Is the Secret to Healthy Ageing in Your Gut?

Alena Pribyl, Ph.D.
Senior Scientist

From: Buford, T. W. (Dis)Trust your gut: the gut microbiome in age-related inflammation, health, and disease. [Microbiome](https://www.nature.com/articles/s41551-017-0001-6) 5, 80 (2017).

Fibre
- Anti-inflammatory
- Short Chain Fatty Acids (SCFAs)
- Many pro-inflammatory metabolites

Lack of fibre
- Low diversity

Human genome:
- 20,000 – 25,000 genes

Human microbiome:
- 2,000,000 – 20,000,000 genes

>50% bacterial cells

Diet and Residence Location

Community Dwellers
- (mean age: 74 years)

Long-Stay Hospital
- (mean age: 84 years)

Microbiota and Residence Location

Community Dwellers (mean age: 74 years)
Long-Stay Hospital (mean age: 84 years)
Healthy Young Adults (mean age: 34 years)

Species richness patterns in ageing adults

Abundance of SCFA producers in ageing adults

Abundance of Proteobacteria in ageing adults

References:

de la Cuesta-Zuluaga, J. et al. (2019) Age- and Sex-Dependent Patterns of Gut Microbial Diversity in Human Adults. mSystems
Bian, G. et al. (2017). The Gut Microbiota of Healthy Aged Chinese Is Similar to That of the Healthy Young. mSphere.

Diverse fibres Happy gut Healthy ageing