Bacteria that are good for you!
From food conservation to health benefits

Recent years have seen a growing interest for the human gut microbiota, by some referred to as "our other genome", and its role in human health. Every human individual's gut is home to some $10^{14}$ bacteria, and gut metagenome sequencing revealed correlations between gut microbiota composition and a growing number of diseases, suggesting the existence of cause to effect relationships. The idea that bacteria in our gut can affect health not only in a negative but also in a positive way, and that we could make use of this to improve our health, emerged some 100 years ago when Elie Metchnikoff developed the concept of what is presently known as probiotics. This concept is now supported by experimental evidence from many studies, in animal models and human trials.

While probiotic bacteria are ingested with the explicit goal to positively affect health, many other bacteria make part of our diet only because they served in the production of fermented food products. Some of these bacteria are consumed on a daily basis, in important quantities. One can ask if these bacteria, that were selected for their fermentation technological capacities and the organoleptic properties that they confer to the product, may affect health too. In this context we studied the *in vitro* and *in vivo* anti-inflammatory capacities of the alimentary bacterium *Lactobacillus delbrueckii*.

Refs.