

**Yeast mannoproteins is expected as a novel potential functional food for  
attenuation of obesity and modulation of gut microbiota**

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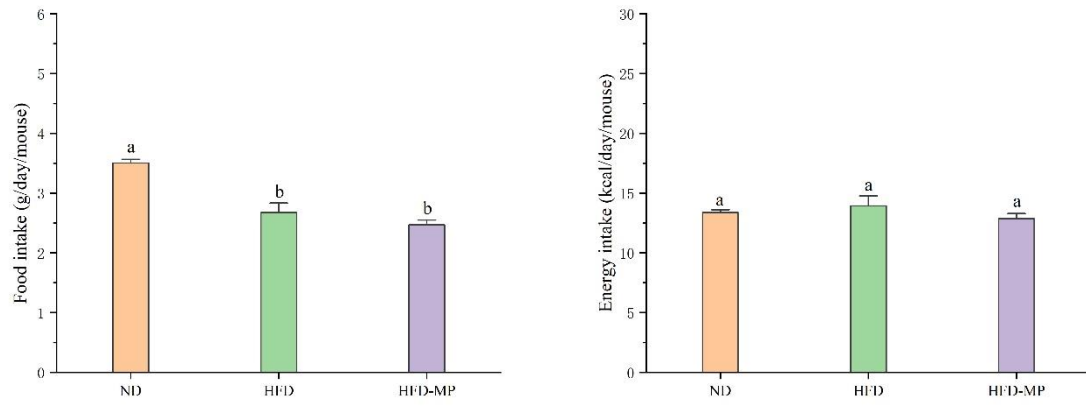
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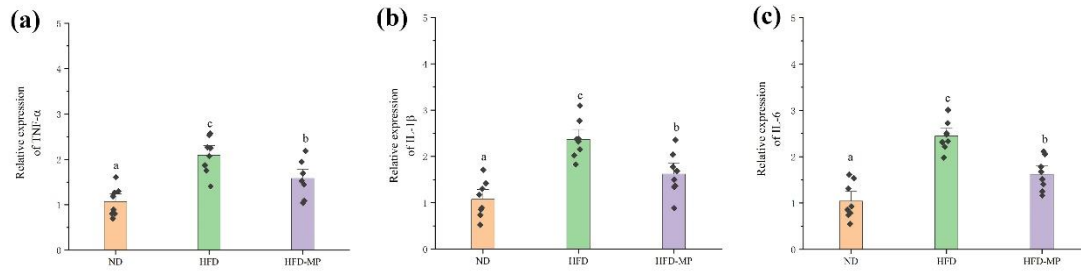
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**Table S1. Primer sequences for RT-qPCR experiments**

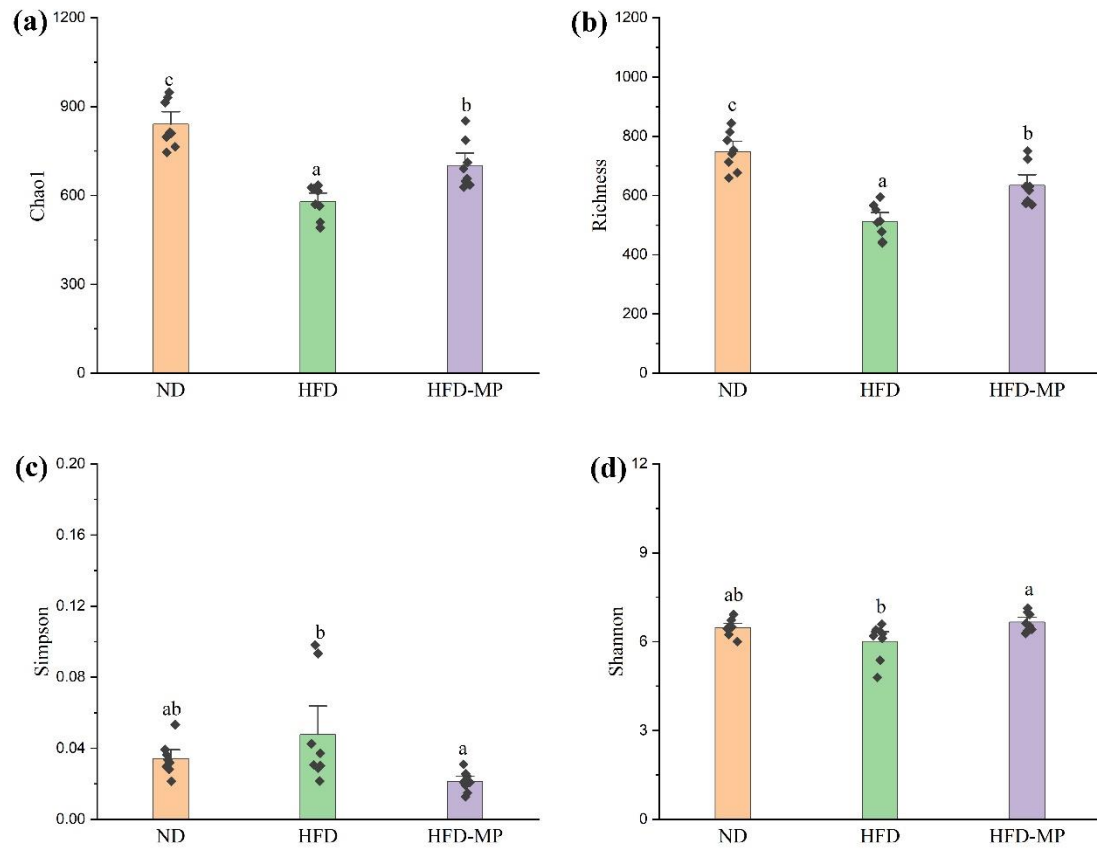
Gene	Forward primer (5'-3')	Reverse primer (5'-3')
TNF- $\alpha$	CTCATGCACCACCATCAAGG	ACCTGACCACTCTCCCTTTG
IL-1 $\beta$	AGCTTCAAATCTCGCAGCAG	TCTCCACAGCCACAATGAGT
IL-6	GACTGATGCTGGTGACAACC	AGACAGGTCTGTTGGGAGTG
GPR41	CGACTAGAGATGGCTGTGGT	AGAAGATGAGCAGTGTGGCT
GPR43	TCCAGCCTGGCTTTCCAATA	GCCTGCAGGAGACATTCAG
GAPDH	GGACTTACAGAGGTCCGCTT	CTATAGGGCCTGGGTCAGTG



