“Multicultural competency is not a luxury or a specialty, but a requirement for every registered dietitian,” according to the American Dietetic Association. Practitioners who primarily treat clients with type 2 diabetes are familiar with the challenges of intercultural counseling. The prevalence of type 2 diabetes among African Americans, Asians/Pacific Islanders, Latinos, and American Indians/Alaska Natives is disproportionately high; it is 1.5–2 times greater than in the white population of the United States, with even higher rates in some subgroups.

Similar trends are seen internationally, with prevalence rates in Russia and Japan exceeding those in the United States. The countries with the highest number of people with type 2 diabetes are India (35.5 million) and China (23.8 million). Today, diabetes specialists most likely work with at least some clients with backgrounds different from their own. In the near future, even more client-practitioner relationships may be intercultural. Type 2 diabetes is increasing worldwide, as is the need for multicultural competency.

We have identified three key proficiencies in multicultural competency. First, there is an attitude of acceptance. This includes respect for cultural differences, a tolerance for the ambiguities inherent in intercultural communication, and patience for the additional time and effort necessary for effective counseling. Second, there is culture-specific knowledge of clients’ diets and traditional health beliefs and practices. This includes information on typical foods and meal patterns, special-occasion customs, food avoidance/additions necessary to well-being, common botanical remedies, and acculturation norms. Finally, intercultural counseling skills are necessary. These include verbal and nonverbal communication abilities and practical approaches to diet modification.

Discussion of these three complex proficiencies is beyond the scope of a single article, and other resources addressing them are available. In this overview, we instead address hands-on practice, with the assumption that diabetes specialists are familiar with the three key proficiencies. We provide an applied approach to multicultural competency through understanding the role of taste in food choices, and we introduce tools for successful intercultural diet modification.

**The Importance of Taste**

Researchers have identified numerous influences on food choices, including taste, cost, convenience, self-expression, well-being, and variety. These are outlined in the Consumer Food Choice Model (Figure 1). People select foods from a domain of available items—the sum-total of those foods found in the garden or field, at the market, in the grocery store, or at food stands and other eateries. Individuals have little control over what is available in this domain; availability is typically determined by environmental, economic, political, and social constraints.

In cultures where the dietary domain includes plentiful food, such as in the United States, taste is typically the most significant factor in selection decisions. Cost and convenience may be important to some people, or on certain occasions. Foods are sometimes chosen for self-expression (adolescents may eat fast foods; orthodox Jews may eat a Kosher diet; and southerners may eat fried chicken, grits, and greens) or to promote well-being (vegetarians may eat only fruits, vegetables, and grains for moral well-

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**Figure 1. The Consumer Food Choice Model**

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being; Hindus may avoid beef for spiritual well-being; athletes may load carbohydrates or eat meat for physical well-being). Variety can influence people who travel or eat often at restaurants. But in general, taste dominates choices within the dietary domain.

Taste, in its most narrow definition, is the stimulation of the receptors on the tongue for sweet, sour, salty, and bitter flavors. This form of taste is an innate sense. We have an inborn preference for sweets, hypothesized to be an evolutionary adaptation that encourages the consumption of calorie-dense foods in the natural environment (an advantage for our prehistoric ancestors who spent their days foraging). As we age, our desire for sweets diminishes, while an appetite for bitter flavors, such as those in broccoli, grapefruit, or coffee, increases.

In its broader definition, however, taste includes numerous sensory properties that are more cultural than physiological. Color, aroma, and texture are equally important to what tastes “good” to us. We have certain expectations regarding these properties, and differences may indicate that a food is poisonous or spoiled.

If we generally experience one of our staple foods, say, potatoes, as white or cream colored, we know they should not be consumed if they are green. Most staple foods are light in color, yet in Hawaii, taro root is pounded and fermented to make poi, a lavender-colored paste.

Similarly, the accustomed aroma for a food can stimulate our appetite, while an unexpected odor can cause revulsion. Europeans may salivate at the aroma of a ripe brie cheese, while many Latinos would be repulsed by it. Conversely, strong-smelling fermented meats, such as muktuk and itog, are enjoyed by some Inuit and Filipinos, respectively, although many Americans would gag at the odor.

