

Digestion

Seagreens® seaweed improves beneficial bacteria in the gut microbiome. A natural prebiotic, it is also antibacterial against gram-negative pathogenic bacteria, and anti-inflammatory. Its polysaccharides (soluble and insoluble dietary fibre up to 45% of its composition), help protect the epithelial lining and gut mucosa. It reduces oxidative stress from gut free radicals and toxins because it is rich in polyphenols, phlorotannins and its antioxidant capacity remains effective against free radicals in the digestive tract. It is non-allergenic, non-mucoid forming and has beneficial effects on the secretion of pancreatic and digestive enzymes. Used daily at even a gram (a 1/4 teaspoon), it helps balance the diet and regulate metabolism, providing comprehensive micronutrients including an ideal ratio of all the essential fatty acids, rare vitamins, and all the minerals and trace elements. **Seagreens** benefit carbohydrate digestion: they prolong the release of sugars, reduce the glycemic index, assist in the digestion of fats. Our native brown wrack species *Ascophyllum* (Knotted Wrack) and *Fucus* (Bladder Wrack) 'support gastrointestinal health and digestion, the maintenance of intestinal and bowel function, and are a good source of dietary fibre' (allowable EU Nutrition and Health Claims, 2012). In the scientifically proven macrobiotic diet, rooted in Japanese culinary tradition, a small amount of sea vegetables is taken daily, as a condiment, in soup, cooked with grains, beans or vegetables, as a seasoning to supply minerals, and as a small side dish twice a week. A gram is sufficient in an otherwise healthy diet to balance the micronutrients, and this is how seaweed has been used traditionally. In Japan at 4.6 grams daily (latest data 1969), is a heaped teaspoon of **Seagreens** whether in capsules or granulated form or pieces, which our research shows is therapeutic. All [Seagreens products](#) are easy to use on a permanent basis, alone or with any meal, preferably in the morning. Incidental health benefits accrue from daily use, particularly in diabetes, dieting, mineral deficiencies, obesity, special needs, heavy metals and bacterial toxicity. 4 research summaries follow on dietary fibre, prebiotic, and antioxidant capacity. This article examines seaweed benefits and compares it to land grown foods. *Seagreens information website link: [Daily Diet and Nutrition PH 2013](#).*

Thank you for requesting this information. Please ask if I can help in any other way.

