



Butyrate Complex

BUTYRIC ACID FORMULA

Butyric acid supplementation

- Contains butyric acid derived from calcium/magnesium butyrate
- A source of butyric acid, a short-chain saturated fatty acid which provides energy. A source of butyric acid.

Convenient capsule format

- Increases patient compliance



Butyrate is an important short-chain fatty acid (SCFA) that provides a source of energy. Butyrate Complex provides SCFA in the form of calcium/magnesium butyrate, and is suitable for vegans.

EACH CAPSULE CONTAINS:

Butyric Acid (calcium/magnesium butyrate)..... 610 mg

Non-Medicinal Ingredients: Hypromellose, medium chain triglycerides

Recommended Adult Dose: Take one capsule three times daily with meals, a few hours before or after taking other medication, or as recommended by your healthcare practitioner.

Product Size: 90 Vegetable Capsules **Product Code:** 10478

Scientific Rationale:

Butyrate is a short chain fatty acid (SCFA) that is naturally produced within the human large intestine. One of the key functions of the large intestine is the absorption of water and nutrients from the diet that were unable to be absorbed earlier during digestion. The bacteria present within the large intestine also help to break down undigested food matter, such as dietary fibre. Most of the butyrate in the large intestine is formed when bacteria ferment (break down) dietary fibre into butyrate and other SCFAs. Butyrate is considered an important source of energy for the epithelial cells that line the inside of the large intestine. Butyrate is also a source of energy for the rest of the body: it's estimated that SCFAs can contribute as much as 5-15% of the total daily calorie requirements in humans ¹.

Evidence is still emerging, but butyrate may improve the ability of intestinal epithelial cells to form a protective barrier ². This role may be of some use in minimizing diarrhea symptoms, such as in traveller's diarrhea. Traveller's diarrhea (TD) affects an estimated 10 million tourists each year, and typically occurs when tourists visit countries with lower hygiene standards than



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GENESTRA BRANDS

Butyrate Complex

BUTYRIC ACID FORMULA

their own and eat food or water contaminated with pathogenic bacteria. In a randomized, placebo-controlled clinical trial of 42 adults travelling to tropical countries, daily supplementation with a capsule containing a combined dose of butyrate plus other SCFAs significantly reduced the frequency and symptoms of TD. Participants were randomized into either the butyrate + SCFAs treatment group (6 capsules containing a daily dose of 1500 mg sodium butyrate, 600 mg fumaric acid, 360 mg citric acid, 300 mg sorbic acid, and 240 mg malic acid), or the placebo capsule treatment group. Three days before the start of their trip, participants began supplementation with either the treatment or placebo capsules. Following the conclusion of their trip, participants completed a questionnaire designed to assess the presence of clinical symptoms of TD. The questionnaire evaluated the amount of stools per day, stool consistency, presence of blood or mucous in stool, abdominal pain,

bloating, nausea, vomiting, elevated body temperature, and need of medical assistance or treatment during the trip. TD occurrence was defined based on three or more unformed stools in 24 hours, accompanied by abdominal cramps, nausea, and bloating. Compared with the placebo treatment group, participants that received the butyrate plus SCFA capsule had a significant reduction in the occurrence of TD: just 4.5% of the butyrate plus SCFA group experienced TD, while 40% of the placebo treatment group had TD. A significant decrease in gastrointestinal symptoms also occurred in the butyrate plus SCFA treatment group, especially for symptoms of pain, bloating, and nausea with fevers. No adverse events were observed in the butyrate plus SCFA treatment group³.

1. Hamer HM, Jonkers D, Venema K, Vanhoutvin S, Troost FJ, and Brummer RJ. Review article: the role of butyrate on colonic function. *Aliment Pharmacol Ther.* 2008; 27(2):104-19
2. Ploger S, Stumpff F, Penner G, Schulzke JD, Gabel G, et al. Microbial butyrate and its role for barrier function in the gastrointestinal tract. *Ann. N.Y. Acad. Sci.* 2012; 1258: 52-59
3. Krokowicz L, Kaczmarek B, Krokowicz P, Stojcev Z, and Mackiewicz J, et al. Sodium butyrate and short chain fatty acids in prevention of travellers' diarrhoea: A randomized prospective study

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