The Profession of Dietetics at a Critical Juncture: A Report on the 2006 Environmental Scan for the American Dietetic Association

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EXECUTIVE SUMMARY
What's ahead for the profession of dietetics? The environmental scanning program of the American Dietetic Association (ADA) sets out to answer this question on a regular cycle, each time updating the trends and changes that are shaping the dietetics world through the observations of its membership.

The 2006 Environmental Scan reveals a clear and evident impression of trends and forces that are challenging the profession and changing the nature of professional practice. These same trends challenge all professions, especially in health and medicine. For example, the explosion in communications and information puts medical, health, and wellness information within reach of almost everyone. Like other professionals, food and nutrition professionals must work with and interpret this information torrent for clients and the public. How well they will be able to do so is an ongoing concern of many registered dietitians (RDs) and dietetic technicians, registered (DTRs).

RDs in particular are concerned that they may not have the skills or education to manage new challenges. They are worried that they are well-intentioned professionals at sea in a society undergoing turbulent change.

As they see it, more people are "living for the day," which puts food and nutrition professionals' message of careful planning and thought for long-term consequences at odds with most people's approach to life today.

The survey respondents identified many growing problems and needs in society that are, or will be, in their area of practice. Obesity, with its long-term effects on health and health care, is one example. Others are aging and the desire of members of the Baby Boom generation to be healthy and active as they age; a growing division between low-income and high-income families; the younger generation's lack of food knowledge and unwillingness to cook or to prepare food; and the increasing multiculturalism of US society, with its differing cultural attitudes, languages, and food choices. There are also strong concerns about the profession's future within the US health care system, and the future of the system itself.

Opportunities are emerging along with the challenges. The profession of dietetics can create new ways of communicating with clients, develop practice opportunities targeting aging Americans, take advantage of emerging genetics and nutrigenomics knowledge, and work with those developing nutritional and health solutions with functional foods.

This scan report is organized into 11 themes that cluster trends around a topic. The themes are:

1. Aging
2. A Fast-Food, Eat-and-Run Society
3. The Growth of Obesity
4. The Global Explosion in Communications
5. Growth in Diversity Among the US Population
6. An Industrialized Food System Matures
7. An Economically Fractured Society
8. Environmental Issues
9. Policy Focus on Health and Wellness
10. Choosing Alternative Health Care
11. Science and Technology's Revolutionary Potential

Each theme and trend discussion includes a summary of the potential implications for the profession of dietetics.

These themes are followed by a summary of practitioners' reported experience of working with different generations, with the caveat that individuals in any group are different and may vary from expectations. Figure 1 provides a typical set of observations.

The report also discusses some early signals of change, such as the greater use of technology in the home to make life easier and further reduce physical activity, briefly covers the future of dietetics education, and includes a section on trends affecting and shaping associations.

There is a strong need for someone to help clients navigate their changing nutrition needs. Food and nutrition professionals will meet the need, but the professional clients seek out does not have to be an RD or DTR. In other words, the opportunities are there but there is no guarantee that RDs and DTRs will get them.

INTRODUCTION
What food and nutrition professionals observe about their world is both good
and bad news for the profession of dietetics. Results from the Integral Survey for the 2006 Environmental Scan reveal a rich mine of information and observation about trends, patients/clients, families, eating habits, cultural shifts, the profession, and its concerns.

The most striking impression is a profession at a critical juncture. RDs in particular are concerned that they may not have the skills or education to manage new challenges. They are worried that they are well-intentioned professionals at sea in a society undergoing turbulent change. From their observation, more people seem to be “living for the day,” which puts the message of careful planning and consideration of long-term consequences at odds with most people’s approach to life today.

This is in the context of a health care partnership in which some RDs believe they are at the low end of the medical totem pole without the ability to climb higher, and more general worries about competition from other professionals, low pay, and doubtful future prospects.

Some are concerned that the nature of professional practice may be changing, requiring them to use new tools and new approaches, and to acquire new skills and education. Yet they are not confident that additional education will enhance the profession or their position in it.

On the other hand, many respondents see social, technological, and demographic changes as bringing opportunities for new specialties and creating new needs for RDs. For example, members of the Baby Boom want to be healthy and active in older age—good nutrition is a part of that goal. In another example, genetics and nutrigenomics will offer powerful science-based tools that will enable nutrition to be personalized to individual needs. As well, the growing multiculturalism of US society presents new challenges in understanding and working with clients with diverse backgrounds.

