THE EFFECT OF PRO- AND PREBIOTICS ON BOWEL FUNCTION; RECENT FINDINGS ON INTESTINAL TRANSIT

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Slow intestinal transit is associated with several gastrointestinal symptoms that are commonly affecting a substantial part of the, otherwise healthy, population and negatively affecting quality of life. Sufficient intake of fiber and liquid (water) are the primary recommendations for relief of the symptoms associated with slow intestinal transit. Unfortunately, these simple measures may not always be sufficient. Prebiotics such as polydextrose and selected probiotic strains such \textit{B. lactis} HN019 may form further complementary aids for these conditions.

Recently, studies have been performed with polydextrose and \textit{B. lactis} HN019 alone and in combination. Healthy volunteers with self reported slow intestinal transit and/or constipation received at $10^9$ or $10^{10}$ CFU \textit{B. lactis} HN019 or 8g of polydextrose. Symptom relief was assessed with questionnaires and transit was determined by abdominal X-ray of radio opaque pellets.

The consumption of polydextrose was observed to improve bowel habits and reduce abdominal discomfort. Interestingly, polydextrose also lead to a reduced desire to snack. Consumption of $10^9$ CFU \textit{B. lactis} HN019 significantly shortened the intestinal transit by 19 h and reduced several symptoms of abdominal discomfort. Interestingly, the higher dose ($10^{10}$ CFU/day) shortened transit by 28 h and reduced more symptoms of abdominal discomfort. Also the combination of these two products was shown to beneficially affect intestinal transit.

Selected probiotics and prebiotics have been shown to shorten intestinal transit and relieve abdominal discomfort.