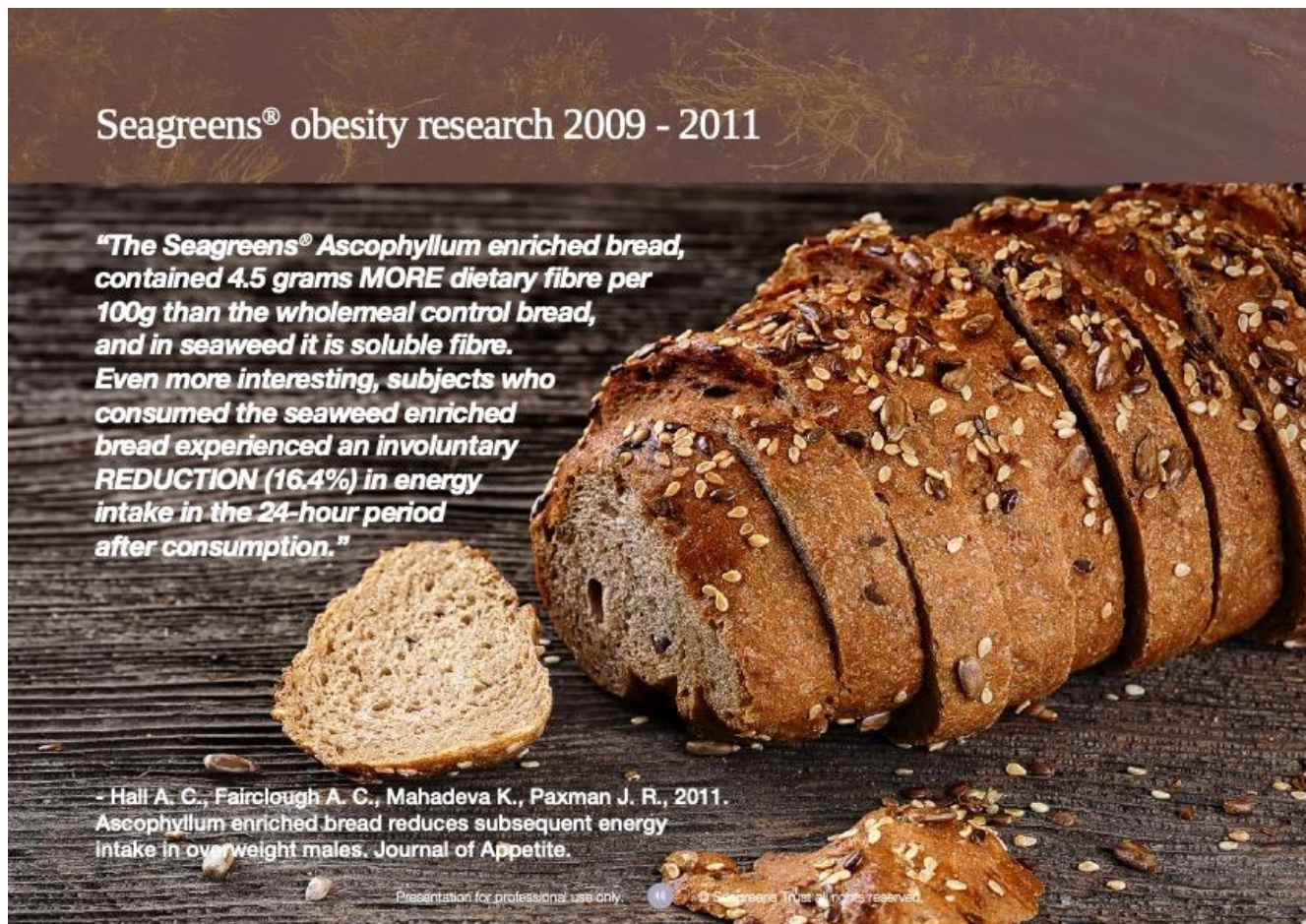
Kind regards

Simon Ranger

Seagreens® Information Service

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Digestion



Seagreens® obesity research 2009 - 2011

"The Seagreens® Ascophyllum enriched bread, contained 4.5 grams MORE dietary fibre per 100g than the wholemeal control bread, and in seaweed it is soluble fibre. Even more interesting, subjects who consumed the seaweed enriched bread experienced an involuntary REDUCTION (16.4%) in energy intake in the 24-hour period after consumption."

- Hall A. C., Fairclough A. C., Mahadeva K., Paxman J. R., 2011. Ascophyllum enriched bread reduces subsequent energy intake in overweight males. *Journal of Appetite*.

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Seagreens® obesity research 2009-2011

Fibre composition of Seagreens® species compared to whole foods

Food type	Total fibre	Soluble fibre	Insoluble fibre	Carbohydrates
Seaweed (g/100g wet weight)*				
<i>Ascophyllum nodosum</i>	8.8	7.5	1.3	13.1
Whole food (g/100g weight)†				
Brown rice	3.8			81.3
Prunes	2.4			19.7
Porridge	0.8			9.0
Lentils green/brown	8.9			48.8
Cabbage	2.9			4.1
Carrots	2.6			7.9
Apples	2.0			11.8
Bananas	3.1			23.2

