Seagreens®: A nutritious prebiotic

A natural multi-nutrient whole food

Seagreens® wild seaweed is selected, monitored, harvested, dried and milled to the world’s highest quality standard; Seagreens proprietary Human Food Seaweed™ standard (Patents Pending).

The Seagreens® standard ensures a consistently superior nutritional quality, international certification including allergen-free, kosher and organic, and international compliance for food and nutraceutical ingredients.

Seagreens® seaweeds have a very broad nutritional profile ideal for multiple and synergistic uses as food ingredients, nutraceuticals and food supplements.

Specifically, Seagreens’ high dietary fibres, trace elements and minerals, and levels of antioxidants make it ideal to deliver prebiotic and colon health benefits.

What are prebiotics, and why Seagreens works

A prebiotic is a component that is colonised and fermented by beneficial bacteria of the gut microflora (the probiotics), enhancing the growth of these bacteria and consequently the health of the gut and the absorption of nutrients. Those foods and components of foods that make for good prebiotics, must be able to pass through the stomach without being broken down by the gastric acidity and enzyme activity.

An imbalance of probiotics has been seen in several gastrointestinal disorders such inflammatory bowel diseases and cancer and also in the elderly. It is now well recognised that prebiotics can beneficially modulate the intestinal microbiota which is essential for the maintenance of a normal healthy gut. However, recent evidence from literature suggests that it can also produce a promising therapeutic potential for treating different gastrointestinal disorders as well as in maintaining a healthy balance in the ageing gut.

Seagreens® is rich in dietary fibres especially in the form of high levels of polysaccharides, which have shown to be resistant to gastric acidity, enzyme hydrolysis and absorption in the gastrointestinal tract. As such, the polysaccharides present in Seagreens® are ideal candidates as effective prebiotics.

Seagreens® Ascophyllum has the highest polysaccharide content of all the brown seaweeds - between 42% and 70% dry weight.

Research studies to date on species produced by Seagreens® are extremely positive, with examples including improved feed intake in post-weaning pigs, reduced diarrhoea, increased presence of good bacteria (Lactobacilli) and reduced presence of bad bacteria (E.Coli) when diets were supplemented with seaweed polysaccharides. Another example, in dairy cows, resulted in increased blood glucose for those supplemented with Ascophyllum, thought to be due to the improved digestion and utilisation of feed.
Seagreens®, via the independent Seaweed Health Foundation\textsuperscript{v} and its academic research partners is furthering the many research projects on the benefits of seaweed polysaccharides with trials on Seagreens. Initial studies at Teesside University in the UK, have suggested that Seagreens has beneficial prebiotic effects, and supports previous research studies.

Furthermore, research undertaken at Newcastle University, UK, has indicated that the antioxidant capacity of Seagreens remains high throughout the initial stages of gastro-intestinal digestion. This suggests that a high concentration of ‘antioxidants’ will be released from Seagreens\textsuperscript{®} within the gut lumen where they can provide protection to the gut from oxidative damage.

**Nutrition for colon health**

In addition to their beneficial effect on the gut flora, the brown seaweeds particularly, are known to assist the acid-alkaline balance\textsuperscript{vi}, help protect the gut lining\textsuperscript{vii}, stimulate the secretion of digestive enzymes\textsuperscript{viii}, assist nutrient absorption and metabolism, and thus strengthen immunity.

In poor colon health, and in all special needs diets, the need for a really comprehensive nutrient spectrum is enhanced, yet at the best of times is difficult to obtain from land-grown and manufactured foods and still more so where certain foods are restricted due to illness and therapy, allergy and intolerance, pregnancy, metabolic disorders or weight regulation.

The effect of soil nutrient deficiencies and imbalances is well documented\textsuperscript{ix} and the nature of land foods is that each species has a distinct but partial spectrum of nutrients, high in some, low in others, all with some nutrients missing. Human food quality seaweeds can fill these nutrient gaps, particularly across all of the micronutrients, due to their remarkable nutritional profile.

\textsuperscript{1} Patel, S. & Goyal, A. (2012). The current trends and future perspectives of prebiotics research: a review. 3 Biotech, V2, pp. 115-125
\textsuperscript{5} Seaweed Health Foundation data - www.seaweedhealthfoundation.org.uk
\textsuperscript{6} H. Aihara, Acid and Alkaline, Ohsawa Macrobiotic Foundation, 1986