A better natural fibre – for better bottom lines

When KFSU Pty Ltd set out to produce fibre from sugarcane, the product's potential functional health benefits were the focus.

While these functional benefits continue to be a major drawcard to *Kfibre*, market feedback and current research and development has shown that *Kfibre* can add substantial value to processed products by reducing the need for expensive inputs while acting as a bulking, binding, water retention agent.

Recent product development trials, in particular shelf life studies, have shown that after two months in chilled conditions meat products with *Kfibre* used as a binder at levels of 5%, had moisture retention levels of 30%. Heating to serving temperatures showed minimal loss of moisture at < 2%.

Table 1. Water absorption capability of *Kfibre* samples, where 1.5 g of fibre was added to 15 g of water.

		Cold water absorption		Hot water absorption	
Sample type	Sample	Residual H_2O (g)	H_2O uptake (g)	Residual H_2O (g)	H_2O uptake (g)
Bagasse	T4-10	2.46	12.54	3.37	12.73
Ussy-fibre	T5-1	2.65	12.35	3.69	11.31
	T5-1	1.54	13.46	2.69	12.31

Source: Protech Research Pty Ltd

Traditionally sugarcane 'bagasse', or the fibre remaining after juice extraction, has been considered a waste product and used only as fuel (burned to provide heat) in the sugar milling process.

KFSU's patented chemical-free production process further purifies the raw fibre creating a whole cell insoluble fibre. The end product, *Kfibre*, is a light cream odourless powder with a particle size range of < 30–80 µm.

With sugarcane being the third largest agricultural product worldwide, grown commercially in 147 countries, the *Kfibre* production company KFSU Pty Ltd has a large resource of biomass largely unaffected by increasing food prices or available food stocks.

In essence, *Kfibre* provides manufacturers with the ability to add a non-allergenic binder with superior capacity to retain moisture through the cooking process and at particle size below mouth feel. A major benefit for food manufacturers is the product's allergen-free status.

KFSU has two products under the *Kfibre* range, *Ussy-Fibre* utilising bagasse from traditional sugar milling and *Fibacel* utilising a front end milling system "IBP" under licence from Biomass Technology Pty Ltd. This allows KFSU to take selected sugarcane from the field and split it into two product streams, fibre and juice.

Originally KFSU had planned to build its first processing plant in Mossman, Far North Queensland with a second plant going into Okinawa, Japan under licence. Due to financial incentives and with the majority of market interest being from Asia, KFSU have reversed this process with the first plant now being built in Okinawa and a second to be built in Australia in late 2009 early 2010.

Potential product ranges which could utillise this fibre include manufactured meat products, baked goods, cereal products, pasta, beverages, snack foods and pet food.

At the Austrade Awards 2007 in Japan, *Kfibre* was presented with the highest honour for Innovation Products. *Kfibre* was incorporated into every dish at the event's banquet, showcasing its versatility.

Gordon Edwards
KFSU Managing Director
Tel: +61 (0) 7 40322706
Email: gedwards@kfsu.com.au
Web: www.kfibre.com.au □

Kfibre™
Natural. Healthy. Versatile

KFSU