1. **While obesity rate plateaus, incidence of diabetes and metabolic syndrome skyrocket**s. For the first time in years, obesity rates appear to be holding steady at about 36 percent, and possibly trending downward slightly. However, rates of type 2 diabetes (linked to excess body weight) and metabolic syndrome—consisting of central obesity, insulin resistance, high blood lipid levels and high blood pressure—have never been higher. Experts agree that there is no single food or ingredient that is preventative, and research focuses on dietary patterns that may play a role in reducing the risk of these diseases. The DASH dietary pattern—high in fruits, vegetables and low-fat dairy products and best known for its effects on lowering blood pressure—is one that seems to offer protection.

The good news about these diseases is that they are not only preventable, but they are also reversible... confirming that it is never too late to adopt healthy habits. Overweight adults burdened with chronic disease who lose even small amounts of weight, become active and improve their diets can extend the length and quality of their lives. Establishing healthy, long-term diet and lifestyle habits is important. Health professionals can play a key role in helping their clients adopt healthier habits.

2. **Recent Dietary Guidelines are seen as “aspirational” rather than achievable; sodium is center stage.**

For the first time, government recommendations for specific dietary components such as sodium are perceived by many experts as unrealistic, particularly in the context of other recommendations that need to be met simultaneously. In relation to the 2010 Dietary Guidelines, mathematical modeling reveals the unfeasible nature of these recommendations. For example, it is almost impossible to meet both sodium and potassium recommendations simultaneously unless quantum changes are made to eating patterns or the food supply.

At the same time, some research around sodium conflicts with the new, lower intake recommendations, leading to disagreement among health professionals as to the healthiest intake levels. The lack of consensus and increasing skepticism around recommendations for sodium and other nutrients could erode the credibility of public health guidelines. However, since public health recommendations direct government nutrition programs, they remain relevant to nutrition education. The challenge to nutrition educators will be to translate broad-based public health recommendations into food choices that are actionable, affirmative, realistic and individualized.
3. **Supplements fall off their “can do no wrong” pedestal.**
People who use supplements as a “security blanket” against marginally deficient diets, or to boost their nutrient intakes for perceived health benefits, should take a hard look at what they are taking because research links some supplements to higher rates of mortality. Higher rates of mortality in older women have been associated with multivitamins in general and vitamin B6, folic acid, iron, magnesium, zinc and copper in particular. Calcium and phosphorus supplements in inappropriate ratios are also linked to adverse effects on bone health. This supports the contention that it is best to get the “package of nutrients” that comes from foods. *Health professionals may need to be more conservative in their advice on taking supplements, ensuring that recommended supplements fill a specific need. By looking for opportunities to improve eating patterns, clients will be more likely to get essential nutrients through the foods they consume without having to rely on supplementation.*

4. **“Good foods—Bad foods” mentality undermines balanced nutrition messages.**
Positive research on dietary patterns and lifestyles that optimize health and prevent disease is often undermined by the categorization of foods as “good” or “bad.” This manifests, for example, in the quest for a standardized front-of-package (FOP) labeling system that would use checkmarks to indicate the healthfulness of a food. The focus of FOP systems is generally on negative nutrients (sugars, sodium, trans and saturated fats) rather than positive nutrients (calcium, protein, vitamins and minerals), and on single foods rather than overall consumption patterns.

Despite reductions in the amount of added sugars in the average diet (currently at 16 percent, down from 22 percent in 1999–2000), there is continued emphasis on further reducing sweeteners in the food supply, linking sugar intake to obesity, diabetes, metabolic syndrome and other diseases. Taxing foods and beverages that contain added sugar, imposing age limits for buying soft drinks, imposing a “sugar-free zone” around schools and removing sugar from the GRAS list are some strategies aimed at reducing sugar intakes. However, improving health is more complex than typecasting foods or eliminating one component from the diet. *Successful and long-term nutrition interventions need to focus on the overall nutritional quality of foods and dietary patterns rather than on a single nutrient or dietary component. Consumers want to hear positive messages about what they can eat, not guilt-inducing messages about what they must not eat.*

5. **Restriction-based changes in the school food service environment may not translate into healthier kids.**
School districts struggle to meet the new nutrient standards and provide tasteful foods and meals within budgetary limitations. Many well-intended, recent efforts to improve the health and weight of children through significant changes to national school breakfast and lunch programs have proven to be less than effective. When favorite foods—such as pizza and chocolate milk—are replaced with alternatives, there are often unintended consequences. For example, children reject the alternatives, discard unappealing items or simply stop eating school meals. Many bring less healthy foods from home or purchase snacks from nearby convenience stores. A few studies have found that there is little, if any, improvement in weight and that the overall consumption of sugar and “empty calorie” foods is not reduced through such efforts.