A majority of respondents believe that the attitudes of the public and health professionals toward food and nutrition professionals are generally better largely because of their expertise and as valued members of a health care team.

The primary topics and trends identified in the survey are explored and validated in this scan report. Topics for which the scan survey produced substantial response and discussion include:

- Aging of the US population, with particular mention of the Baby Boom generation and its needs.
- Differences between generations, with concern about younger generations’ lack of food knowledge.
- Increase in obesity among the population and its potential effect on the health care system.
- Budget constraints and the rising cost of health care.
- Impact of the Internet and communications technologies.
- More technology to make food easier to prepare and eat.
- Fast food and the convenience culture.
- Environmental issues, including those affecting the global food supply.
- Increasing economic gaps; that is, the haves and have-nots in US society.
- Shifting educational needs for the dietetics profession.
- More diverse population (and client base).
- The importance of prevention strategies to future health care.
- Greater multiculturalism, with the benefit of different food choices.

It is notable that there are divergent views on many topics. Where one respondent sees a problem, another sees an opportunity. Frequently respondents commented on specific experiences. Several of these comments are integrated into this report.

What Follows

The trends and themes of the environmental scan are the main body of this report, followed by a summary of the challenges posed for the profession of dietetics in working with different generations of clients and patients. The report also includes a brief discussion of some early signals of change, conclusions about the future of the profession, a section on trends shaping the future of associations, and a description of how the 2006 Scan Survey was constructed.

THE SCAN’S THEMES

The scan is organized into 11 themes that represent either megatrends or a grouping of trends that are connected. These themes map responses by ADA members to the 2006 Scan Survey. These themes, their topics, and the trends associated with them are validated and augmented with examples, and data from the work of Leading Futurists, LLC.

Several of the themes overlap and interact—for example, many food and nutrition professionals agree that obesity (Theme 3) has its origins in inequities in American society (Theme 7), and in an industrialized food system (Theme 6). In using this report, RDs and DTRs can link the information in any way they choose, or they can choose to concentrate on the themes that concern them the most and where they believe they can be the most effective.

Each theme includes a set of implications for the profession of dietetics based on the theme’s content.
Longer lifespans raise the stakes

Many older people will not have the leisure time to stay in college to get advanced degrees. Alternative solutions employers may use include:

- Outsourcing technical and skilled work overseas.
- Recruiting US workers and supporting their advanced education.
- Competing to recruit foreign skilled workers under restrictive immigration rules.
- Making work and hours more flexible to retain their older workers.

A big factor for the aging Boomers will be opportunities to change careers as they age, or simply to step down their work hours so that they can work part-time to supplement income, or work on and volunteer for, activities that interest them.

**Trend 1.2. Baby Boomers Are Investing More in Health and Wellness as They Age**

Many industries are likely to benefit as Baby Boomers reshape aging in the next decades by pursuing technologies and strategies that will ensure their active lives well beyond traditional retirement ages. They are likely to go for:

- Healthful living in spa-style developments.
- Sports medicine that supports continued activity.
- More plastic surgery, particularly the less invasive forms.
- More rehabilitation and complementary medicine services.
- Eating more functional foods to stave off the conditions of old age, such as arthritis and Alzheimer’s.

Well-off boomers will support specialized facilities and health care support. They will use integrated care centers that combine fitness, spas, urgent care, rehab, nutrition counseling, and alternative medicines in one site.

The picture for those less well-off is bleaker, with the potential for decreasing Medicare cost reimbursement and greater demands for basic health care.

**Trend 1.3. US Life Expectancy Is Reaching Record Highs**

As shown in Table 1, life expectancies in the United States are at an all-time high, at 77.6 years.

Death rates for more than half of the leading causes of death have dropped, including heart disease, cancer, and stroke. Advances in screening, diagnosis, and treatment may account for these changes. Death rates for Alzheimer’s disease, kidney disease, hypertension, and Parkinson’s disease are up.

The effects of chronic diseases resulting from widespread obesity, like diabetes, will have on life expectancies is not reflected in these data, but they are likely to affect the lives and life expectancies of current generations.

