1

Appendix A. Supplementary material

2 Table S1

3 The body weight of mice of different group from 0^{th} to 5^{th} week.

Time	Body weight (g)						
(w)	BCD	HFD	MET	DCS	DCSK		
0	25.20 ± 1.95	25.12 ± 0.91	25.05 ± 1.73	24.33 ± 1.44	23.75 ± 1.61		
1	23.80 ± 1.31	25.72 ± 0.54	25.04 ± 1.45	25.29 ± 1.54	23.55 ± 1.28		
2	23.56 ± 1.58	25.99 ± 0.93	24.94 ± 1.37	24.28 ± 0.43	23.40 ± 1.53		
3	23.79 ± 1.24	26.12 ± 0.90	24.75 ± 1.13	25.40 ± 2.07	22.71 ± 1.77		
4	23.81 ± 1.37	25.92 ± 1.12	24.64 ± 1.51	25.50 ± 1.97	23.29 ± 1.89		
5	23.90 ± 1.01	26.22 ± 0.53	24.10 ± 1.06	25.45 ± 1.48	23.1 ± 1.28		

4 Each value was represented as mean \pm SD (n = 8).

Group	А	$R^{2}X$ (cum)	R ² Y (cum)	Q ² (cum)
BCD VS HFD	3	0.524	0.994	0.861
MET VS HFD	2	0.514	0.990	0.906
DCS VS HFD	2	0.545	0.995	0.962
DCSK VS HFD	2	0.522	0.996	0.961

5 Table S2 The OPLS-DA parameters of fecal samples of mice of different groups in the

6 positive model.

7 Note: A, the number of principal components; R²X, the interpretation rate of the X
8 matrices of the built model; R²Y, the interpretation rate of the Y matrices of the built
9 model; Q2, the projection ability of the model.

10 Figure Captions

- 11 Fig. S1 Effects of DCS and DCSK on blood glucose level in T2D mice. Note: #p < 0.05
- 12 vs the BCD group, *p < 0.05 vs the HFD group.
- 13 Fig. S2 Rarefaction curve (top) and rank abundance (bottom) of intestinal microbiota
- 14 of the four experimental groups on otu level.
- 15 Fig. S3 Principal coordinates analysis (PCoA) of the differences in structure of
- 16 intestinal microbiota among the five experimental groups based on weighted (left) and
- 17 unweighted unifrac distance (right).
- 18 Fig. S4 The OPLS-DA score plot from BCD, HFD, MET, DCS and DCSK groups in
- 19 the positive mode.

20 Fig. S1





22 Fig. S1 Effects of DCS and DCSK on blood glucose level in T2D mice. Note: #p < 0.05

23 vs the BCD group, *p < 0.05 vs the HFD group.



27 Fig. S2 Rarefaction curve (top) and rank abundance (bottom) of intestinal microbiota

28 of the four experimental groups on otu level.

Fig. S3 Principal coordinates analysis (PCoA) of the differences in structure of
intestinal microbiota among the five experimental groups based on weighted (left) and
unweighted unifrac distance (right).

34 Fig. S4

37 Fig. S4 The OPLS-DA score plot from BCD, HFD, MET, DCS and DCSK groups in

38 the positive mode.