

SUPPLEMENTARY MATERIAL

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Supplementary Tables S1-S4.

Data set S1. Table with causes of death of the mice that died prior to sacrifice.

Data set S2. Genes differentially expressed between 6vs12, 6vs24 and 6vs28 months ($q < 0.01$).

Data set S3. All correlations between the 50 genera with a relative abundance $\geq 0.1\%$ in at least 1 sample

and the 817 up-regulated genes assigned to the red profile as determined by STEM. Orange cells contain $r > 0.8$, blue cells contain $r < -0.8$.

Data set S4. All genes differentially expressed between 12 and 28 months of age ($p < 0.01$).

Data set S5. All correlations between the of 50 genera with a relative abundance $\geq 0.1\%$ in at least 1 sample and the 1371 genes differentially expressed between 12 and 28 months. Orange cells contain $r > 0.8$, blue cells contain $r < -0.8$.

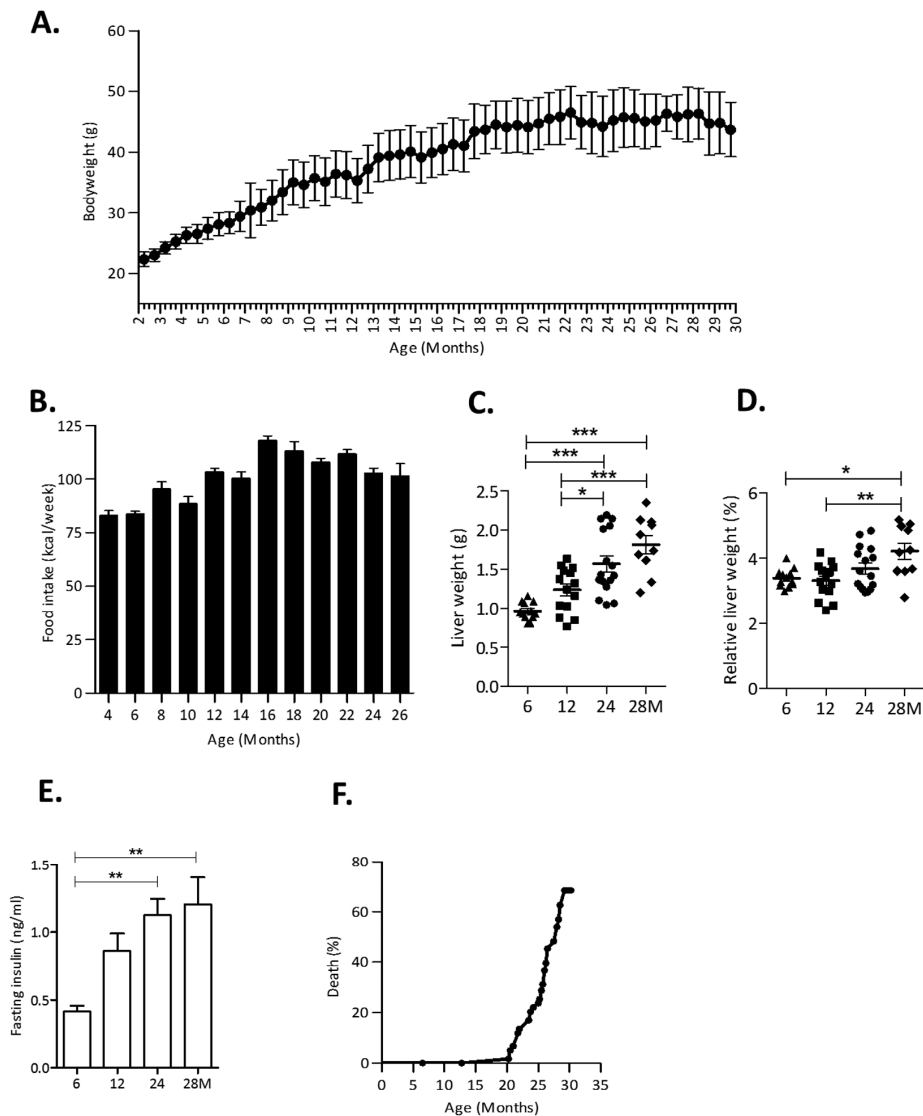


Figure S1. (A) Body weight measurements recorded every 2 weeks. (B) Mean food intake in kilocalories per week during the life span of the mice. (C) Liver weight in grams. (D) Relative liver weight as percentage of body weight. (E) Fasting insulin levels (ng/ml) measured in plasma. (F) Percentage of mice that died before sacrifice.

