Diabetes and nocturia

Nutrition research on **Seagreens**® wild Wrack seaweeds conducted at Sheffield Hallam and two other British universities between 2009 and 2011 showed **Seagreens** to inhibit pancreatic enzymes *in vitro*, suggesting that they prolong the digestion of carbohydrate foods, helping to regulate dietary sugar release, and may be a valuable ingredient in diabetic foods. Earlier trials using seaweed polysaccharide extracts, showed similar anti-diabetic effects. Some of the Seagreens® studies <u>found advantages</u> over the diabetic drug Acarbose, an amylase inhibitor whose side effects include flatulence, abdominal distension and diarrheoa. *Seagreens information website link:* Inhibitory effects in carbohydrate and fat digestion, Journal of Applied Phycology, 2015

Three seaweed species used in <u>Seagreens Food Capsules</u> and <u>Food Granules</u>, proved to be the most potent, and were found to have five times the concentration of antioxidant polyphenols than the same species from other sources in the extract trials. They were more concentrated than broccoli, tomatoes, mushrooms and green tea, rivalling Vitamin C as free radical scavengers. There is sound evidence of the anticholinestrase antioxidant potential of seaweed, and that obesity and diabetes contribute to the pathogenesis of cardiovascular as well as neurodegenerative diseases.

Nocturia, the nocturnal over-production of urine, may or may not also be a symptom of diabetes, yet seaweed may nonetheless benefit sufferers. The content of dietary fibre (\leq 40%) and especially soluble fibre (\leq 20% of total DF), the clearing of toxins, its alkalinity, and the provision of all the micronutrients, including all the activators of melatonin, are reasons to use <u>Seagreens nutrition products</u>. The general advice is to avoid sweet and salty foods including chocolate, nor drink too much liquid, especially alcohol, within 4 hours of going to bed, and as for diabetes, vegetables and dietary fibre are preferable to carbohydrate and red meats. The cells are trying to remove sodium and calcium electrolytes during sleep and replace these minerals with magnesium and potassium, both of which are well represented in Seagreens (8 and 22mg/g respectively), whilst plenty of water during the day helps hydrate the cells and cleanse the system.

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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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)				
Ascophyllum nodosum	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

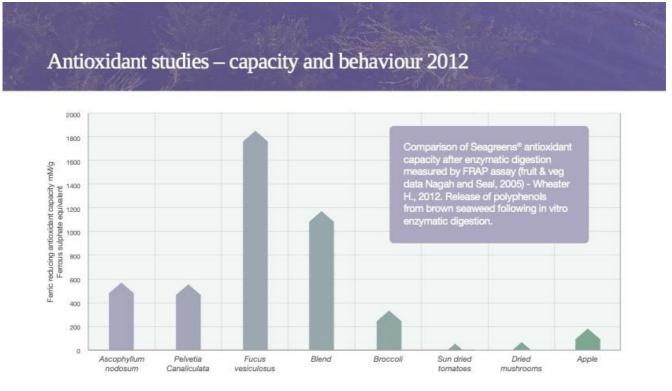
[†]Values for whole foods from McCance et al. (1993).¹⁵

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Diabetes and nocturia



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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