RBM-Rice Bran Malaysia



RBM is a nutraceutical product developed from local rice bran, which is a coproduct of rice milling process. Presently local rice bran is underutilised and only used as an animal feedstuff or simply discarded. Yet rice bran contains about two thirds of the nutrients in the rice kernel. Therefore converting rice bran from a low value rice industry by-product into a high value added nutraceutical is not only smart economics but more importantly it offers an alternative product with potential health benefits.

Stabilisation process is crucial in the development of RBM in order to avoid deterioration. Research findings from our laboratory at UPM indicate that stabilised defatted and full fat RBM could lower blood cholesterol levels in laboratory animals. In addition in an animal model induced with colon cancer, defatted RBM was able to reduce the number and multiplicity of Aberrant Crypt Foci, suggestive of its anticancer effect. RBM is an exciting product with excellent chemical composition that includes high level of dietary fiber, polyunsaturated fatty acids, minerals and vitamins. The most notable feature of RBM is its high content of sev-



RBM-a nutraceutical product

eral components with antioxidant activity such as gamma-oryzanol, vitamin E and phytosterols. RBM can be used as a raw material for nutraceutical, other food ingredients and even pharmaceuticals.

Rice bran oil can be extracted from RBM with yield as much as 20 %. Rice bran oil has been generally considered to be one of the highest quality vegetable oil. Apart from this, RBM may be incorporated into many functional foods as a source of dietary fiber and antioxidants. It may be used as food ingredients in cereals such as in rolled or flaked, shredded, extruded and mixed grain or nugget-type cereal. RBM is well suited for a variety of baked products such as multigrain or high fibre breads and muffins as well as cookies, crackers, pastries, pancakes and waffles. RBM has also been tested as filler for processed meat products such as burger, hotdog and sausages.

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