**Implications for the Profession**

- Aging will affect the profession as older professionals make the decision to stay or leave the field. If many RDs and RD educators retire over the next few years, there could be shortages of experienced professionals in critical areas.
- RDs and DTRs will have a greater range of ages among their colleagues and clients. They should anticipate worldviews and approaches to work and the profession that differ, based on age, generation, and life experience.
- A positive outcome will be the preventive health care needed to keep Baby Boomers healthy and extend the young-olds’ working life expectancy into ages 70 and 80 years.
- Greater concern today with the nutritional status of older old people should translate into more practice opportunities for RDs in geriatric specialties.

**THEME 2: A FAST-FOOD, EAT-AND-RUN SOCIETY WITH BUSY LIFESTYLES**

Although some aspects of the fast, busy, modern lifestyles may be an ad-

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**Table 1. Life expectancy in the United States**

<table>
<thead>
<tr>
<th>Population group</th>
<th>Life expectancy (y)</th>
</tr>
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<tbody>
<tr>
<td>Men (white)</td>
<td>75.4</td>
</tr>
<tr>
<td>Women (white)</td>
<td>80.5</td>
</tr>
<tr>
<td>Men (African American)</td>
<td>69.2</td>
</tr>
<tr>
<td>Women (African American)</td>
<td>76.1</td>
</tr>
</tbody>
</table>

*Source: Data from the Centers for Disease Control and Prevention (4).*
It's not clear that food and nutrition professionals have the answers for this trend, and they are frustrated by it. Some suggest they must be more creative in motivating patients/clients to make healthful choices.

Politically, ADA survey respondents urge each other and the ADA to speak up for better nutrition, and to pressure the food producers to offer more healthful choices.

Solutions will not come from fighting these trends—RDs and DTRs will have to adapt to, and work with, the fast-food lifestyle as most people’s reality.

The broadening of most people’s meal choices into a variety of ethnic foods and restaurants is seen as a benefit because many of these can be healthful. However, RDs and DTRs should be familiar with ethnic foods and their nutritional qualities to be able to advise a more diverse population.

Trend 2.1. Modern Busy Lifestyles Are at Odds with Lifestyle Aspirations for Health and Wellness Through Good Nutrition and Exercise

Convenience, and intolerance for food preparation and cooking that takes time, shapes urban people’s lifestyles today. This trend is considered a characteristic of American food culture that will be with us for the long term, with some exceptions. Busy lifestyles continue to have potentially dangerous effects on healthful diets.

Family meals are declining or have disappeared. Fewer families have the time to eat together, and the shifting roles in families, plus more working parents, mean that eating out, or eating restaurant takeaway food is more likely than home cooking.

A generation of young people has grown up in homes where neither parent cooks.

Some ethnic groups try to stick to their food traditions, but with busy lifestyles, these often give way to fast-food solutions.

At the same time, the food industry is under pressure to produce more healthful foods. But these have to be convenient, and easy to prepare, put on the table, or eat.

Implications for the Profession

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Trend 3.2. Diabetes Continues to Be the Most Visible and Fast-Growing Chronic Disease in the United States

The Centers for Disease Control and Prevention estimate that diabetes affects nearly 21 million Americans—about 7% of the population. That represents an increase of 2.6 million people since 2002. If patterns do not change, there could be 48 million people in the United States with diabetes by 2050 (9). More than 50 million peo-
Public attention to obesity, which increases their risk of developing type 2 diabetes, as well as heart disease and stroke. The Centers’ list of risk factors includes obesity; genetics; being African American, Hispanic or Latino, Asian, or American Indian; aging; and lack of exercise and poor diet.

In some reports, diabetes and obesity are considered twin epidemics. Health care costs for diabetes are likely to increase beyond the current $132 billion per year in 2005, in direct medical costs and indirect costs based on missed work days (9).

Around the world, 200 million people are believed to have diabetes, with this number expected to increase to 350 million by 2025 (10). Of this total, 80% will be living in low to middle-income countries, with minimal access to care.

Implications for the Profession

- Parents will need to be re-educated about the long-term effects of obesity in children. Some cultures are more resistant than others to seeing it as a problem.
- Practitioners will have the opportunity to support or be involved in the implementation of wellness policies in their local school districts that include more healthful meals and more activity and exercise.
- Obesity is also a practical opportunity for RDs with medical specialties in diabetes, renal problems, and hypertension.
- Obesity is a huge education and be-
- diet.
- Parents will need to be re-educated on missed work days (9).

Three quarters say they are reassured by their ability to search and find health information, but 25% feel overwhelmed by information they find online, and 22% are frustrated by not finding the information they want.

