



Givaudan reappraises umami to create new approach to taste

Dübendorf, Switzerland, 19 August 2009: Givaudan is conducting new and extensive scientific and culinary research into *umami* through its TasteSolutions™ programme.

Combining culinary knowledge of umami, together with scientific expertise in receptor research and taste analysis, Givaudan has developed an extensive palette of natural taste ingredients which focus on umami. This enables its flavourists to create flavours which provide a new level of deliciousness and authenticity in foods without having to rely on the addition of declarable taste enhancers.

The move to label declarations that consumers can readily recognise and understand is a trend which continues to grow in importance linked to health and wellness concerns. This translates into requests from food manufacturers who wish to reduce the number of ingredients on the label declaration to the minimum and find natural alternatives to artificial or chemical-sounding ingredient names.

At the heart of this 'clean label' movement is the desire to remove taste enhancers such as MSG (monosodium glutamate). MSG is widely used in savoury and snack foods to provide an umami sensation which enhances the overall flavour intensity. Umami is a Japanese term that directly translates into 'delicious taste' and provides the body, mouthfeel and succulence to foods which consumers find highly desirable. Developing successful products which are not reliant on adding MSG is a significant technical challenge for food manufacturers.

Through their creation and application expertise in umami and the extensive palette of ingredients at its disposal, Givaudan is providing customers with flavours that are tailored to creating the perfect umami taste profile for their product.

"It is important to understand how the balance and harmony of taste affects the eating experience," explains Matthew Walter, Givaudan's EAME group leader for the culinary center of expertise. "Taste is not just about commonly used enhancers such as MSG or IMP/GMP* alone - it is a much more complex phenomenon. Understanding the contribution that other taste ingredients make and using them in the right balance is essential to creating deliciousness. The Japanese refer to this taste complexity and balance as *kokumi*, which is a term still poorly understood outside of Japan."

Givaudan has committed substantial resources to discovering more about umami and kokumi through its TasteSolutions™ programme, undertaking receptor research and sensory understanding programmes to unravel the complexities of taste. Significant effort is currently focused on how umami can be measured in terms of both its strength and its temporal effects and to distinguish

between the taste characteristics of different umami ingredients.

Working with its in-house chefs and trained sensory panelists, Givaudan also focuses on understanding what makes food taste great. Givaudan has discovered a wealth of new molecules through the analysis of traditional fermentation processes, cooking techniques and artisanal ingredients that are used in cuisines around the world to impart taste.

Furthermore, the company's network of industrial and academic partners provides unmatched opportunities for future taste development. In 2008-9, 70% of the patents Givaudan filed related to taste perception and modulation.

Givaudan's deep and holistic knowledge of taste has led to a reported double-digit growth in the number and value of the company's taste projects over the last 18 months.

Editors' notes:

IMP*: disodium inosinate

GMP*: disodium guanylate

Givaudan's TasteSolutions™ programme is a palette of ingredients and technologies designed to enable food manufacturers and processors to either reduce salt or enhance sweetness or build back deliciousness into their products while maintaining consumer preference.

Givaudan Flavours is a trusted partner to the world's leading food and beverage companies, combining its global expertise in sensory understanding and analysis and consumer-led innovation in support of unique product applications and new market opportunities. From concept to store shelves and quick serve restaurants, Givaudan works with food and beverage manufacturers to develop flavours and tastes for market leading products across five continents.

For further information and photographs, please contact:

USA: Shelby Rohwedder shelby.rohwedder@coburnww.com Tel: +1 212 536 9836

Non-USA: Toni Gill toni.gill@razor-pr.com Tel: +44 (0) 1869 353807