

# Glycerol Monocaprylate Modulates Gut Microbiota and Increases Short-Chain Fatty Acids Production Without Adverse Effects on Metabolism and Inflammation

Junhui Zhang <sup>1,2</sup>, Fengqin Feng <sup>1,2</sup> and Minjie Zhao <sup>1,2,\*</sup>

<sup>1</sup> College of Biosystems Engineering and Food Science, National Engineering Laboratory of Intelligent Food Technology and Equipment, Key Laboratory for Agro-Products Postharvest Handling of Ministry of Agriculture and Rural Affairs, Key Laboratory for Agro-Products Nutritional Evaluation of Ministry of Agriculture, Zhejiang University, Hangzhou 310058, China; zhangjunhui9916@163.com (J.Z.); feng\_fengqin@hotmail.com (F.F.)

<sup>2</sup> Ningbo Research Institute, Zhejiang University, Ningbo 315100, China

\* Correspondence: minjiezha@zju.edu.cn; +86-571-88982981

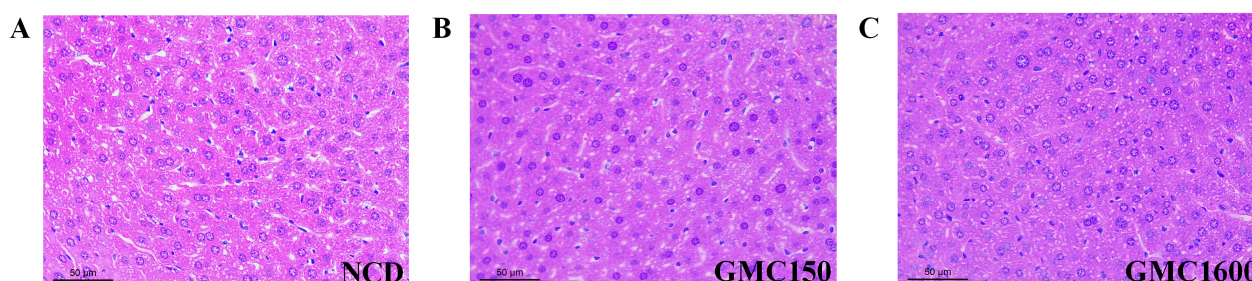


Figure S1. H&E staining of liver in each group.

Table S1. Primer Sequences Used for qRT-PCR Analysis.

	Forward Primer (5'-3')	Reverse Primer (5'-3')
<i>PPARα</i>	GTCCTCAGTGCTTCCAGAGG	GGTCACCTACGAGTGGCATT
<i>PPARγ</i>	GCATTCTGCTCCACACTATGA	TCGCACTTTGGTATTCTTGG
<i>SCD1</i>	CCGAAGAGGCAGGTGTAGAG	TTCTTACACGACCACCACCA
<i>CYP7A1</i>	TGGGCATCTCAAGCAAACAC	TCATTGCTTCAGGGCTCCTG
<i>SREBP-1C</i>	GATCAAAGAGGAGCCAGTGC	TAGATGGTGGCTGCTGAGTG
<i>HMGCR</i>	GGACCAACCTTCTACCTC	CCATCACAGTGCCACATAC
<i>G6PC</i>	TCTGTCCCGGATCTACCTTG	GTAGAATCCAAGCGCGAAAC
<i>PEPCK</i>	TAGGAGCAGCCATGAGAT	CGAAGTTGTAGCCGAAGA
<i>GCK</i>	TCCCTGTAAGGCACGAAGAC	ACGATGTTGTTCCTTCTGC
<i>TLR2</i>	CACCGGTCAAGAAACAACCTTACC	CAAGATCCAGAAGAGCCAAAGAG
<i>TNFα</i>	AGGCACTCCCCAAAAGAT	CAGTAGACAGAAGAGCGTGGTG
<i>MCP-1</i>	GTGCTGACCCCAAGAAGGAA	GTGCTGAAGACCTTAGGGCA
<i>YWHAZ</i>	TTCTTGATCCCCAATGCTTC	TTCTTGTCATCACCAGCAGC
<i>UCP1</i>	GGTGTGGCAGTGTTTCATT	TGGTGGCTATAACTCTGTAAG
<i>PRDM16</i>	TGGCTGAGACCTACTGAG	AGACAATGGCTGGAATGG
<i>FGF21</i>	CTGGAGGACGGTTACAATG	GAAGAGTCAGGACGCATAG
<i>CHREBP</i>	CCTTAGTTCCTGAGCAGAG	CAGTCACACCAACACCAA
<i>LPK</i>	CTCCCCACTCAGCTACAGACC	CCCTTCACAATTTCCACCTCC
<i>CD36</i>	GCTTGCAACTGTCAGCACAT	GCCTTGCTGTAGCCAAGAAC
<i>ACOX1</i>	CTATGGGATCAGCCAGAAAGG	AGTCAAAGGCATCCACCAAAG
<i>FASN</i>	AGGGGTGCACCTGGTCTCTCA	GCCATGCCCAGAGGGTGGTT