Methods that have enjoyed some success include the Smarter Lunchroom Initiative that redesigns the cafeteria to make the healthiest choice the easiest and most desirable, while still offering a variety of foods. Helping children tap into their own internal motivation to make healthy choices, rather than limiting food choices at school, will be key. *Effective, individualized and motivational nutrition education coupled with improving the school food environment using positive instead of restrictive tactics needs to be an integral part of future efforts to improve children’s health.*
6. **Shifting health stakeholders and new technologies are changing how dietary advice is delivered.**

The shortage of family practice medical doctors is leading other allied healthcare professionals—nurse practitioners, physician’s assistants and health “coaches”—to step up to the plate to provide health, nutrition and lifestyle advice. At the same time, patient-centered medical care is a focus, facilitated by readily accessible electronic medical records. The number of community-based and work-based health clinics is also rising, giving consumers another venue to receive health information without stepping foot into a doctor’s office.

Consumers are seeking more control over their health and wellness, and with various health and nutrition websites, phone applications and other “get it now” technologies, they have it. As a result, consumers often come to their healthcare providers better prepared than in the past. This puts even traditional health professionals in “counselor/coach” roles rather than in “content provider” roles. Realistic guidance, with a focus on positive, affirmative and empowering messages, will resonate with today’s clients.

7. **Protein’s list of health benefits grows; daily distribution is key.**

Recent studies have identified new health benefits of protein such as weight management and bone health, as well as muscle and fitness. While as a whole the population gets adequate protein, certain segments of the population (the elderly and teenage athletes) do not always consume adequate protein to benefit their health. Animal protein in some studies has been shown superior to plant protein for building muscle. Whey protein in particular is getting attention for its satiating effects and for building muscle protein. With an aging population, this will be important in prevention of sarcopenia—the degenerative loss of skeletal muscle mass and strength associated with aging.

In addition to total amount and type of protein, the distribution of protein intake throughout the day appears to be critical. New research shows that approximately equivalent amounts of protein at breakfast, lunch and dinner meals (20–30 grams per meal) optimize muscle synthesis. Dairy, a high-quality, convenient source of protein, is often associated with calcium but not always with its high protein content and other inherent nutrients. People who consume dairy products (milk, cheese and yogurt) generally have better overall nutrient profiles and lower risk of chronic diseases such as osteoporosis, high blood pressure, obesity, type 2 diabetes and colon cancer. Health professionals can assess their clients’ protein intakes and provide suggestions for high-quality, convenient sources throughout the day to meet their lifestyles.

8. **Gut microbes are gaining interest in medical circles; probiotics are the most commonly understood.**

There is increasing research interest in human microbe interactions with health and disease. For example, new research is showing that gut microflora play an important role in health and disease prevention. Probiotics, live microorganisms thought to be beneficial to health and often added to yogurt and other dairy products, are one of the best understood of these microbes. They are gaining attention for their multitude of purported health benefits, which include reducing eczema and allergy, decreasing cholesterol levels, helping manage diabetes, minimizing antibiotic-associated diarrhea and reducing symptoms of lactose intolerance.
However, very few countries allow manufacturers to market probiotics with related health claims. There is increased pressure from marketers and researchers alike to share positive research on probiotics and to better inform consumers. With more dialog on this issue, there will be expanded education opportunities to improve consumer understanding of probiotic health effects. More and more products with probiotics will be added on the store shelves—from yogurt and other dairy products to cereals and breakfast bars. *Health professionals will need to stay abreast of claims allowed and products available, in order to best advise their clients around appropriate consumption of probiotics to meet their health needs.*

9. **Alternative eating patterns don’t always live up to their perceived “health halos.”**

People who follow a flexitarian eating pattern are those who plan to eat some meatless meals throughout the week—for example, the current push for Meatless Mondays. Some consumers equate healthy eating with eating fewer animal foods. There may be a perception that any meatless meal is low calorie and healthier, which is not necessarily true. There are health risks with any diet that omits whole food groups, especially among those on a strict vegan (no animal food) diet since it may not provide enough calcium, iron, zinc, protein and vitamins B12 and D, among other nutrients. Children on these diets are at special risk of not meeting their needs for growth and development. Well-planned lacto-ovo patterns that include milk products and eggs are much more likely to satisfy nutrient needs.

People often adopt other popular alternative eating patterns—for example, lactose-free and gluten-free diets—for their anecdotal health benefits but with no justified medical reason. In some cases these restrictive diets can lead to nutrient deficiencies and long-term health consequences. *A better message to communicate is the “health halo” of eating patterns that include foods from all the food groups, as each group provides a unique nutrient contribution to the diet.*

10. **Shifting demographics, social media are changing products and marketing.**

Baby boomers are predicted to be significant product influencers and food purchasers in the coming years, with a focus on health and wellness. Products geared toward vitality, joint health and brain health are predicted to thrive. Men, an often under-targeted demographic, are also expected to be a big influence in the marketplace as they do the food shopping in about one-third of American households.

Social media usage is expanding as more consumers access smart phones and iPads. Mobile marketing will drive the movement as consumers want anytime/anywhere information about food, nutrition and health. Information that is empowering and positive, using words such as “gain energy” versus “lose weight,” appeals to their values and emotions. Fun, new and unusual modes of marketing will resonate with the non-traditional, adventure-seeking millennial generation. *Health professionals will need to stay abreast of these advances in technology and social media if they are to ably assist clients toward healthier lifestyles.*