The surveys also show that about 85 million Americans searching for information on health topics do not do any consistent checking on the publication date and the reliability of their sources.

Table 2. Percent of American Internet users performing online searches of health topics, by year

<table>
<thead>
<tr>
<th>Search topic</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Specific disease or medical problem (%)</td>
<td>63</td>
</tr>
<tr>
<td>Certain medical treatment or procedure (%)</td>
<td>47</td>
</tr>
<tr>
<td>Diet, nutrition, vitamins, or nutritional supplements (%)</td>
<td>44</td>
</tr>
</tbody>
</table>

*Source: reference (11).

Trend 4.2. Consumer Confidence Increasingly Depends on Communications Transparency

Consumers want to enjoy what they eat, but they are increasingly aware that they are not being told all they need to know about their food supply. Food companies are less likely to be able to get away with covering up problems because the media, and ordinary consumers who access the Internet, are finding out what the industry might not have told them before broadband, blogs, and search engines became available to most people. As a result fewer people trust the nutritional claims of food companies, and more companies are facing media suspicion about problems in the industry.

The health care industry is beginning to face the same assault, with more hospitals beginning to acknowledge medical mistakes, and health consumers and the media better able to find out what they have not previously been told.

Trend 4.3. Everybody Has a Video Camera

The average person is more likely to have some ability to watch or make videos on a whim. Video capabilities increasingly come with cellular telephones, handheld digital devices, dig-
ital cameras, and with smaller and easier to use video cameras. It is becoming easier to watch, make, or record video or still images with handheld devices. Data from a study by Nielsen Media Research in October 2006 shows that only a few iPod users are watching videos on their devices. Earlier data indicates that picture size and battery life are discouraging people from watching video on their cellular telephones (12).
These devices may not be as effective as expected by commercial media providers. The average person can make his or her own video clips and post them on the Internet for anyone to download to their computers and handheld devices. Video is the new extension of the Internet, enabling people to expand their information sharing.

Implications for the Profession

- The public increasingly uses the Internet for medical knowledge, and RDs must come to terms with this fact, as must everyone in health care.
- The future of the health care system is in electronic medical records linked by digitized systems.
- Health care’s future, including nutrition diagnosis and intervention, is also in outsourcing, tele-medicine, and alternative, lower-cost options. (See Theme 9).
- Food and nutrition professionals must be aware of this potential and be creative and assertive in maintaining their practices with new technologies and approaches.
- The World Wide Web is gradually acquiring more powerful and more intelligent systems that can aid people in finding information and making decisions. More effective systems will be available over the next decade that can give personal advice, helping people plan and choose what they need.
- Handheld devices are becoming more powerful, and can enable closer contact, more personalized information, and more immediate connections with clients.
- RDs will increasingly use wireless notebooks for patient’s bedside notes, recordkeeping, and a more mobile practice.
- Some RDs have clients take pictures of what they are eating with their cell phones for evaluation and counseling. iPods can be used for exercise workout instruction, for podcasts, and minivideos that can give just-in-time information.
  - Internet based consulting will be more popular.
  - RDs and DTRs must learn to use the new technologies effectively to further their practices. Podcasts and brief videos may be useful ways to reach children and teenagers on their cellular telephones.
  - Clients can find all the information they want online, explore their options, and get ideas, but they will need professionals to help them interpret what they find and make decisions. The profession will constantly have to fight the buzz of information overload to get people’s attention focused on reliable and useful nutrition information.

THEME 5. GROWTH IN DIVERSITY AMONG THE US POPULATION
More than one third of people living in the United States claim minority status, reflecting not only demographic reality, but also an increasing willingness of individuals to define themselves by how they diverge from the norm. It also reflects intermarriage and more awareness of the variety of backgrounds of US residents.

Trend 5.1. The US Is Increasingly Becoming a Hispanic and a Hapa Nation
Hispanics accounted for nearly half of US population growth in 2004-2005, according to the US Census Bureau. There were 1.3 million more Hispanics, with 800,000 in natural increase and 500,000 by immigration. In 2005 there were 42.7 million Hispanics. The African-American population, including Africans and Caribbean immigrants, is 39.7 million (13).

The Asian-American population increased by 3%, or 421,000, in that same period. There were 14.4 million Asians in 2005. Children of Asian Americans who have intermarried with other groups are calling themselves “hapa” from the Hawaiian term hapa haole or half-white, and forming hapa clubs in college. Hapas are the second largest subgroup (after Chinese) in the US Asian population.

