

Baltimore's public high school curriculum), which may account for part of their improvements in diet quality. Second, there may have been intervention "ceiling effects" due to the urban demographic characteristics of the students, many of whom had limited access to healthy food. Third, about 75% of students in both schools were participating in the School Breakfast Program and the National School Lunch Program. Because these programs offer standardized menus, it was difficult for students to improve their meals. Nonetheless, a future study might consider this pilot study strategy and use a larger, more generalizable sample from several high schools. The *Spice*

MyPlate nutrition education pilot study found that some measures of diet quality and attitudes toward healthy eating improved in the spice and herb intervention group compared with the control group.

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The Importance of Flavor in Dietary Counseling

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"If it doesn't taste good, people won't eat it."

—Jacques Pépin, French chef

Dietary counseling to improve health has traditionally included advice on adding fresh fruits and vegetables, high-fiber grains and cereals, and low- or reduced-fat dairy and meat products to the typical diet.¹ Consumers are usually and perhaps necessarily advised to "avoid," "limit," "reduce," or "control" the intake of certain foods and/or nutrients to achieve their dietary goals. Despite several decades of public nutrition education and individual dietary counseling, it seems many consumers cannot or will not convert dietary instruction into practice, and nutrition education alone does not always produce the desired dietary changes. Consumers are interested in foods that provide function *and* better health, but recent research has indicated that they fear such foods will not taste as good.² For consumers, the word "food" means flavor, fun, enjoyment, taste, and motivation; the word "nutrition" speaks of rules, boring and not-so-tasty foods, less freedom, more work, and deprivation. It is no wonder the traditional approach to dietary change is not working as well as we would like.

WHAT CONSUMERS SAY ABOUT HEALTHY FOOD

Consumers perceive barriers to eating functional foods and adopting healthy eating patterns. In a recent survey

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Funding for this presentation was provided by the McCormick Science Institute. The author is a member of the Scientific Advisory Board, NuVal LLC, Braintree, Massachusetts, and is a consultant for The Walt Disney Corporation, Milk Processor Education Program/USDA, and Dannon Corp. Correspondence: Keith T. Ayoob, EdD, RD, FAND, 1165 Morris Park Ave, Bronx, NY 10804 (keith.ayoob@einstein.yu.edu).

DOI: 10.1097/01.NT.0000453849.14464.48

of 1005 Americans aged 18 to 80 years of age, 55% said health-promoting foods and food components were too costly, whereas 31% said they sometimes do not taste as good. These barriers were considered major reasons for not eating healthy foods more frequently.²

ADDING SPICES AND HERBS HELPS CONSUMERS OVERCOME BARRIERS TO HEALTHY EATING

Adding spices and herbs to the diet boosts flavor and variety; may contribute antioxidants, anti-inflammatory compounds, and other bioactive components; and can help consumers overcome some barriers to meeting their dietary goals. For example, adding a variety of spices and herbs to carrots, potatoes, and leafy greens will give budget-conscious consumers a different taste nearly every day. Cooking classes can convince consumers that adding spices and herbs enhances natural flavors without calories. Low- or reduced-fat fruit and vegetable dishes and dairy foods prepared with added spices and herbs can readily be incorporated into weight control diets. It has been shown that even preschool children will eat more celery and squash when the vegetables are paired with a low-fat, herb-flavored dip.³

CHANGING CONSUMER ATTITUDES

Consumers are already receptive to experiencing a broader range of flavors. Witness the explosion of ethnic restaurants. Even school lunch menus now feature foods such as hummus—not only because it is a healthful food, but because it tastes good. Indeed, flavoring foods with spices and herbs may be 1 of the best ways to help improve the dietary patterns of Americans. Although convenience rules consumers' food choices, food producers and manufacturers can add spices and herbs to packaged foods to produce a flavorful product that both pleases the consumer palate

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.

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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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DOI: 10.1097/01.NT.0000453850.22087.3b