Texture, or “mouth-feel,” is also significant. It is the mouth-feel of fat that makes it well-liked in almost all societies worldwide. But other textures are more cultural in popularity. The mucilaginous property of okra is appreciated in the Southern United States, but disliked by people in other regions. Mashed potatoes are favorites with many Americans, but their thick, sticky texture is often unpopular with Asians.

Diabetes nutrition specialists who ignore the sensory taste properties of cultural foods may find that their recommendations are ignored.

The Role of Flavor
Most cultures also have expectations regarding the flavor of prepared dishes. Flavor is the quality in a food that imparts a particular taste in the palate. Every technique used in cooking foods, from preparation (i.e., washing, chopping, or leaching) to heating (i.e., roasting, grilling, or frying) or preserving (i.e., drying, pickling, curing, or fermenting) affects the flavor.

Most noteworthy, however, is how a food is seasoned. The herbs, spices, vegetables (onion or garlic, for example), and fats (such as butter, olive oil, or sour cream) associated with dishes can be used to classify cuisines culturally.

A traditional combination of seasonings, called a flavor principle, is the most distinctive factor in a given ethnic cuisine. A fish sautéed with tomatoes, onions, chile peppers, cilantro, and cucumber is a Mexican recipe, whereas that same fish steamed with soy sauce, rice wine, scallions, and ginger root is a Chinese specialty. Vegetables cooked in vegetable oil and seasoned with garam masala (a curry blend that may include coriander, cumin, fenugreek, turmeric, cardamom, and other spices) is an Asian-Indian dish that differs from Greek vegetables cooked in olive oil, lemon juice, garlic, and oregano. Generally, cultures in which meats and protein foods are prominent in the diet tend to have fewer seasonings in their cuisine than cultures in which grains and vegetables are emphasized.

Regional differences are typically variations on the broader flavor principle. Although soy sauce, rice vinegar, and ginger root are a Chinese flavor principle, soybean paste, garlic, and sesame oil are added in the northern regions of China, and fermented black beans are included in the south. Even more locally, chile peppers, hot bean paste, or fagara pepper supplement the soy sauce, rice vinegar, and ginger root in Szechuan cooking, and red rice wine is the featured addition in Hakka cuisine.

Understanding that a dish will not taste like a Samoan dish if the coconut cream is omitted or that a Nigerian dish made with corn oil instead of palm oil is no longer a Nigerian dish can direct diabetes nutrition specialists in making modifications satisfactory to their clients. Reductions in the amount or frequency of ingredients in a flavor principle are more acceptable than their elimination or the substitution of other seasonings.

Core and Complementary Foods
The sensory taste properties of food and flavor principles are united in the concept of core and complementary foods. The original model states that foods in each culture can be grouped according to intake frequency. Core foods are the foundation of the diet, the staples that are consumed almost daily. Examples include rice, corn, wheat, yams, cassava, taro, and other starches, although protein items are core foods in some cultures. Foods that are eaten widely and often (but not daily) in a culture are secondary core foods. In the United States, these might include chicken, apples, and carrots, for instance. Peripheral foods are those that are eaten sporadically and usually represent personal preference rather than cultural traditions.

An adapted model (Figure 2) includes a fourth category, complementary foods. Core foods tend to be bland in flavor and uniform in texture. Small amounts of complementary foods are added to boost taste, vary texture, and encourage consumption. It is hypothesized that not only do complementary foods improve the palatability of core foods, but they also increase nutritional value. Rice is often prepared with legumes and small amounts of meats in many cultures, for example, and leafy greens and abundant herbs, or tomato sauces, are added to rice, root vegetables, or pasta. The appropriate flavor principle is often used to season complementary foods.

Clients may be quite willing to eliminate some peripheral foods, or even some secondary foods, from their diet, but core foods and their complementary foods are so associated with most ethnic cuisines that clients may resist any attempt to change or modify these items. Familiarity with the core
and complementary foods model for each client can reduce ineffective diet modifications.

The Influence of Age
As illustrated in the Consumer Food Choice Model, the importance of taste changes through the life cycle.