Theme 6: An Industrialized Food System Matures
The industrial age of food production, which has been developing for more than 60 years, has shaped how people understand food, nutrition, and diet. Its influence will be particularly strong on younger generations. Some theo-
rists, such as George Ritzer, author of *The McDonaldization of Society* (15), suggest that the efficiency, quantification, predictability, and technological control of the industrialized food system also tends to structure and control lives and expectations around food and eating. This argument seems reasonable, especially because most people in urban societies have given up producing food and must rely on what the food system produces for them. However, when the system seems to be based on a fast-food model, this could be less than healthy.

**Trend 6.1. Younger Generations Accept Manufactured Foods and Supplements as the Dietary Norm**

Physicians dealing with overweight children blame television watching, video games, and high-fat processed foods for juvenile weight gain. Both parents and children may lead sedentary lives, which can be the case in rural as well as urban areas (16).

An industrialized food system may also be having an influence on eating disorders. Although comparatively few adolescents (0.5% of teenage girls, for example) are diagnosed with eating disorders, the National Institutes of Health reports that the incidence of eating disorders have increased steadily since 1950 (17).

Young people are likely to use a variety of strategies to cope with a food system that offers endless and convenient food choices and variety, as well as potential risks of weight gain and concerns about safety and social justice.

- Cooking is a hobby, a novelty, something to be watched on television.
- Children and adults make food choices based on what they see on television, and may be misled by marketing claims.
- People learn to use a combination of food supplements, pills, and vitamins instead of healthful food. Generation Y would prefer to drink their meals, in fortified waters and missing multi-vitamins and other supplements.
- Having more knowledge through access to the Internet does not prevent young people from being dependent on big food suppliers and the food industry.

How younger generations will respond to this influence on their lives is as yet unclear, with scattered protests today against fast-food organizations, the growth of animal rights activism, and an increase in vegetarianism among the young. The 2006 movie *Fast Food Nation* explores some of the complexities that the industrial food system issue poses for young people. If champions arise to frame and promote specific issues, then more protest, activism, and legislation can be expected.

**Trend 6.2. Food Companies Are Investing More In Functional Foods**

Citing consumer demands, food companies are changing many products to reflect greater health consciousness. They are bringing out new products with nutraceutical capabilities and health functions. Companies are also reworking staple products to produce more healthful versions. The “healthy foods” market grew 7% to 8% in 2004 and 2005, outpacing the regular foods market, which grew only 1% to 2% (18).

Nestlé, for example, describes itself as transforming into a nutrition, health, and wellness company, with new research and development aimed at foods that have health protection functions. Nestlé recently announced a collaborative project to investigate how nutrition affects and can enhance brain function. The company is also producing new, and patentable, forms of dietary supplements, lycopene, for example (19).

Nestlé’s new venture with the Swiss Federal Institute of Technology has a big goal: to do for the prevention of neurodegenerative diseases what has been done for heart disease prevention over the past 20 years. Increasing rates of Alzheimer’s disease are one reason for exploring the effects of diet on the brain. Nutrition’s influence on cognitive development in children will also be a target.

**Implications for the Profession**

- Early childhood education in food and nutrition becomes more important so that children learn to distinguish the best choices from what the market is offering.
- For teenagers, RDs and DTRs will have to talk their language, which may mean through an instant message or a YouTube video. Student activism against the food system, for example, may lead many teenagers to decide to be vegetarians without knowing to eat a healthful vegetarian diet.
- Most consumers will want to know how to get the best for their families from what the food system offers. For some, this may be mostly based on price. Others may want to learn about nonindustrially produced alternatives, or be willing to pay a premium for local, and/or organic foods.
- Like the professionals with Consumers Union, food and nutrition professionals should be watchful guardians of the public’s interest in nutrition, taste, flavor, and value. What policy positions they take, as individuals, or as members of a group, will depend on the beliefs, attitudes, and values they hold.
- Agricultural, food, and nutrition research have huge potential for new outcomes that can benefit nutrition and wellness. But food producers make competing and sometimes unsustainable claims for their research findings. RDs have a potentially huge role in helping people sort out the information and misinformation they receive.

**Theme 7: An Economically Fractured Society**

Most ADA survey respondents observed that the United States is becoming a service economy, with low-paying jobs for the many and wealth for the few. Incomes are becoming more stratified. A few at the top are growing richer, with the ratio of total income of those in the top 5% to those in the bottom 5% increasing from 6:1 in 1980 to more than 200:1 in 2006 (20).

