A healthy and balanced microbial ecosystem in the intestinal tract can have a profound effect on health and well-being. In contrast, an imbalance in the microflora is associated with a large variety of syndromes and diseases. Modulating an imbalanced intestinal tract with ‘friendly’ bacteria is not new, as the health-promoting lactic acid bacteria in yoghurts and cheeses have a long history of use. Probiotic administration seems a promising method of modulating the aberrant intestinal tract. However, even though scientists have been working on probiotics for over a decade, there are still no products available with a health claim. Innovation in the field of probiotics seems hampered; as a result patient needs in society may not be met. This thesis set out to assess innovation drivers in microbiota research & development in order to advance gut modulation. The potential properties, safety and efficacy of probiotics as well as other barriers in the innovation process and future research directions are assessed.

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