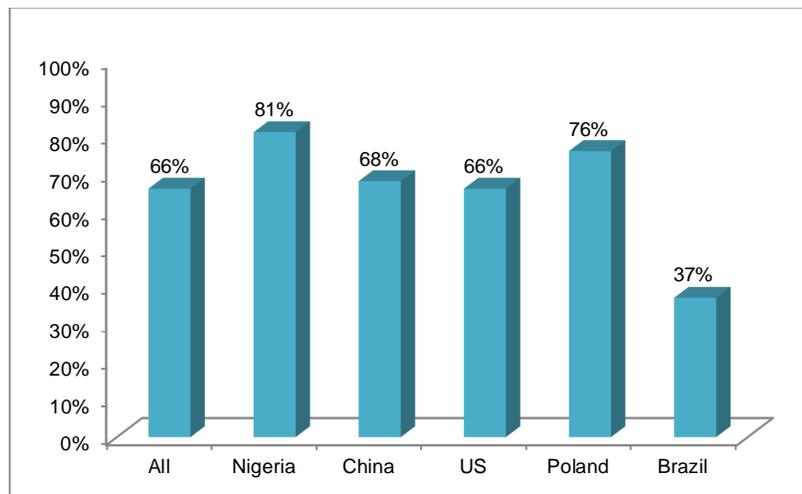


## Spiced food - a global preference in 2014

### URBAN CONSUMERS ARE UNITED BY THEIR LOVE OF SPICED FOODS

- Urban consumers separated by thousands of miles, decades in age and differences in gender are united by a preference for spiced food, as the third Global Insight report from DSM on consumers' perceptions of savory foods reveals.
- When asked to rank which typical tastes of food they prefer to eat or prepare in the home out of a list including 'spicy', 'salty', 'sweet', 'sour', 'sweet & sour', 'plain or mild', 'bitter' and 'other', 66% of respondents listed 'spicy' as one of their top three choices, while 62% included 'sweet' and 60% included 'salty'. Only 50% said that they enjoyed 'plain or mild' foods within their top three choices.
- In certain countries the preference for spiced food is even more pronounced: over 80% of Nigerian respondents and 76% of Polish respondents prefer to tuck into spiced meals at home.
- Brazil bucks the trend when it comes to spice preference. Brazilian consumers prefer to cook and eat salty (94%) and sweet (77%) foods with only 37% stating a preference for highly spiced cuisine.
- Men are somewhat more likely than women to select spiced dishes as a favorite food (70% versus 62% of respondents).



Percentage of respondents rating spiced food in their top 3 preferences (out of 8)

#### INSIGHT: More opportunities to eat spiced foods

- Even in countries such as Poland, where the traditional cuisine is not heavily spiced, spiced foods are incredibly popular and manufacturers are looking for ways to respond to this trend. Where once people may have eaten spiced foods in particular ethnic restaurants or when cooked by others, they are now expecting much more richness and intensity in the flavors of their at-home menus, making spicy tastes a vital area for pre-prepared and processed food manufacturers to explore. In addition, highly spiced snacks have surged in popularity. As spiced foods become an everyday part of people's diets they will demand the same qualities from spiced dishes as from any others: fresh and authentic tastes with satisfyingly complex flavors that are free from complicated additives and represent good value for money.

One limitation of a consumer spice perception survey is the broad meaning that this term, as well as terms such as 'sweet' and even 'mild', can convey to different consumers. For example, to some the term 'spicy' refers to hot, mouth-burning food we traditionally associate with chilies, whereas others associate this term with well-seasoned dishes with a complex taste profile that includes herbs and spices. For manufacturers this may mean that finding out exactly which intensity of taste their target audience prefers when saying they want spicy food is crucial.

However, the fact that a global audience of consumers prefers these words ('spice', 'spicy', 'spiced') when talking about their at-home meals indicates that food manufacturers can tap into this language for marketing purposes. The message is clear: that consumption of 'spiced' processed food in all its forms is increasing, and that intense, complex and rich, authentic flavors form a solid base for a full and lingering taste sensation.

