# Low-salt sea

**THE HEALTH FOOD market is full of claims of the miraculous nutritional and medicinal properties of different 'natural' products – from honey to hemp, blue-green algae to açai berries. The scientific basis for such claims is not always convincing, so the validation of a product by an independent, sceptical research department is a significant step.**

**Arctic wrack: healthy alternative to common salt**

As part of Sheffield Hallam University's Food Innovation programme – which aims to help companies respond to the Government's healthy eating agenda – SHU researchers have been working with the Anglo-Scandinavian company Seagreens. The company's food additive granules, made from north Atlantic seaweed, are offered as a natural, healthy alternative to salt in food processing.

After exploring the granules' properties, SHU's researchers have become enthusiastic proponents. Dr Andrew Fairclough, lead researcher on the Food Innovation team, explains: "Seagreens came to us with a proposal for using their wild Arctic wrack seaweed granules as an alternative to salt, but wanted to find out more about how this would affect foods, in particular their shelf life. Our research has found that as well as maintaining the taste of the food, the seaweed granules reduce the numbers of certain micro-organisms thereby helping to lengthen its shelf life in a similar way to salt."

For the UK health agenda, dietary salt is a major issue. Around 75% of our daily salt intake comes from processed foods, with the average adult consuming 50 percent more salt than the recommended limit of six grams per day. Excess salt is linked to high blood pressure, which triples an individual's chances of suffering a heart attack or stroke. Experts predict that if all adults cut their salt intake down to recommended levels, 70,000 heart attacks and strokes would be prevented in the UK each year. The seaweed granules contain sodium at around 3.5%, instead of 40% typically found in salt.

Simon Ranger, Seagreens' chief executive, said: "Seaweed has already been shown to offer significant benefits in connection with cardiovascular health, where sodium chloride in the form of common salt is contra-indicated. It has now been clearly demonstrated that it not only matches salt in terms of food flavouring and its comprehensive nutrient profile, but that it can also effectively extend the shelf life of food."

Seaweed also has other reputed benefits and may play a beneficial role in a number of common health conditions, such as obesity, diabetes, thyroid problems, breast cancer and cardiovascular disease. Alongside its antimicrobial properties, the 'health-giving' properties of seaweed may further increase its commercial potential.

Fairclough added: "SHU tested the granules for their 'purity' in terms of their microbial load and for any external pollutants, and found that the product is extremely 'clean'. When you also factor in the other health benefits of seaweed this has the potential to have a massive effect on the food industry, and to impact on the health of millions."

# Useful websites

**Sheffield Hallam University - Food Innovation**
www.shu.ac.uk/foodinnovation/