

More fibre, improved well-being

Our intake of specific plant fibres (dietary fibres) influences the function and composition of our gut flora. This is because the good bacteria inside our intestines use the fibre for nutritional and reproductive purposes. The more species of bacteria that colonise the intestine, the better. A large variety of bacteria contributes to a stable gut flora, which can combat a wide range of disorders. This is important because colonisation by beneficial bacteria bears a direct relation, not only to digestive processes and intestinal functions, but also to metabolism and the psyche, and thus to well-being.

But good intestinal bacteria often have a hard time of it because our dietary fibre intake in western industrialised countries is far too low. At present, the official recommended intake is least 30 grams of fibre per day. The actual average intake, however, is around 20 grams. This “fibre gap” could be one of the reasons why the variety of bacterial species in our gut flora has decreased in recent decades.

Scientific background

The importance of bacterial colonisation of the intestine for human health has only recently become the subject of scientific research. But now, research on gut flora and its function has been given top priority since it is likely to play a key role in maintaining health and well-being. In this context, dietary fibres that serve intestinal bacteria as a food substrate, have now also become an important topic of scientific research.

It is primarily the soluble dietary fibres, such as pectins and certain dextrins (resistant starches), that are broken down by beneficial species of bacteria such as lactobacteria and bifidobacteria to serve as food. This results in intermediate products, so-called metabolites, which carry benefits for both humans and bacteria. The good bacterial strains are strengthened, enabling them to drive out less beneficial microorganisms. There is an overall increase in bacterial diversity. In addition, metabolites such as lactate, acetate or short-chain fatty acids (especially butyrate) enable human metabolic processes to run more smoothly.

Method

Our clinical test was designed to show whether a 10 gram increase in daily dietary fibre intake leads to a measurable improvement in well-being in people with suboptimal intestinal function.

For this purpose, the subjective quality of life at the beginning and end of the eight-week study was assessed with the aid of the WHO-5 questionnaire on well-being. This accredited World Health Organization (WHO) questionnaire is used internationally to assess and compare subjective well-being. A maximum score of 25 points indicates top levels of well-being and quality of life. A value below 13 points indicates poor well-being and a low quality of life.

The test product

Biogena ColonBalance® is a tasteless powder with a high soluble dietary fibre content (acacia fibre, i.e. Fibregum™, amylopectin, citrus pectin and resistant dextrin), all of which are the preferred food substrates of intestinal bacteria. Participants consumed 10 grams of powder dissolved in a glass of water per day, at an unspecified time, in addition to their normal diet.

Results

Evaluation of this non placebo-controlled product test showed an average increase of 39% in the total well-being score over eight weeks. At the beginning, an average score of 12.9 was achieved, which is at the threshold for poor well-being (up to 13 points). By the end of the study, a good well-being score of 17.9 points was found (Fig. 1).

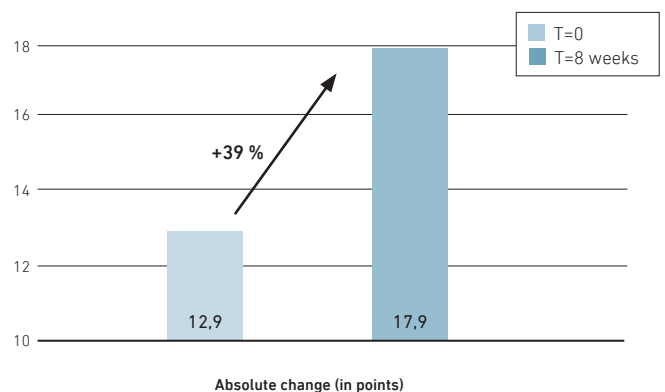


Fig. 1: After eight weeks of consuming 10 grams of Biogena ColonBalance® per day, well-being increased by 39%. This result is highly statistically significant ($p < 0.01$; $n = 15$).

Taken individually, each point (item) recorded in the WHO-5 questionnaire improved over the course of the trial period. The categories relating to positive mood (good spirits, relaxation), vitality (being active and waking up fresh and rested), and general interest (being interested in things) improved by up to 100% within eight weeks (Fig. 2).

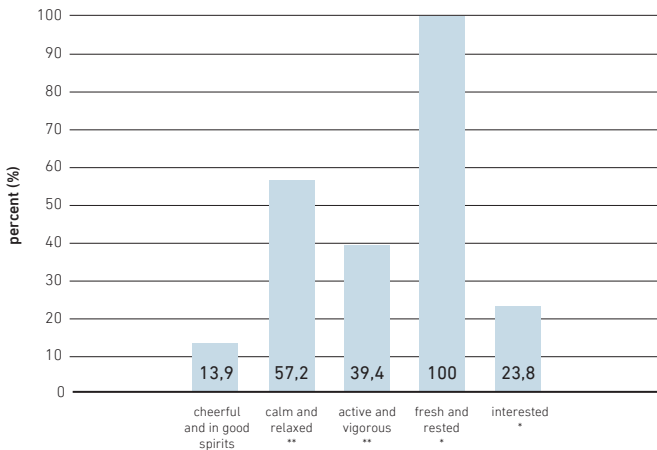


Fig. 2: Improvement in the five areas covered by the WHO-5 questionnaire for well-being, after eight weeks of consuming 10 grams of Biogena ColonBalance® per day.

* Significant change: $p < 0.05$

** Highly significant change: $p < 0.01$

Summary

The results of this product trial are consistently positive: more soluble dietary fibres in the form of Biogena ColonBalance® led to improved well-being and a better quality of life. The trial participants significantly improved their well-being scores by 39% and felt more relaxed, in better spirits, more active and rested, and more interested.

Biogena ColonBalance® is an easy to use, tasteless and well-tolerated powder. It can be stirred into water or food. It contains soluble fibres that fulfil important nutritional functions. Increasing our daily dietary fibre intake has benefits for our health. And as we all know, human health begins in the gut.

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