**Trend 7.1. There Is an Increasing Economic Gap Between the Haves and Have-Nots in US Society**

Although there are arguments about how big a gap exists, and its causes, there is general agreement that the steady productivity gains in the US economy during the past decade, and the effects of global competition for jobs and industries are exerting a downward pressure on US wages. Productivity gains in the United
States are not going to average working families. Workers with wanted skills and in valued occupations are doing well, as are those who leverage their skills into fields where they can earn higher amounts through consulting and investment.

Trend 7.2. Middle-Class Families in the United States Are Becoming Increasingly Vulnerable to Losing Jobs, Pensions, and Health Insurance, and Finding It More Difficult to Save
Private and public debt in the United States is high at the same time as asset value is growing. Overall wealth in the society remains high. However, a prolonged fall in house prices would affect particularly the debt of middle-class families because their homes are often highly leveraged assets.

Women are working more jobs and more time at all but the youngest ages. The biggest increases in labor participation rates for women since 1986 are between the ages of 50 and 64 years. Both men and women are more likely to be working between the ages of 60 and 75 years (21). Middle-income families may need to reduce their food spending, eating out less and needing help to put together inexpensive and quick meals at home.

A future economy with falling prices, low taxes, and higher interest rates may suit aging Baby Boomers, but will make the lives of younger people, who tend to borrow more, more anxious. Younger people want their incomes to keep up with inflation and interest rates to stay low.

The US economy relies on consumer spending, ideally by young families and immigrants doing well. If Boomers cut back their spending as they age, the economy could be hard hit.

Trend 7.3. The Fast Growth of China and India’s Economies Will Lead to More Dislocation in the US Economy
Economic competition from India and China comes from their professional and skilled workers as well as from their relatively low-cost workforces, which are focused on exporting goods and services. Over time, their biggest affect on the world economy may come from their own internal growth and development, which will drive up prices for steel, oil, construction materials, and eventually possibly food and consumer goods.

The US workforce is still feeling the effect of the loss of manufacturing jobs to Asia, but future job loss may more likely be in scientific and technical work, as the global communications explosion makes possible the rapid movement and exchange of information and knowledge. Local service jobs, such as hairdressing, retail sales, and construction, cannot be outsourced, but engineering, programming, and radiology can be.

Some economists argue that advanced economies such as that of the United States can only compete by improving labor quality, which means more and better education and skills development for the nation’s children. Adults need to upgrade their skills as well.

Trend 7.4. Families on the Wrong Side of the Income Gap Are Less Able to Maintain Good Nutrition
With increasing economic stress, low-income families may be less able to feed themselves well. Research shows, for example, that low-income households consistently spend less on fruit and vegetables. In any week, about 19% of low-income households buy no fruits and vegetables (22). The reasons why may be a combination of other economic priorities and educational issues. US Department of Agriculture data show that households with a college-educated head, regardless of income, will spend the most on fruits and vegetables.

Other factors that may put pressure on families already under stress include:

- Likely increases in the cost of living, driven by fuel costs and health care costs, mean that children may go hungry or have inadequate nutrition.
- In 2006, about $2.5 billion was spent on Special Supplemental Nutrition Program for Women, Infants, and Children services, reaching about 8 million people a month (23). Support for Special Supplemental Nutrition Program for Women, Infants, and Children programs is continued at a similar level in the proposal for the 2007 Farm Bill, although some survey respondents expressed concern that funds may be cut, given budgetary constraints and the pressure on all discretionary spending.
- Factors that may discourage low-income families from buying more fruit and vegetables include the effects of weather and season, as well as the growth of more expensive prepackaged fresh produce.
- Low-income people may not have the skills they need to eat healthfully on a budget.
- Many low-income communities have few, or no, adequate grocery stores with good selections of healthful foods.
- School lunch programs may not be filling the nutrition gap in all schools, although average daily participation increased slightly in 2006, to about 30.6 million (23).
- Despite an estimated $7 billion being spent on school lunches, 78% of schools do not meet the US Department of Agriculture’s school nutrition guidelines (24).

