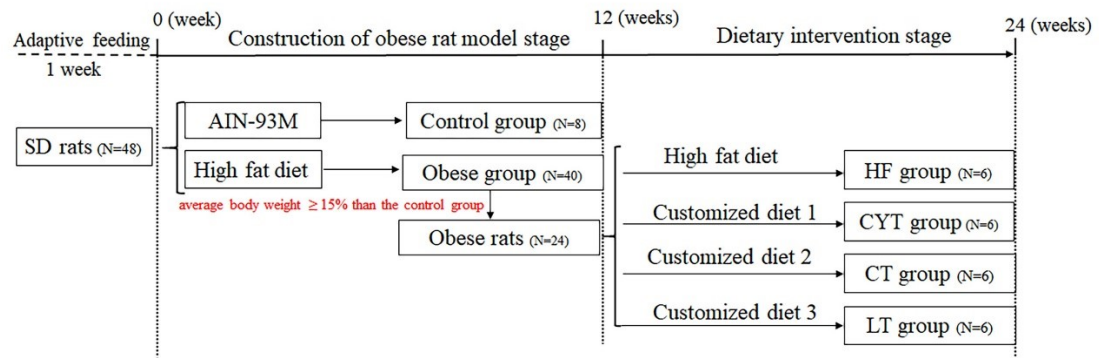


Figure S1 Description of the animal experiment