

ProbioSatys – Naturally Modulating the Appetite via the Microbiome

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TargEDys is a French biotech company aiming to control metabolic disease by modulating the appetite through an intervention on the microbiome. TargEDys' innovative, satiety inducing technology (ProbioSatys), is based on a unique understanding of appetite regulation at the molecular level. Bacteria can send signals of satiety to the brain from the gut by molecularly mimicking satiety hormones, thus activating natural satiety pathways. This gut-brain axis is the bidirectional communication between the central and enteric nervous systems, linking the emotional and cognitive centres of the brain with peripheral intestinal functions. Gut bacteria are very important in influencing these interactions.

The basis of TargEDys' ProbioSatys technology is a commensal, enterobacteria probiotic strain, *Hafnia alvei*, that produces the ClpB protein. ClpB is a mimetic of the satiety hormone (α -MSH) that regulates food behaviour at both peripheral and central levels. When released, ClpB directly stimulates the intestinal enteroendocrine L-cells to produce satiety hormones. ClpB also enters the bloodstream to act on satiety regulation in the central nervous system by mimicking α -MSH. The resulting effect is the feeling of satiety or fullness after a meal. The mechanism of *Hafnia* has been proven preclinically *in vitro* and *in vivo* and is currently being tested in humans. This probiotic will be launched as a food supplement in April 2019. The preclinical results indicate that after 3 months of treatment customers can expect to safely lose 3-5% of their body weight, see a 5-10% reduction in food intake, improved body composition and activation of lipolysis.

Biography:

Gregory LAMBERT is a Pharmacist and has a Ph.D. in pharmaceutical technology, Gregory LAMBERT carrier is split between Biotech and Pharma where he occupied the positions of Chief Scientific Officer and Chief Executive Officer in companies such as Novagali Pharma, Septodont and currently TargEDys.

He drove the development of several products from the laboratory to market authorizations.

In 2014, Gregory joined the scientific founders of TargEDys as CEO. Having completed its preclinical development and produced industrial batches, TargEDys now concentrates on human clinical trials and commercial launch activities.