

Developing Rice-based Food Products

Hwang-Jaw Lee, PhD
Board Director, Taiwan Flowers Development Association

In response to domestic demand for gastronomic diversity, Taiwan's Council of Agriculture (COA) has been developing rice-based food products in recent years, ranging from the creation of various innovative pastries and rice burgers to the establishment of a new line of "rice noodles" products. On top of being nutritious and savory, these rice noodles are also easy to prepare and to digest, which prompted the COA to transfer the know-how to domestic producers in hopes of rewarding consumers' palates, promoting local produce, reducing carbon emissions and strengthening the nation's food security.

From grains to strands, rice becomes a new favorite amongst noodle lovers

Contrary to common perception, rice can be used for making more than simply a bowl of steamed rice; in fact, the humble rice is a handy and healthy substitute for oat, wheat and other non-indigenous grains. Tapping into the versatile characteristics of rice, the COA first worked with related industries to create various rice-based baked products, and then developed rice noodles in a project co-piloted by the China Grain Products Research and Development Institute (CGPRDI). Under the CGPRDI project, the COA was able to identify the golden proportion of rice powder to wheat flour for creating the most luscious rice noodles. Together, COA and CGPRDI experts have developed the most efficient method for mass production, and these supple, fragrant rice noodles will soon be on their way to enticing noodle lovers all over the world.

Double the ingredients, triple the benefits

The COA highlighted the fact that rice contains 6-8 grams of quality protein per 100 grams; hence the formula of using 30-50% rice powder in the manufacturing of rice noodles allows the consumers to enjoy double the nutrients from both rice and wheat. The two servings of amino acids combined with the fact that rice can be digested up to 98% by the human body make these rice noodles the perfect pantry staple. Moreover, due to the rice's intrinsic properties, rice noodles are naturally smoother and whiter than wheat-based noodles, making the COA's newest creations more appetizing in both appearance and texture. As the final cherry on the top, these rice noodles need little time to be cooked through – only half of the time required by traditional rice-based noodles currently sold in the market. The reduction in carbon emissions in the culinary process marks these noodles as bona fide eco-friendly products, making them perfectly competitive in a market environment that is increasingly advantageous for green products.

One type of rice, an unprecedented variety of noodles possible

Colorful, nutritious, fragrant and chewy, the COA's newest line of products include plain rice noodles, ramen rice noodles and egg rice noodles, as well as flavored rice noodles that incorporate local produce such as spinach and carrots and exotic foreign ingredients such as cuttlefish ink. Given the unstable international grains markets, the COA stressed that using locally grown crops to manufacture rice noodles will give the product an unprecedented edge in pricing and quality.

(Data Sources: Council of Agriculture)

Date submitted: November 21, 2013

Reviewed, edited and uploaded: November 25, 2013