Implications for the Profession

- RDs and DTRs could be promoted, or promote themselves, as the solution to reducing a family’s food costs, and helping people decide where to spend their food dollars.
- Poorer people also have a need for convenience and ease in meal preparation. RDs and DTRs will have to continue to work at helping them discover how to eat affordably as well as conveniently.
- The profession, and ADA, should consider promotional strategies to enhance the value of the profession in the marketplace and to be more salary-competitive.
- As individuals, professionals, or parents, food and nutrition professionals can get involved in their school district’s overhaul of school lunch programs.

THEME 8: ENVIRONMENTAL ISSUES AND CONSUMER PREFERENCES AFFECT FOOD AND NUTRITION WORLDWIDE

The global supply and quality of food will be affected by growing energy demands from the world’s increasing population, and also by shifts in agriculture to produce biofuels from crops. Water, like food, is unequally distributed worldwide and likely to
become more so. Access to clean water and sanitation will continue to be inadequate for millions, perhaps billions, of people. Competition among uses of water may result in agricultural loss, and many countries are incurring a water-based ecological debt through their overuse of water supplies that will not soon be replenished (25). Global warming will be another big force affecting the world’s water supplies and agricultural land through, for example, drought in some areas and higher temperatures in others.

Consumers in fast-developing economies are changing their diets and buying and eating different foods. In developed economies, more consumers are choosing food produced from organic and sustainable agriculture.

Trend 8.1. Worldwide, Consumers Buy Fewer Staples and More Processed, Manufactured, and Convenience Foods

Internationally, as incomes increase, more people are buying processed and packaged foods. The global diet is becoming richer as people use their improved incomes to buy a wider variety of foods. Urbanization and the employment of women typically alters a family’s food-buying habits toward more convenience foods. International food companies are building local processing plants to meet these needs (26).

Trend 8.2. Local Food Supplies Increase in the United States

Gradually increasing costs of energy and the expense of transportation may boost public interest in more food being grown locally and delivered to nearby cities and towns. This could mean new opportunities for small family farms and a reason to protect agricultural land on the edge of cities. In some suburbs today, families can buy a “share” in outlying family farms and get frequent deliveries of locally grown vegetables and crops. Today this is a niche opportunity that consumers must seek out for themselves. Online information sharing will help this trend grow.

Getting locally grown food will not work for all consumers, all geographies, or all seasons. Alaska, for example, must import many of its foods. Farmstand patrons on the East coast may find the selection of green vegetables thin in winter.

Trend 8.3. Demand for Organic Foods Continues to Grow

The success of health food marketers like Whole Foods indicates that interest in organic and fresh foods continues to grow in the United States. Organic agriculture has grown worldwide (from a small base) at about 20% a year during the past 7 years. In 2005, shoppers spent more than $51 billion on organic and natural products (27). The biggest purchasers of organic and natural foods, 95%, are in the United States and the European Union, with the European Union leading the United States in numbers of organically certified farms and acres under organic production (4.4 million hectares in the European Union to fewer than 1 million hectares in the United States). Price premiums are encouraging food producers to go organic. The United States adopted national standards for organics in 2002.

In the United Kingdom, which is a leading user of organic foods, older consumers eat them to feel healthier and younger consumers give them to their children for health and safety reasons, with organic baby foods almost 50% of all baby food sold (28). Organic convenience and prepared foods are a growing trend among UK consumers. Outside Europe and the United States, few other countries have big organic markets, although Brazil is becoming a big exporter of organic food.

- Even with greater consumer interest in the safety and sustainability of local food it is likely to be a slow-growing trend, appealing to those willing to seek out and/or pay more for locally grown foods.
- There is likely to be a global synergy between organic food preferences and environmental issues, which will eventually raise concerns about how food is produced, and its sustainability.
- Concern about agricultural hormones, pesticides, and potential disease from foods will drive more consumers to organic foods, or to remove certain foods from their diets after a scare.
- Price premiums for organic foods may make them less accessible to low-income consumers. This may also be true for locally grown produce and meats.

Implications for the Profession

- RDs and DTRs could find themselves drawn into the middle of hotly debated issues on the environment, farm policy, food safety, and sustainable food production, and should be prepared to participate.
- As responsible professionals, RDs and DTRs must advocate for food safety, better food distribution, and the value of eating more fresh food. However, whether that food should be organic, sustainably produced, or not, will depend on the practitioners’ own beliefs and who he or she is working with. Growing public interest in organics demands that practitioners must have done some of their own thinking on the role of organics in health, wellness, and diet.