**Fig. S1.** Average food intake (a) and energy intake (b) per day of mice. The data were represented as the mean  $\pm$  SEM. Statistical differences were carried out by one-way ANOVA followed by Tuckey test,  $p < 0.05$  indicates significant.

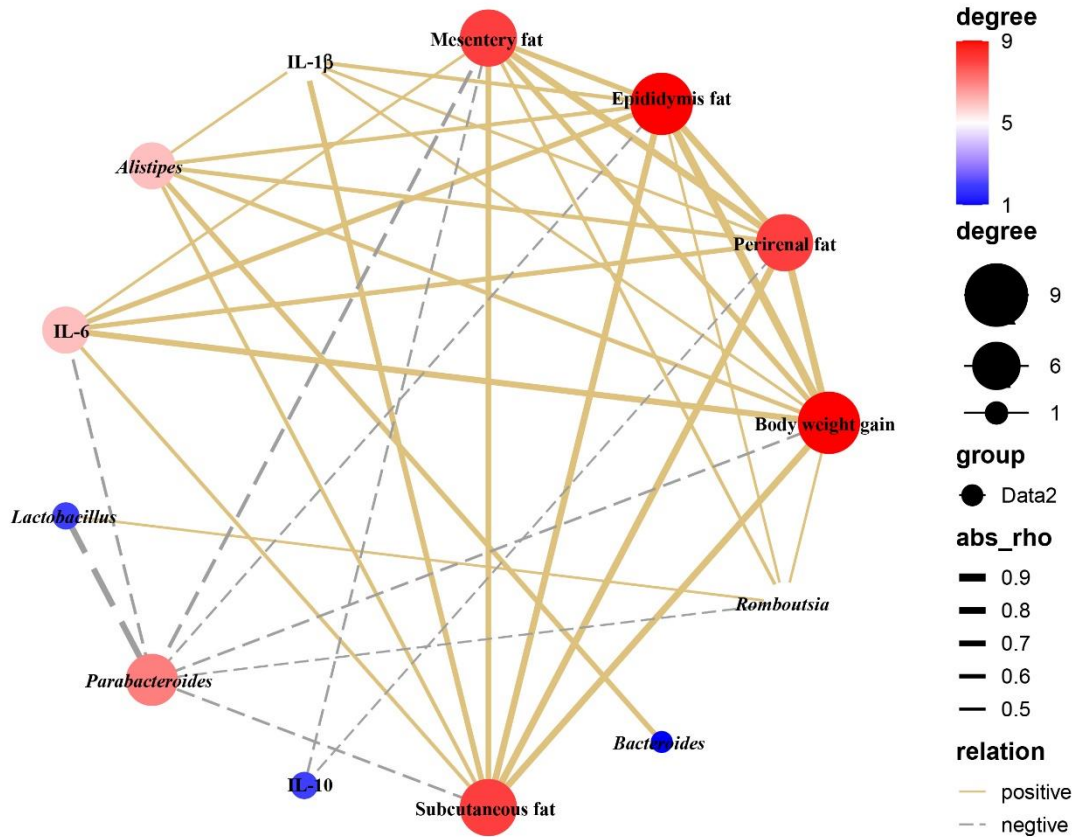


**Fig. S2.** The effect of MPs on the relative mRNA expression levels of TNF- $\alpha$  (a), IL-1 $\beta$  (b) and IL-6 (c) in liver. The data were represented as the mean  $\pm$  SEM. Statistical differences were carried out by one-way ANOVA followed by Tukey test,  $p < 0.05$  indicates significant.