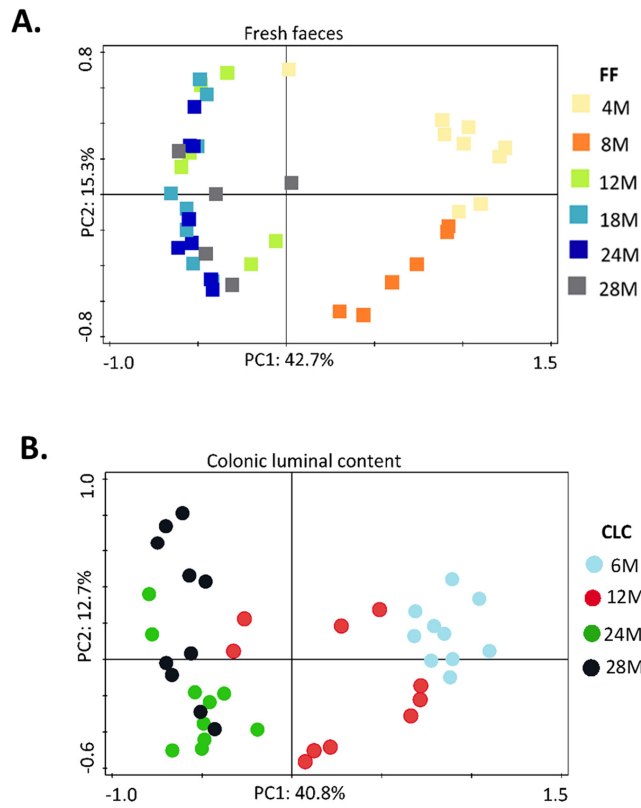


Figure S2. Figure (A) Principal Component Analysis (PCA) displaying separation of the fresh faeces (FF) samples collected at 4, 8, 12, 18, 24 and 28 months. (B) PCA displaying separation of the colonic luminal content (CLC) samples collected at sacrifice at 6, 12, 24 and 28 months.

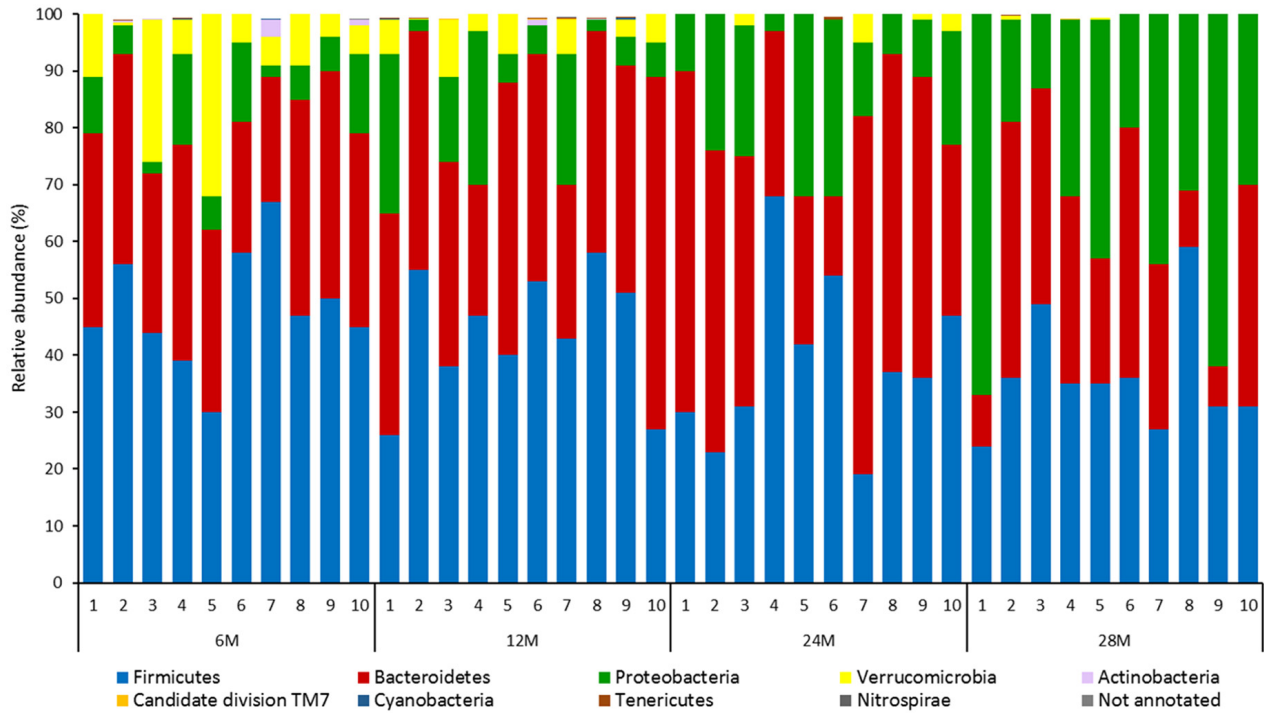


Figure S3. Relative abundance (%) at phylum level in colonic luminal content determined in all individual mice.

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3. Puisieux A, Brabletz T, Caramel J. Oncogenic roles of EMT-inducing transcription factors. *Nat Cell Biol*. 2014; 16: 488-94.
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5. Yu H, et al. The contribution of TGF-beta in Epithelial-Mesenchymal Transition (EMT): Down-regulation of E-cadherin via snail. *Neoplasma*. 2015; 62:1-15.
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