

Bread Manufacturers Could Benefit From Algae Opportunities

Contributed by Euromonitor
Monday, 23 June 2014

Seaweed is an important food source, especially in Asia. However, its use in baked goods is unheard of. With the recent discovery of brown algae as a replacement for salt, this situation could change. Algal ingredients can be particularly valuable in bread, which, according to Euromonitor International, accounted for 29% of global sodium chloride use in 2012. In addition, seaweed ingredients also fit well with the growing consumer demand for natural products, and help to lower blood pressure. A recent study also linked brown algae to a reduction in abdominal fat in humans. As governments struggle to bring down soaring obesity rates and manufacturers battle to rejuvenate tumbling bread sales, brown algae could offer the solution they both long for. But where will this work?

Algae's Formula for Success: The Merger of Income, Obesity and Sodium Intake

Globally, almost 90% of all salt consumed as an ingredient stems from packaged food. Some 35% of sodium chloride use derives from baked goods alone, of which bread accounts for the largest proportion. Given the sheer volume used in bread, any attempt to replace it with a viable alternative would make commercial sense. Brown algae is a viable alternative not only because it provides a sodium substitute but also because it fulfills a nutritional function. Algae powder has the potential to play a role in fighting obesity as well as helping to reduce cholesterol and manage blood sugar levels. However, extracting algae remains very costly and complex. According to the FAO, the estimated cost of algal production alone ranges from US\$4-300 per kg of dry biomass, which is quite high given the fact that table salt retails for less than US\$1 per kg. Therefore, its use will be primarily limited to high-income countries.

Daily Sodium Intake via Bread vs Obesity and Overweight Population in Selected Countries

Many Western European countries, such as Germany, the Netherlands and Italy, along with the United Arab Emirates, appear to be those with very high rates of obese and overweight people and a high daily intake of sodium through bread. With a 27% share of global consumption, Western Europe ranks first in terms of global use of the ingredient in bread. Therefore, Western European countries offer the best opportunities for ingredient and packaged food manufacturers.

Algae is Sustainable but Discolouring Might be an Issue

Sustainability is a valid concern for food producers. As part of this, many suppliers are already looking at algae as a future solution. Indeed, algae can be grown on land otherwise unsuitable for agriculture and thrives in dry, hot weather. In addition, it does not need any fertiliser as it feeds mainly on sunlight and uses carbon dioxide and as such can be considered carbon neutral. However, manufacturers may think that algae might not be worth the high production costs because of its (perceived) inferior taste and appearance. In addition, algae is associated with pond slime and thus might alienate consumers.

Due to the association between salt and flavour, products with a reduced-salt positioning may indeed not be very well regarded by some consumers. However, recent studies indicate that brown algae's replacement of salt in pizza dough had no particular impact on taste. Bread purists might also blanch at the thought of brown-coloured bread and dismiss it on the grounds of appearance. Although discolouring might be an issue in white bread and baguettes, its application in wholegrain and multi-seed variants as well as pizza could work as the dark colour will be barely noticed. In fact, Eat Balanced Ltd has already incorporated seaweed into its latest pizza varieties, which it started trialling in nurseries and schools last year.

Brown algae offers potential for bread manufacturers if it can overcome price issues and negative consumer perception. The ingredient has several health benefits, including sodium reduction, weight management and the regulation of cholesterol levels. Brown algae's best opportunities lie in wholegrain bread in developed countries such as Germany, the Netherlands and Italy, which have a high consumption of sodium chloride and a high number of overweight and obese people. In the wake of the low-carb craze, bread manufacturers could still manage to reap rewards by tapping into this sustainable salt alternative to rejuvenate the waning popularity of this major staple.

Republished with permission from Euromonitor Market Research Blog, originally posted on June 20, 2014