

Table S1 Sequences of primer used for RT-qPCR analysis

Gene	Primer sequences (5'-3')
β -actin-F	TCCAGCCTTCCTTCTTGGGTATG
β -actin-R	CATCCTGTCAGCAATGCCTGGGTAC
G6PC-F	AGGTCGTGGCTGGAGTCTTGTC
G6PC-R	AATGCAGGCGAAGCGGAATGG
PEPCK-F	AAGGAGTGGAGACCGCAGGAC
PEPCK-R	TGCCGAAGTTGTAGCCGAAGAAG
FOXO1-F	CCTGAGCCTGCTGGAGGAGAG
FOXO1-R	GCACGCTCTTCACCATCCACTC
GSK3 β -F	ACCCTCATTACCTGACCTT
GSK3 β -R	TCGGCAGACAATTCAACTC
IRS-1-F	GCTCTCCTTCAGTTCGATGT
IRS-1-R	CTCAACTCCACCACTCTCCT
PI3K-F	CGCGCCTTTGCCTTTCAATC
PI3K-F	ATGCGGTACAGGCCAGAGAT
Akt-F	GGATGAAGTCGCCCACACAG
Akt-R	CCCgATCCTCCGTGAAGACT
U6-Loop	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAAATATG
U6-F	AGAGAAGATTAGCATGGCCCCTG
U6-R	GTGCAGGGTCCGAGGT
miRNA-26a-Loop	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAGCCTA
miRNA-26a-F	CGCGTTCAAGTAATCCAGGA
miRNA-26a-R	AGTGCAGGGTCCGAGGTATT
miRNA-126a-Loop	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCGCATT
miRNA-126a-F	CGCGTCGTACCGTGAGTAAT
miRNA-126a-R	AGTGCAGGGTCCGAGGTATT
miRNA-451-Loop	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAACTCA
miRNA-451-F	CGCGAAACCGTTACCATTAC
miRNA-451-R	AGTGCAGGGTCCGAGGTATT
miRNA-29a-Loop	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACTAACCG
miRNA-29a-F	CGCGTAGCACCATCTGAAAT
miRNA-29a-R	AGTGCAGGGTCCGAGGTATT

Table S2 Effect of WGH on weekly blood glucose change in db/m and db/db mice (mmol/L, n = 8)

Weeks	NC	MC	Met	FA	LD	MD	HD
1	7.40 ± 0.76a	21.83 ± 3.66b	22.52 ± 2.09b	23.20 ± 3.19b	22.70 ± 2.84b	23.17 ± 1.72b	22.93 ± 3.34b
2	8.46 ± 0.83a	22.69 ± 2.40b	21.08 ± 3.80b	22.11 ± 4.30b	21.48 ± 2.42b	22.42 ± 3.08b	21.34 ± 2.82b
3	8.50 ± 0.59a	24.16 ± 4.47c	20.50 ± 2.08b	21.93 ± 3.80bc	20.46 ± 2.25b	21.24 ± 3.43b	20.31 ± 2.50b
4	8.07 ± 0.56a	26.16 ± 4.81c	18.29 ± 3.68b	20.11 ± 2.60b	19.23 ± 2.42b	20.30 ± 2.27b	19.49 ± 2.02b
5	8.27 ± 0.55a	28.57 ± 3.85c	17.18 ± 2.86b	18.04 ± 4.76b	18.58 ± 1.35b	18.34 ± 2.30b	17.78 ± 3.70b
6	8.44 ± 0.65a	27.69 ± 3.59c	16.79 ± 3.64b	17.20 ± 3.43b	18.05 ± 2.04b	17.82 ± 2.76b	16.73 ± 3.85b
7	8.17 ± 0.85a	25.32 ± 3.30c	15.26 ± 2.61b	15.94 ± 3.43b	17.52 ± 3.45b	16.85 ± 2.34b	15.66 ± 3.40b
8	8.13 ± 0.50a	26.68 ± 3.04d	13.52 ± 2.93b	14.72 ± 2.59bc	16.26 ± 3.77c	15.48 ± 2.26bc	13.88 ± 2.54bc

Values with different lowercase letters in each row differ significantly at $p < 0.05$.