INSIGHT: Factors driving preference and purchasing of spiced food

- Men report a higher preference for spiced foods than women, but given that the responsibility for grocery shopping falls to (or "on") women in the majority of homes around the globe,<sup>1</sup> food manufacturers need to ensure that their marketing campaigns address the expectations of both the end-product purchaser and the end-product consumer.
- Importantly, from the survey and the first Global Insight paper launched in June 2013, it appears that only ~30% of respondents have seen, read or heard about healthier alternatives to salt for flavoring food. Capitalizing on consumers' preference for spiced foods may therefore aid salt reduction - an approach that is recommended by The National Heart, Lung and Blood Institute.<sup>2</sup>

INSIGHT: Sensation seekers want highly spiced food

- A study presented at the 2013 Institute of Food Technologists annual meeting suggested a correlation between preferences for highly spiced food and risk-taking personalities ('sensation seekers').<sup>3</sup> Using the Arnett Inventory of Sensation Seeking (AISS) test, individuals who scored above the mean consistently reported liking a meal with capsaicin even as the burn increased, with those scoring below the mean disliking the spicy meal as the burn increased. For manufacturers this may mean that in order to attract the widest range of customers, pre-prepared food needs to be available from mild to hot varieties and that more 'lifestyle' marketing approaches might be an untapped opportunity.

INSIGHT: Spice is the variety of life

- As the popularity of highly spiced food has grown, the market has responded with a variety of ethnic dishes and snacks. Manufacturers are using spices along with a host of flavors to create appealing dishes that reflect the cuisines of a range of cultures. Creating spiced foods is no longer a matter of adding a single ingredient such as chili or pepper: it is a process of building a complex and satisfying flavor with spicy qualities at its core. Layering is key to achieving this, as is an understanding of what each ingredient adds to the dish or snack's flavor profile. Layering is more important than ever in spiced foods as continuing innovation in this area of great opportunity will rely on an increased level of sophistication in the delivery of complex, well-balanced flavors.

INSIGHT: Building complexity layer by layer

- The flavor profile of a Mexican dish such as spicy salsa, with chili heat as well as the fresh flavors of tomato, parsley and garlic, is very different from that of a spicy Chinese dish, which may feature the flavors of Szechuan pepper and ginger as well as intense umami notes. By

<sup>1</sup> [http://plma.com/2013PLMA\\_GfK\\_Study.pdf](http://plma.com/2013PLMA_GfK_Study.pdf) Accessed June 2014

<sup>2</sup> <http://www.nhlbi.nih.gov/hbp/prevent/sodium/flavor.htm> Accessed June 2014

<sup>3</sup> <http://www.ift.org/newsroom/news-releases/2013/july/17/personality-spicy-foods.aspx> Accessed June 2014

carefully layering flavor upon flavor and ensuring that each addition complements and supports every other flavor element, it is possible to create the complexity of flavors that makes foods from all cuisines delicious and memorable. The challenge is to layer the flavors in such a way that they do not overwhelm each other or distract the palate from the dish's focal flavor.

Frank Meijer, Global Product Application Development Manager for DSM Food Specialties comments *"Our earlier insights report showed a consumer preference for home-made and fresh flavors. When we consider this in combination with the demand for spiced foods, it becomes clear that manufacturers have a flavor challenge on their hands: to produce fresh-tasting foods with the delicious qualities of a home-cooked dish or snack that satisfy the rising demand for spice. Achieving complexity and the right intensity of flavor is key to meeting this challenge and making the most of the opportunity that the world's taste for spicy foods offers. Simple flavor combinations and single smell components will fall short when it comes to achieving savory innovation successes in this area."*

INSIGHT: Layering flavors to achieve home cooked, complex and intense flavors

- DSM's savory ingredient development strategy is based on a multi-tiered, taste pyramid formulation approach where the base of the pyramid provides an initial savory umami taste that is rich and lingering. Following this, the middle blocks of the pyramid deliver specific taste directions (boiled, roast, fried etc.) by using natural ingredients to stay as close to the home-made cooking experience as possible. Finally, process flavors add complexity and intensity to the finished recipe. It is the combination of the three layers of the pyramid that help deliver intensity, complexity and flavor richness, that form the basis for a spicy, lingering and delicious taste sensation.

#### SURVEY OVERVIEW

DSM conducted an international perception survey around food and taste of 5000 18-45 year olds (50:50; men: women; living in key urban areas) from emerging markets Brazil, China, Nigeria and Poland as well as the USA in May 2013. This is the third in a series of Global Insight reports to be published by DSM to explore people's perceptions of savory tastes in these diverse and emerging global markets.