



# REGULAR Girl®

## Clinical Evidence

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Regular Girl is a synbiotic blend of clinically proven prebiotic fiber and probiotics that helps maintain a healthy digestive balance.\* Regular Girl combines the clinically proven benefits of the award-winning and patented Sunfiber® brand of soluble dietary fiber with *Bifidobacterium lactis*. It was created with the help of a woman nutritionist and dietitian.

### Sunfiber® Clinical Evidence

Sunfiber is one of the most clinically researched fibers in the world. Clinical evidence supports claims related to regularity (addressing both occasional constipation and diarrhea), Irritable Bowel Syndrome, prebiotic benefits, glycemic index/glycemic control, satiety and more. Sunfiber has a Grade A Consensus for reduction in diarrhea and a Level 1 evidence recommendation by Clinical Nutrition Supplements (2004). Below are just a few studies related to the benefits of Sunfiber. Feel free to contact us for a complete list of all clinical work.

### Regularity and GI Conditions

- Fecal frequency significantly improved from 12.4 to 13.7 times over a two-week period with intake of 5 grams Sunfiber / day. Frequency returned to constipated state following discontinuation of Sunfiber intake. Furthermore, fecal volume increased while fecal hardness decreased. Yamatoya, et. al. J Appl Glycosci 42:251-257, 1995
- Fecal frequency significantly increased from 3.67 to 5.21 times per week, and fecal quantity significantly increased ( $p < 0.01$ ) with intake of 5 grams Sunfiber / day, while no change in fecal hardness or odor was observed. Okazaki et. al. Journal of Nutritional Food. 1999; 2: 1-8.
- Defecation frequency and fecal volume significantly increased ( $p < 0.01$ ) with intake of 7 grams Sunfiber. Tanaka et. al. Journal of Nutritional Food, 3(2), 45-52, 2000.
- Bowel movements increased significantly ( $p < 0.01$ ) with intake of 5 grams Sunfiber over a 4-week period. Reduction in laxative use and abdominal pain associated with chronic constipation were also observed. Polymeros D., et. al. Dig Dis Sci 2014; 59:2207-14.
- Intake of 3 grams Sunfiber per day was found to be as effective as lactulose laxative treatment in relieving stool withholding and constipation associated abdominal pain, and its use improves stool consistency. Lactulose laxative was found to have more side effects, including flatulence and bad taste. Ustundag, G. et. al. J Gastroenterol 2010; 21(4): 360-364
- Intake of 5 grams Sunfiber per day suppressed maltitol- and lactitol-induced diarrhea. Nakamura S., et al. European Journal of Clinical Nutrition (2007), 1-8.
- Intake of 5 grams Sunfiber per day significantly reduced symptoms of flatulence (55%), abdominal tension (4.7%) and abdominal spasms (35%) over three-week period in both normal and obese subjects having IBS. Additionally, subjects showed improvements in cholesterol levels (12.2%), lipids (26.9%) and glucose levels (16%). Giaccari S., et. al. Clin Ter 2001; 152:21.
- Intake of 5 grams Sunfiber per day showed greater success (60%) compared to 30 grams of wheat bran per day (40%) in relieving symptoms associated with diarrhea-predominant IBS, constipation-predominant IBS and changeable bowel habits. Parisi, G.C. et. al. Digestive Diseases and Sciences, Vol 47, No 8. 2002.
- Intake of 5 grams Sunfiber per day was effective in significantly reducing gastrointestinal, psychological and quality of life symptoms over 12-week period. Parisi, G.C. et. al. Digestive Diseases and Sciences, Vol 50, No 6. 2005.
- Symptoms associated with alternating constipation / diarrhea, and diarrhea only, in children with IBS improved by 82% and 58% respectively with the intake of 5 grams Sunfiber per day. Abdominal pain associated with IBS also improved by 68%. Paul, S.P. et. al. JPGN 2011; 5:53.

