TECHNOLOGISTS have rediscovered the ‘gold of the orient’ as rice has been known for thousands of years. This time with a twist: besides the presence of phyto micro-nutrients including many antioxidants, stabilised rice bran can also be considered a symbiotic ingredient due to the presence of both pre and probiotic dietary fibre.

This alone creates marketing opportunities especially for modern lifestyle consumers who are conscious of nutritional performance, including the total absence of gluten, something of great importance for the growing numbers of celiac affected people.

Celiac disease is an autoimmune disorder triggered by gluten, the protein in wheat, barley, spelt and rye. It is usually recommended that celiac sufferers also avoid oats, although this cereal does not contain gluten.

Reason being, cereals often can become cross contaminated with gluten during harvest and subsequent further processing. Rice and rice bran does not contain gluten and possess no risk of being cross-contaminated with harvested grains due to the typical nature of harvest, milling, sifting and further processing.

RICE BRAN COMPONENTS
The stabilised rice bran is an ingredient composed of a complex matrix of insoluble fibre, soluble fibre, non-allergen (hypoallergenic) protein, and trans-fat free oils.

As such the ingredient can be used without the concerns of spoilage and loss of heat-sensitive nutrients, including maintenance of high levels of phytosterols, gamma oryzanol, tocopherols and tocotrienols.

The combination of rice protein, rice fibre, rice oil and over 100 anti-oxidants and co-factors deliver long-term energy burn. Clinical studies have also shown it to aid in cholesterol and blood sugar management.
STABILITY IS KEY
From moisture management to acting as an unimposing carrier in seasoning blends, the ability of stabilised rice bran to outperform other ingredients while maintaining similar water activity levels is unparalleled. Subsequently, stabilised rice bran can be considered an essential ingredient to manage moisture and nutrition across a variety of applications while delivering quality, taste and least-cost options.

From a technological point of view, the stabilising properties have shown capabilities in a wide range of further processed meat products.

In most cases, a relatively small percentage of addition allows this all-natural ingredient to wholly or partially replace materials commonly used in the past such as carrageenan, soy protein, modified polysaccharides and starches. All this while also eliminating chemical-sounding E-numbers on labels which consumers increasingly have reservations on.

The combination of these ingredients while maintaining its all-natural origin, result in its ability to control purge in processed meat products. It increases water retention and improves cooking yields throughout the thermal processing cycles.

There is no need to mention confusing E-numbers or chemically sounding names on product labels. To sum: rice bran is a label-friendly, ecological sound healthy ingredient that provides low-cost sustainable nutrition and applications for a rapid increasing world population.

BREADED COATED FRIED FOODS
Extensive testing confirmed that the inclusion of defatted rice bran as a partial replacement of wheat flour (5-15 percent) in batter systems significantly reduces oil uptake in deep-fried products such as chicken patties and nuggets.

Tests have further confirmed that reduced oil uptake not only improves the nutritional profile, it also improves organoleptic quality included much desired crunchiness.

When used in tandem with stabilised rice bran as a small inclusion level (<1.5 percent) in the meat matrix, water loss from the cooked or fried meat patty is also greatly reduced which significantly improves juiciness and succulence of the finished product.