Rats eating U-$^{13}$C Inulin

Inulin is a soluble dietary fibre that is resistant to human digestion. It is a naturally occurring polymer containing a small number of simple sugars and, unlike most saccharides, inulin is non-digestible. It passes through the small intestine to finally ferment in the large intestine. The gut flora consists of many microorganisms that perform useful functions for their hosts, known as prebiotic effects. Prebiotics like inulin stimulate the growth of healthy bacteria in the gut and increase our resistance leading to health improvement. *Bifidobacterium* species have been identified as a group of bacteria residing in the colon and exerting beneficial health effects. Several *Bifidobacterium* species are used in the food industry as probiotics.

IsoLife’s products are increasingly used in animal and human trials to clear up the complex interactions between (functional) food components and the microbial gut flora. Early 2014, a study was published in Applied and Environmental Microbiology using rats eating U-$^{13}$C Inulin to identify bacterial species involved in the degradation of the prebiotic inulin (see also Applications).