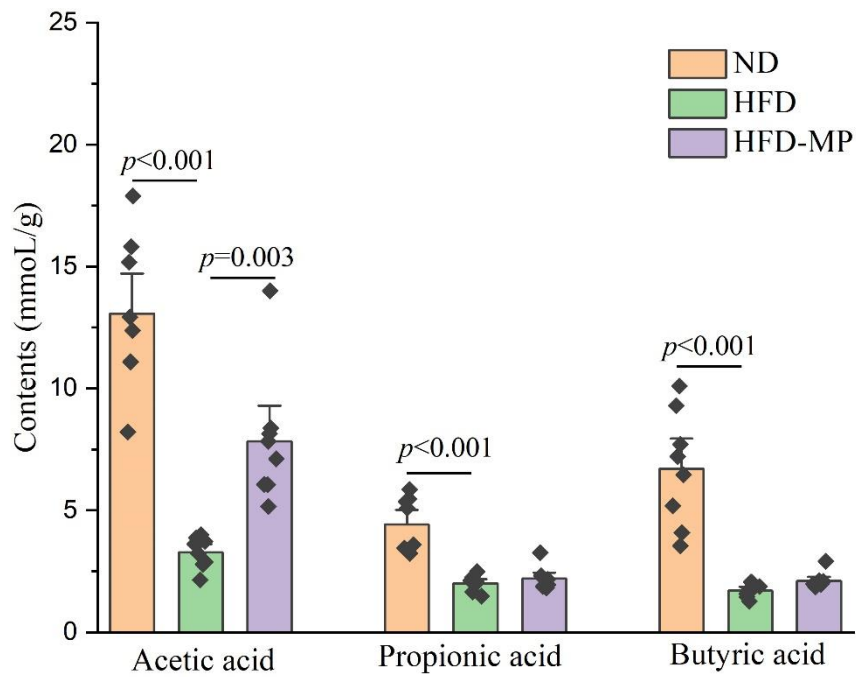


**Fig. S3.** Effect of MPs on the alpha diversity of gut microbiota, including (a) Chao1, (b) Richness, (c) Simpson and (d) Shannon indexes. The data were represented as the mean  $\pm$  SEM. Statistical differences were carried out by one-way ANOVA followed by Tukey test,  $p < 0.05$  indicates significant.

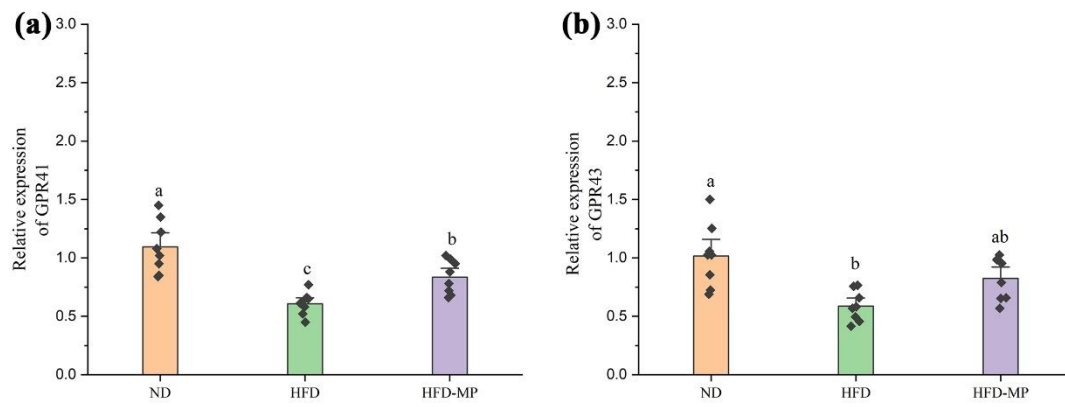
# Correlation Network



**Fig. S4.** Spearman's correlation between relative abundances of key gut microbiota at the genus level and features of obesity.



**Fig. S5.** The effect of MPs on the levels of SCFAs in mice cecal contents. The data were represented as the mean  $\pm$  SEM. Statistical differences were carried out by one-way ANOVA followed by Tuckey test,  $p < 0.05$  indicates significant.



**Fig. S6.** The effect of MPs on the relative mRNA expression levels of GPR41 (a) and GPR43 (b). The data were represented as the mean  $\pm$  SEM. Statistical differences were carried out by one-way ANOVA followed by Tukey test,  $p < 0.05$  indicates significant.