



FREEKEH INSIDE

A super grain with a super potential.

Words by Lynn Elsey

In the shadow of ambitious plans to make this country Asia’s Food Bowl, an innovative Australian project that seemingly has it all – a “super grain” loaded with nutritional and health benefits, produced through an efficient, easily exportable technology – has yet to attract the attention of the Australian government, consumers and farmers.

Ancient grains are riding a tsunami of interest as consumers discover their nutritional value, complex flavours and allergy-friendly properties.

According to DataMonitor, global launches of new products made from super grains, such as millet, kamut and amaranth, have risen by more than 150 per cent since 2006.

The potential benefits from these grains were recently noted by the chief of the Food and Agriculture Organization of the UN, José Graziano da Silva, who said that neglected crops that are currently being underutilised could play an important role in addressing global food and agriculture challenges and should be re-evaluated.

Quinoa and chia appear to be topping the grain wave at present but according to many experts such as Tom Vierhile, innovation insights manager at Datamonitor, freekeh, a traditional food from the Middle East, is the grain to watch.

“It’s high in protein, fibre, resistant starch, vitamins and minerals, plus lutein and zeaxanthin. It’s a nutritional powerhouse,” Vierhile said.

The traditional process for converting raw grain into palatable food – a time and labour intensive process involving

picking young green grains (usually wheat) then parching, roasting in burning straw, thrashing and rubbing off the grain, in a process known as freekeh – has provided significant barriers to widespread commercial appeal.

However, if South Australian visionary Tony Lutfi has his way, the nutritionally-blessed freekeh will become a widely produced and consumed grain.

Improving on tradition

US-born Lutfi spent many years living and working in the Middle East, focusing on joint ventures and risk management along with other things such as working as an adviser to the Crown Prince of Jordan. A mechanical engineer by training, he had a ‘Eureka’ moment when he came across Jordanian freekeh being sold in Australia.

“I couldn’t believe that Australia, a country with masses of wheat,

“ There is unpublished research that suggests that the gluten in freekeh is different from normal gluten ”



Tony Lutfi

was importing a wheat product – complete with bugs and rocks – from Jordan, a country with very limited wheat production,” he said.

Lutfi decided to apply the technology he’d learned while working in the oil and gas industries to see if he could engineer a practical, cost efficient method of harvesting and producing freekeh for a broader market.

The freekeh process, which involves harvesting the grain while it is still green, results in a product that contains more protein, vitamins and minerals than most other wheat and grains which are produced at a later stage of maturity. The process also gives the grains a pleasant crunchy sensation and nutty flavor, making it an excellent accompaniment to a wide range of foods.

Non-milled grains have been a staple food in other countries, especially in the Middle East and Europe, for centuries. But Lutfi found little research had been done on freekeh, which has a number of different characteristics from other ancient grains.

“There didn’t seem to be any research investigating the differences between immature and mature grains,” he said. “And that the health and nutritional value in the green grain is completely different. It opens up a whole new area for research.”

So as Lutfi worked on developing a new technology to efficiently harvest and produce freekeh he also engaged some of the Australia’s key food research organisations including CSIRO, the University of Adelaide and the Australian Government Analytical Laboratories to investigate the nutritional properties of freekeh.

Along with nutritional benefits, freekeh had also been noted as an option for those who suffer from wheat intolerance and allergies. According to anecdotal evidence, some coeliacs have consumed freekeh without adverse or allergic reactions.

Lutfi said there is unpublished research that suggests that the gluten in freekeh is different from normal gluten which may eventually lead to a new classification: free from normal gluten. He hypothesises that the variation could exist because the gluten isn’t fully developed and the young grain lacks another amino acid that acts as a trigger to intolerance. It could also be a by-product of his company’s production process. Further research may help clarify freekeh’s potential in this area.

Super benefits

Although the jury is still out on some of the intolerance and gluten potential of freekeh, the nutritional and health benefits are backed by published research.

