

Capturing the Value of Rice Phytonutrients

Don R. McCaskill, Vice President – Research
Riceland Foods, Inc.

Whole grain (brown) rice and its fractions contain a wide range of constituents that provide a variety of health benefits; but, individual companies and the industry-at-large must carefully weigh a number of factors in determining whether it is best to remove and concentrate them for use as nutraceuticals and dietary supplements or to leave them in the whole grain matrix. Chief among these are technical, safety and regulatory requirements, consumer acceptance and marketing requirements, loss or retention of phytonutrients through conventional processing, capital costs, processing costs, and risk exposure.

Although many consumers currently rely heavily on dietary supplements, some believe the trend is shifting toward consumption of whole foods as a source of health benefits. Support can easily be found for either approach in the nutritional and clinical literature. Numerous studies have been published regarding the health benefits and efficacy of various phytonutrients. Still, others have provided evidence that whole foods often provide greater benefit, attributing this to the additive or synergistic effects of multiple constituents, the presence of unidentified phytochemicals, changes in chemical structure of isolates, and / or physical factors affecting release and absorption in the digestive tract.

In summary, the rice industry is at a crossroads, requiring careful consideration of options based in economic reality. Can additional value be created by emphasizing the benefits of whole grain (brown) rice and its fractions like bran and oil? Or, must individual phytonutrients be concentrated or isolated and sold as dietary supplements and nutraceuticals?

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