

Baking **Management**

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		% Daily Value
Saturated Fat	5g	20%
Trans Fat	2g	25%
Cholesterol	30mg	
Sodium	600mg	
Total Carbohydrate	31g	
Dietary Fiber	0g	10%
...	5g	

FLARE

taste buds with

HISPANIC SPICES



PHOTO COURTESY OF CUSTOM CHEFS LTD.

With an increasing Hispanic population comes economic might. High-volume bakers can capitalize on the demands of this growing market by adding a Hispanic touch to bakery foods.

by **Christopher Reckling**, assistant editor



PHOTO COURTESY OF EDLONG CORP.

U.S. Census Bureau data reveals that the Hispanic population soared 58% between 1990 and 2000. This population segment will soon represent nearly 15% of the total U.S. population. New bakery food development is needed to satiate the Hispanic population's demands, and ingredients such as spices, Hispanic cheeses and fruit emulsifiers add a Hispanic touch to bakery foods.

New cultural influences are followed by taste buds, and the Hispanic population enjoys eating tortillas. In 2002, the U.S. tortilla industry had sales of \$5.2 billion, according to an Aspex research study titled "State of the Tortilla Industry." The growing Hispanic population combined with an overall increase in tortilla consumption by non-Hispanics caused this growth.

"The consumer is looking for

some excitement in flavors, what people call 'wow' flavors, and the reason is ethnic/Hispanic ingredients," James Curry, Custom Chefs Ltd.'s president, says.

Tortilla and bread flavoring

Custom Chefs Ltd. has developed new liquid flavor technology that diminishes the difficulties of adding flavors to tortillas and bread. Because of the high amount of starch, which absorbs flavors, found in tortillas and bread, adding flavors to tortillas and bread has little affect on taste. Another difficulty with flavoring tortillas is the gluten proteins in flour encapsulate flavors. Because flour traps ingredients, only strong flavor notes can be tasted. Plus, fresh aroma is prevented from being smelled by consumers when eating their tortillas and bread, according to Curry.

"Bread is a perfect carrier for fla-



Spices such as garlic, cilantro and red chili pepper enhance bread and tortilla flavor. Adding these Hispanic flavors to bakery foods increase their selling potential.

Mediterranean fiber extends freshness

Ethnic ingredients do not just cater to the Hispanic population. One ingredient derived from fruit pulp found in brown pods on carob trees in the Mediterranean and United States, adds fiber and other benefits to bakery foods. Nutrinova Inc.'s Caromax, a multifunctional dietary fiber, contains large amounts of lignin and polyphenol, which promotes digestion due to its high content of insoluble dietary fibers. Caromax also lowers cholesterol, according to Nutrinova. Other benefits include better blood-glucose level control and anti-inflammatory affects in the body.

Caromax also benefits the baking process. This fiber has ideal water-holding capacity, which prolongs product freshness and shelf life. With its chocolate-brown color, the fiber can be used in cocoa-containing products to substitute 50% of cocoa. Fats also can be substituted by as much as 25%.

vors, and the reason is because bread is fairly bland when by itself," Curry says.

High-volume bakers can enhance tortillas and breads with flavors such as herb and garlic, spinach pesto garlic, black bean and New Mexico red chili by using a variety of methods. These methods include: fresh extract, which uses cold processing to isolate and extract fresh oils; essential oils, which are produced by steam distillation; enzymatic flavor development, which uses reactions starting with acetic acid to create flavors; and Non-enzymatic development, which uses sugar and amino acid reactions to create flavor compounds.

Salsa is a widely eaten food in the United States, but difficult to implement into a baking formula. However, cilantro, found in salsa, is easy to mix into tortillas and bread. Cilantro is ideal for bread and tortilla dough when used in extract form. One pound of extract is typically needed for a 100-lb. dough batch. When using crushed or chopped cilantro, bakers need to add 15 lbs. per 100-lb. dough batch. Cilantro extract also differs from raw plant material by improving shelf life.

Above all else, the greatest benefit to selling a cilantro-flavored tortilla is profit increase. Typically, a dozen unflavored tortillas sell for \$1.50 at supermarkets. When adding cilantro, bakers can sell a dozen tortillas for \$2.50 to \$3.00.

By adding cilantro, bakers create a premium tortilla with a larger margin. According to Curry, adding cilantro to tortillas would cost the manufacturer 10 cents more per dozen.

"Just like on gourmet seven or eight grain bread, they get a premium for that," Curry says. "I want something that tastes good, and I don't care if it is a dollar more."



“Bread is a perfect carrier for flavors, and the reason is because bread is fairly bland when by itself.”

Mexican cheese benefits

When selling tortillas is not feasible, Hispanic gusto can be added to bakery foods with dairy concentrates. Natural-jalapeno cheese, part of Edlong Corp.'s Ed-Ferno flavor line, adds fresh jalapeno-pepper spiciness to bakery foods such as artisan bread and crackers. This emulsion is water dispersible and is available in a natural, artificial or natural- and artificial- blended form. The suggested usage level in bakery-food formulas is .10% to 1%.

Other flavors from Ed-Ferno's flavor line include Natural Chipotle cheese and Natural Hot Red Pepper and cheese. These cheese concentrates reduce the cost of using regular dairy products such as butter and



PHOTO COURTESY OF EDLONG CORP.

Emulsions reduce the need for real dairy products in baking formulas by 60%.

cheese. As much as 60% of real dairy products can be substituted with Ed-Ferno flavors, Dave Booth of Edlong, says. These cheese-concentrate emulsions are double encapsulated using Edlong's CapsuLong process, which increases heat stability.

If a gentler Hispanic flare is desired, several taste-bud friendly cheese concentrates are available. Manchego-cheese flavor adds a slight salty and earthy flavor to bakery foods. Another flavor profile, the Chihuahua-cheese flavor, adds a creamy, slightly nutty and sour flavor to bakery foods. For a Mexican-style ricotta flavor for artisan breads, bakers can use the Sierra-cheese flavor. This flavor adds a mild, chalky and salty flavor to bakery foods.

When baking with dairy products, the allergenicity of a food is important. Ed-Ferno flavor emulsions can be produced using non-allergy-causing raw materials that mimic dairy flavors.

Adding fruity flavors

Sweet goods also can incorporate a Hispanic twist by using fruit flavors native to Latin America. Fruit fla-

vors such as orange and guava can be mixed into muffins, pies, cookies and cakes to satisfy Hispanics. The ideal way to implement these emulsions is to use propylene glycol as a carrier, according to Tim Parker, Parker Vanilla Products Inc.'s president. Propylene glycol acts as a preservative and is heat stable when used in sweet goods. This carrier is able to mix more flavor oils into bakery foods than flavor extracts that use alcohol as the carrier, Parker says. When using alcohol as the carrier, less than 50% of the flavor mix has flavor oils in it. When using propylene glycol, more than 70% of the flavor mix has flavor oils, which makes it much stronger in sweet goods, Parker says. Flavors using this solvent also are cheaper than flavor extracts, according to Parker. However, bakers should not, "pay less than \$10 to \$15 for flavors," Parker says. "If you want something decent, with good top notes, with decent strains, the flavors should be in the \$15 to \$25 range per gallon."

With the increasing Hispanic population becoming a large market for bakery foods, high-volume bakers can experiment with different spices and flavors on their bakery lines to entice new Hispanic consumers. ●

Breads that use fresh extracts allow consumers to smell herbs and spices through the packaging.