Taste is most significant to very young children, who consume food at an almost completely sensory level, often devoid of cultural and social inhibitions. Their dietary domain is totally dependent on what is provided by their parents, and they are often very resistant to new foods, especially those that are somewhat sour or bitter. Older children also focus on taste, and they are especially susceptible to advertising. Children modify their dietary domain through pressuring their parents to purchase certain foods or through selections at school lunch counters and snack kiosks.

Taste is also a significant factor in the food choices of adolescents. Teens are attracted to the sweet, salty, and fatty flavors found in inexpensive, processed foods and have a strong desire to eat whatever their peers are eating as a form of self-expression through differentiation from their parents and conformation with their group. Taste may be secondary in some cases, however, such as when a favorite traditional dish from their culture is rejected as a sign of independence or eaten only in the privacy of home.

Young adults continue to be concerned with taste, although cost and convenience issues become a factor in food selection, especially for families. A couple may be willing to give up the taste of a home-prepared meal for the speed and entertainment value of eating at a restaurant that caters to families with young children. And favorite, pricey foods may be consumed infrequently.

In middle age, income typically increases and cost issues diminish. Some adults enjoy their ability to purchase expensive, tasty foods and beverages at this stage, with variety at a premium. For others, specific physical or spiritual concerns or a general interest in longevity may begin to influence food choices.

In old age, taste often becomes secondary to a diet that satisfies health needs. Limited income or physical disability may once again make cost or convenience important, as well.

Thus, age can affect how important taste will be to clients’ food choices, and diet nutrition specialists can make diet modification recommendations that recognize not only the role of taste, but also that of other influences in their clients’ food selections.

The Influence of Acculturation
The Consumer Food Choice Model describes the role of taste in food selection; it also mirrors the diet acculturation process. When people move from one culture to another, their food choices change in many ways, becoming over time or over generations more like the diet of the new culture than that of the culture of origin. The transformation can be immediate if no traditional ingredients are available in the new culture. But most often, it is a gradual process of adding new foods, substituting new ingredients for traditional ingredients if necessary, and rejecting some traditional items. Core and complementary foods and flavor principles are maintained if possible, while preferred sensory properties are also preserved as self-expression of cultural identity.

Changes are typically influenced mostly by taste. Most immigrants to the United States quickly accept the sweet, salty, and fatty flavors of processed foods, for example. Soft drinks, candy, cookies, doughnuts, breakfast cereals, mayonnaise and dressings, and meats (particularly beef) are some of the first foods added to the traditional diet. Foods that are strong in flavors that are uncommon in the new culture, such as variety cuts of meat in the United States, are often the first foods to be eliminated.

Similar to the changes in the role of taste during the life cycle, the role of taste also changes during acculturation. After the adoption of sweet, salty, and fatty foods, other items are slowly introduced into the diet dependent on the other influences on choice. Cost and convenience may be factors for some families, especially if traditional ingredients are expensive or difficult to obtain. Well-being, especially as expressed through foods eaten for good health or to cure illness, such as balancing hot-cold foods or yin-yang foods, may also significantly affect selection. And those immigrants who come from societies where food choice is limited may seek variety. Eventually, even the core foods most associated with an ethnic diet may be eliminated as the culture of origin becomes more distant and the new culture is incorporated. Thus, it is essential to know the degree of

Figure 2. The Core and Complementary Foods Model
acculturation in clients’ diets when proposing diet modifications.

Summary
The influence of taste on cultural food choices should not be underestimated. Our physiological fondness for sweet, salty, and fatty flavors has backfired in our plentiful food environment, leading to overeating and the conditions associated with obesity, including type 2 diabetes.

Dietitians face the challenge not only of changing clients’ desire for such foods, but also of working within clients’ cultural tastes, with an awareness of sensory preferences, flavor principles, and core and complementary foods. Additionally, clients must be assessed for life cycle stage and degree of acculturation to determine the personal significance of taste in their diet.

Multicultural competency requires acquisition of the three key proficiencies—an attitude of acceptance, culture-specific knowledge, and intercultural counseling skills. The applied approach outlined here—understanding the role of taste in cultural food choices and using the tools of the flavor principles, the core and complementary foods model, and the Consumer Food Choice Model—can help diabetes nutrition specialists make effective diet modifications that are tasty and will contribute to a healthy lifestyle for their clients.

References

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