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- Severity of IBS symptoms and concentration of methane production was significantly reduced ( $p < 0.01$ ) with intake of 5 grams Sunfiber per day. Furnari, M., et. al. Gastroenterol 2012; 142:S391.
- Intake of 5 grams Sunfiber per day showed a significant reduction in the severity of IBS symptoms (43%), abdominal pain scores (0 vs 4) and bowel habits (40%) in children with IBS. Romano, C., et. al. World Gastroenterol 2013; 19:235-240.
- Intake of 5 grams Sunfiber per day resulted in significant improvement in use of laxatives, stool form / consistency and colonic transit time. Furthermore, significant improvements in abdominal bloating was observed in males and the number of evacuations in women. Russo, L. et. al. Saudi J Gastroenterol 2015; 21:104-10.
- Severity of IBS symptoms, including bloating and bloating plus gas significantly improved ( $p < 0.035$ ) with intake of 6 grams Sunfiber per day over 12-week period. Niv et. al. Nutr Metabolism 2015.
- Daily intake of 5 grams Sunfiber lead to a favorable impact on constipation prevention of the similar magnitude achieved with laxatives. Kapoor, M. et. al. Journal of Functional Foods 33 (2017) 52-66.

## Prebiotic Effects

- Volunteers taking Sunfiber in a functional food had significantly increased numbers of *Bifidobacteria* (from 14.7% to 31.7%) and *Lactobacillus* (from 67% to 94%). Okubo et al 1994.
- Intake of Sunfiber (6 g/day) for two weeks significantly increased *Bifidobacterium* and butyrate-producing bacteria in the large intestine. Ohashi, Y., et. al. Beneficial Microbes, 2014; 1-6.
- Sunfiber (Partially Hydrolyzed Guar Gum) was found to increase the concentration of Bifidobacterium in the gut. Roberfroid M., Slavin JL. Non-digestible oligosaccharides. Crit Rev Food Sci Nutr 2000;40:461

## Satiety

- Intake of 3.72 grams Sunfiber resulted in a significant increase in satiety feelings. Energy intake was significantly reduced by 101 kcal before ( $p = 0.046$ ) and 71 kcal after ( $p > 0.05$ ) the two-week adaptation period. Park, S. et. al. Obes Facts 2012; 5:58.
- Intake of 2 grams Sunfiber with yogurt significantly increased perception of satiety over a 2-week period. Acute post-meal perception of satiety was observed with intake of 5 gram Sunfiber, and entire daily caloric intake decreased by 20%. Acute post-meal perception of satiety effects with intake of 6 grams Sunfiber was significantly greater compared with equal dose of other soluble fibers. Rao, T.P, et. al. Br J Nutr 2015; 113:1489-1498.
- Intake of 2.6 grams Sunfiber with protein-fortified yogurt resulted in significant reduction in appetite ratings, and energy intake from subsequent meals was significantly reduced by 274 kj. Luch, A., et. al. Food Quality Preference 2010; 21: 402-409.

## *Bifidobacterium lactis* Clinical Evidence

Regular Girl contains 8 billion CFU of *Bifidobacterium lactis*, which is trusted by many of the world's leading manufacturers of dietary supplements and nutritionals. These probiotic cultures have proven stability and clinical benefits, and are internationally recognized as safe for consumption.

- *B. lactis* (as component of a five-strain formulation) was found to reduce the antibiotic-induced disturbance of total microbiota population in a randomized double-blind, controlled trial of probiotics to minimize the disruption of fecal microbiota in healthy subjects undergoing antibiotic therapy. Engelbrekton, A.L., et. al. (2007)
- *B. lactis* (in a two-strain formulation) beneficially modulated intestinal microbiota in healthy elderly people. Microbiological effects of consuming a synbiotic containing Bifidobacterium lactis, were determined by real-time polymerase chain reaction and counting of viable bacteria. Bartosch, S., et. al. 2005. Clinical Infectious Diseases. 40:28-37.
- *B. lactis* resulted in faster IgG induction than the control, indicating stimulation of specific immunity by B. lactis BL-04. Danisco Technical Memorandum 2010.
- Immunomodulatory effects of probiotic bacteria DNA: IL-1 and IL-10 response in human peripheral blood mononuclear cells. FEMS Immunology and Medical Microbiology. Lammers, K.M., et al. 2003. 38:165-172