According to research undertaken by CSIRO, the Australian Government Analytical Laboratories, the University of Adelaide and Flinders Medical Centre, freekeh is loaded with the following attributes:



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- low in GI (43)
- low in carbohydrates
- a good prebiotic effect with a large number of biofidobacterial and lactobacilli
- high in fibre (up to 16.5 per cent), four times the level of fibre found in similar grains
- low in fat
- high in protein, more than found in couscous and rice
- rich in calcium, iron and zinc
- rich in zeaxanthin and lutein (implicated in the prevention of age-related macular degeneration)
- appreciable levels of nondigestible carbohydrates, suggesting that it is likely to have positive effects on bowel health and function, and
- is good for bowel health including managing irritable bowel syndrome.

The freekeh produced by Lutfi’s company, Greenwheat Freekeh, is also 100 per cent natural, free from chemicals, GMO, colouring, additives or preservatives.

Hitting the market

Because the green grains are high in moisture content, developing an efficient technology to produce a shelf stable product while retaining the grain’s high nutritional and taste benefits provided Lutfi with a challenge.

Lutfi utilised his extensive engineering background to develop a time and labour-friendly method of producing freekeh in order to make widespread production possible. The process, which took three years to perfect, is entirely natural and involves immobilising the enzymes in the grain without cooking it.

Lutfi says that his company is the only one in the world with an automated technology to harvest and produce freekeh. They currently produce a range of freekeh products including wholegrain and cracked grains freekeh. Through cooperation and co-branding with other manufacturers, mainly in the US, they



also market flours, breakfast and lunch cereals, water crackers and more. And apparently, freekeh pizza is a hit in New York City.

Lutfi’s company is focused on co-branding ventures with other food producers, with an emphasis on using the Greenwheat Freekeh name as a key branding element – similar to the widely successful “Intel Inside” campaign Lutfi explained.

His overall goal, however, is not to be simply be a freekeh producer but rather to focus on marketing the

Greenwheat Freekeh brand and the unique technology through licensing and joint ventures.

“The goal is to become the Kleenex of the freekeh world,” he said

“Freekeh has it all: it is easy to cook, extremely versatile, safe, healthy and tasty,” Lutfi says.

Quite versatile, it can be used alone, in combination with other foods in salads, soups or even crab cakes, or as a base ingredient in foods such as pasta, breads, burgers and noodles. Its unique taste and nutritional properties

makes it suitable for enhancing the taste and health profile of other foods.

Although the Australian market seems a bit unenlightened about freekeh, other parts of the world have recognised its potential. Greenwheat Freekeh currently exports its freekeh products to the US, Canada and the UK. The Ukraine, another prodigious wheat producing country, has also seen the light. Greenwheat Freekeh currently is providing a muesli product for their market. Lutfi said that substantial interest in the processing technology is emerging from the US, Canada, Ukraine, Brazil and Argentina.

But although Lutfi has created an efficient method of producing a “super” food product that offers an array of health benefits, is kind to the environment and easy to farm, lack of interest and support from government and industry is styming the potential growth of the business and industry and stifling potential benefits to Australia.

Undaunted, Lutfi continues to spread the word about the benefits of freekeh across to consumers, farmers and the government.

“I believe we are developing an industry, not just a company. What we have is potentially a Microsoft here,” Lutfi said. “It offers a way to change the way wheat and other grains such as rice is processed.”

Lynn Elsey is the editor of food Australia

Freekeh
Nutritional Component - One serving 42grams

	Quinoa	Brown Rice	Farro	Freekeh
Calories	155	170	170	150
Total fat	1.3g	2g	1g	1.5g
Total carbohydrates	30g	38g	35g	30g
Dietary fibre	3g	2g	5g	6g
Protein	5.5g	4g	7g	6g
Calcium	0mg	0mg	2mg	25mg
Iron	2%	2%	1%	2.2mg



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