*Values for seaweeds from the Institut de Phytonutrition (2004).¹⁵

†Values for whole foods from McCance et al. (1993).¹⁵

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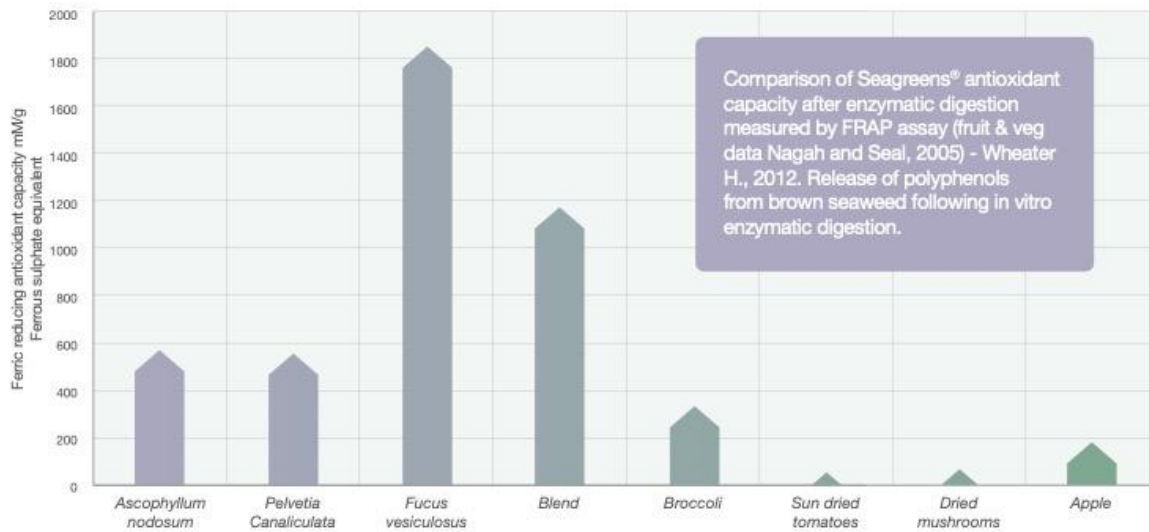
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Digestion

Antioxidant studies – capacity and behaviour 2012



Significant in vitro evidence as potential agents in prevention and treatment of diabetes and obesity. Rich sources of polyphenols, could be more effective radical scavengers than green tea. High antioxidant capacity survived initial digestion, could protect against oxidative damage in the gut. Antioxidant studies - capacity and behaviour 2012

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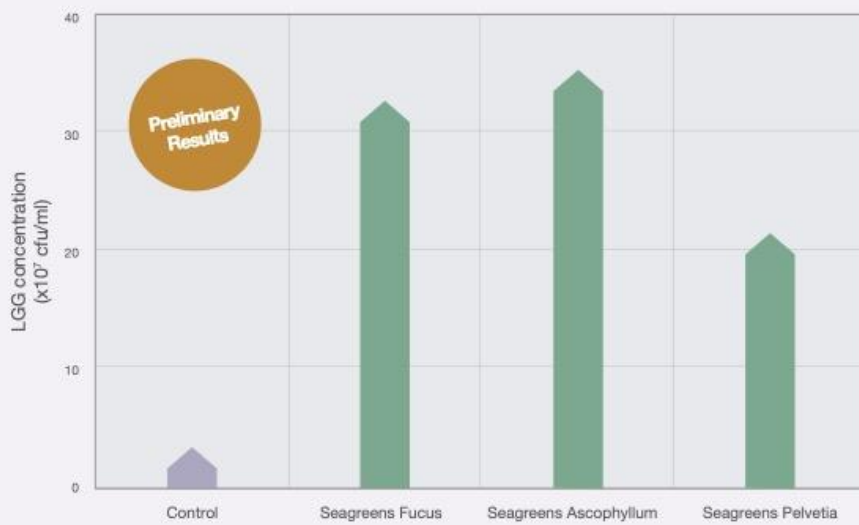
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Digestion

Prebiotic and digestive studies

Use of wholefood Seagreens species as effective prebiotics; demonstrated with *Lactobacillus* (LGG)



Increased good bacteria (*Lactobacilli*).
Reduced bad bacteria (*E. coli*).
Probable reduced oxidative stress from improved balance nitric oxide and reactive oxygen species (ROS).
Supports results in livestock (e.g.. improved digestion and feed utilisation in dairy cows).

Nutrition studies at Sheffield Hallam, Glasgow and Newcastle universities

- Lyons V. Seagreens® as a potential prebiotic and the role of probiotic bacteria in the production of nitric oxide in macrophages. MSc Thesis, Teeside University, 2012

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