

and contains less sodium. Producers of underconsumed food groups such as whole grains, low-fat dairy foods, fruits, and vegetables can use spices and herbs to prepare ready-made flavor combinations and emphasize less salt. Nutrition professionals can communicate the message that flavor can be added easily and economically to every food group and encourage consumers to season foods to their liking with less salt, fat, and sugar. Policymakers can leverage the flavor and health benefits of spices and herbs in institutional menu planning for schools, the military, and hospitals. Consumers themselves can learn to use more spices and herbs in cooking and at the table.

CONCLUSION

Spices and herbs can be added to a single dish, a single portion, or a single bite. By taking them out of the pantry

and putting them on the table, consumers can enjoy more control over their at-home meals while also personalizing flavor. Consumers should be encouraged to use culinary spices and herbs regularly to help meet their dietary goals.

REFERENCES

1. US Department of Agriculture and US Department of Health and Human Services. *Dietary Guidelines for Americans 2010*. 7th ed. Washington, DC: US Government Printing Office; 2010.
2. International Food Information Council. 2013 Functional Foods Consumer Survey. <http://www.foodinsight.org/Content/5519/Functional%20Food%20Consumer%20Survey%20Media%20Webcast.pdf>. Accessed June 26, 2014.
3. Savage JS, Peterson J, Marini M, Bordi PL Jr, Birch LL. The addition of a plain or herb-flavored reduced-fat dip is associated with improved preschoolers' intake of vegetables. *J Acad Nutr Diet*. 2013;113(8):1090–1095.

Spices and Herbs in the Development of Healthier Menus

Greg Drescher

Beyond the potential health-promoting properties of spices and herbs is the question of how these flavors can advance healthier and more sustainable food and menu choices in the United States. The answer lies in the larger landscape of megatrends in American food choices, which can provide a roadmap for driving change and opportunity within the \$680 billion foodservice industry and the broader consumer markets.¹

Current consumer food preferences lean increasingly toward global palates, and Americans—especially the Millennial generation, born between 1981 and 1996—have never been more open to new flavor frontiers. This transition is driven in part by seismic shifts underway in demographics: by 2050 the Hispanic and Asian populations, with their non-European food cultures, will comprise 38% of the population according to the US Census Bureau.² White Americans will constitute a minority in a mere 35 years.

In light of these changes in the population and flavor preferences, strategies that affect the trajectory of future food choices and their resulting health and sustainability outcomes must be considered more broadly—not just for the

next year or 2, but for the coming 10, 20, and 30 years. To meet this challenge The Culinary Institute of America partnered with the Harvard School of Public Health's Department of Nutrition to develop a leadership initiative aimed at linking the idea of deliciousness with healthy, sustainable food choices—a “moonshot” project, if you will, designed to bring together chefs and food industry executives (from restaurant, hospitality, and other foodservice companies), scientists, and other experts to address those most urgent issues that sit at the intersection of health, nutrition, environmental sustainability, and business. Menus of Change, now in its third year, is the result of this innovative collaboration.³

THE MENUS OF CHANGE VISION

The Menus of Change vision is built on 4 precepts: (1) optimally nutritious and healthy food, (2) environmental sustainability of food, (3) delicious food with culinary and cultural appeal, and (4) socially responsible and ethical approaches to producing food.³ One Menus of Change menu research and development principle, for example, focuses on globally inspired and largely plant-based cooking: think produce first.⁴ This principle is based on the insight that shifting consumers' dietary patterns to predominantly plant-based food is likely the most significant decision that can be made in the professional kitchen in support of these imperatives. Because growing plants for food tends to have a less

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negative impact on the environment than raising livestock, a shift to plant-based cooking will advance global environmental sustainability. Many food cultures around the world, including those of many parts of Asia, Latin America, and the Mediterranean region, have achieved a desirable dietary balance in their traditions between foods from animal and plant sources. Now there is an opportunity to help American consumers do the same.

MENU/CULINARY STRATEGY: USE SPICES AND HERBS

Spices and herbs play a key role in 3 of the main menu principles of the Menus of Change initiative: focusing on whole, minimally processed foods; right-sizing portions without sacrificing flavor; and celebrating cultural diversity and traditions. For example, spices and herbs amplify the flavor impact of meat, allowing it to be used as a condiment rather than as the main entrée. Spices and herbs bring to the American table the flavor systems rooted in traditional world food cultures. In many cases, the American consumer may not be ready for menu items *named* after distant and unfamiliar locations, but they have big appetites for these actual flavors.⁵

CONCLUSION: STEALTH HEALTH/STEALTH FLAVOR

Having a great food experience is what matters the most for consumers. The practical issues for the foodservice

industry are how to increase the appeal of produce, nuts, whole grains, legumes, and other plant-based foods, while leveraging smaller amounts of meat to greater effect. Spices and herbs can help address these issues by amplifying flavors and enhancing the acceptance of nutrient-dense foods. The challenge ahead is not merely to encourage additional creativity on the part of chefs. Rather, it is about designing evidence-based research and development strategies that can connect culinary insight and flavor development with successful transformation of food preferences and behaviors around healthier, more sustainable choices.

REFERENCES

1. National Restaurant Association. News & research: facts at a glance. <http://www.restaurant.org/News-Research/Research/Facts-at-a-Glance>. Accessed July 18, 2014.
2. Ortman JM, Guarneri CE. United States population projections: 2000 to 2050. <http://www.census.gov/population/projections/files/analytical-document09.pdf>. Accessed July 18, 2014.
3. The Culinary Institute of America and the Harvard School of Public Health—Department of Nutrition. Menus of Change. <http://www.menusofchange.org/news-insights/news/>. Accessed June 12, 2014.
4. The Culinary Institute of America and the Harvard School of Public Health—Department of Nutrition. Menus of Change 2014 annual report. <http://www.menusofchange.org/news-insights/annual-reports/>. Accessed June 12, 2014.
5. Nunes K. Moving beyond heat (posted 10/22/2013). <http://www.foodbusinessnews.net/>. Accessed August 27, 2014.

Spice and Herb Extracts in the Development of Healthier Products

Suzanne C. Johnson, PhD

Taste and price drive most food and beverage choices, although healthfulness, convenience, and sustainability are also important, according to consumers polled in a 2012 survey. Survey respondents with heart disease, high blood cholesterol, high blood pressure, or a high body mass index—those most in need of dietary guidance—reported finding it difficult to figure out how to eat properly. In fact, a startling 52% of survey participants said it was harder to figure out how to eat healthfully than to

do their taxes, which speaks to the challenge facing nutrition professionals and the food industry alike.¹ Food producers and manufacturers want to extend the benefits of nutritious foods to consumers who have little time to cook every day, and flavor is 1 missing link to healthier eating.

REACHING CONSUMERS THROUGH INCREASED AWARENESS AND FAMILIARITY

Two strategies for improving consumers' eating patterns are increasing awareness and promoting familiarity. The online environment is a good place to build awareness of how to eat a healthy diet. A Google search of articles on the health benefits of spices and herbs, for example, returned more than 1 million articles posted on popular

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