THEME 9: POLICY FOCUS ON HEALTH AND WELLNESS

Health care reform and the possibility for a universal health care system may be driven by the need to make the US economy more competitive against the economies of India and China. As a US automaker recently pointed out, the $1,500 in worker health care costs that goes into every car made in the United States is a serious competitive disadvantage. In future, health care reform to take this burden off the backs of employers will gain support from US corporations.

The broad social and medical changes that will be needed to cope with the twin epidemics of obesity and diabetes could provide US society with the direction and models needed to reform the whole health care system. Most of these changes are preventive, for example (29):

- Whole population preventive strategies to encourage healthful lifestyles.
- Regular screening for diabetes, with preventive strategies that kick in when prediabetes conditions are identified.
- Better chronic disease management, counseling, and self-care with more knowledge and the tools to navigate the health care system.
• Advances in technology that deliver better information on people and their medical conditions.
• Digitization of medical records, and development of personal electronic medical histories for each consumer.
• Access to care for all.
• Individualized care based on genetic knowledge.
• Effective countering of the social and physical factors in modern life that lead people to be overweight or obese—this could require big changes in society to get people to get more exercise, and provide free or low-cost ways for them to do it.

Trend 9.1. Initiatives to Promote Better Health and Wellness in Society Will Be a Policy Focus During the Next Decade, With Mixed Success

Because most governments and societies acknowledge demographic and health issues that could overwhelm their health care systems, new initiatives to prevent such problems are likely. The focus will be on chronic diseases, obesity, and preventable conditions.

• The US federal government’s efforts are likely to be lagging and tentative.
• Most national government prevention initiatives are occurring overseas, notably in Europe and Japan.
• Efforts in the United States are likely to be primarily state- and local-based.
• School-based initiatives to improve diet are reported in many states.
• Private initiatives are likely, such as “health coaches.” Health insurance plans will assign a coach to assess a subscriber’s potential health problems and encourage them to stick to a preventive plan.

The role of food in health care is already expanding in Europe and Japan, with government regulatory help. The European Union strategy is a European Union–wide regulatory system aimed at building consumer confidence in the health claims of functional foods. In Japan health claims for food fit the culture’s interest in, and beliefs about, the preventive properties of food. In 2004, there were 398 Foods for Specified Health Use, with government-approved health claims. The market for functional foods in Japan is expected to be the world’s largest by 2010, at $25 billion (30).

Trend 9.2. An Information Revolution Is Reshaping the Health Care System

US health care, which has lagged other sectors of the economy in embracing digitization, is gradually bringing information into the system. Digitization will produce volatility and change as well as new efficiency in the health care system and the medical care market during the next decade.

Only about 20% of physicians today use electronic medical records (31). The goal is a national health information network that would enable all health care workers to access an evidence supported database for more personalized answers to treatment questions. Large integrated health systems like Kaiser Permanente and the Veterans Administration expect to save millions of dollars in more efficient drug use, for example.

A national health information network ought also to reveal the medical and cost advantages of preventive care, although that is not a primary goal for most participating organizations today.

Genetic information will likely also be included in electronic health records, enabling the tailoring of drug prescriptions and other care.

Trend 9.3. Health Care Growth Is Supporting the US Economy, but Health Care Costs Are Contributing to Economic Insecurity for Many

Health care today is the largest source of job growth in the private sector, adding 1.7 million jobs since 2001 (32). Many of these jobs may not be long-term. As information technology revolutionizes the health care system, fewer workers will be needed.

At the same time, higher costs of health insurance premiums are driving more firms to drop coverage, or to increase the portion paid by employees. The Kaiser Family Foundation’s annual study of benefits found that health insurance premium rates increased 7.7% in 2006, which is higher than the rate of increase of overall inflation (3.5%) and wage gains (3.8%). Premiums have increased 87% since 2000 (33).

High health care costs are leading to the growth of health tourism, either sponsored by employers to cut costs, or by individuals to be able to afford treatments not covered by their insurance plans. Previously, people might have left the US health care system for alternative medicine treatments, but in the future, they may seek health care anywhere in the world.

Implications for the Profession

• RDs are concerned that they be “written in” to any preventive legislation or policy that deals with nutrition/wellness. They will need to be leaders in the movement toward an electronics-based health system, to be part of the solution, rather than the problem.
• RDs and DTRs should be prepared to testify and advocate for preventive care in the coming debates over health care and wellness. They will need powerful information, such as the cost to society, to families, and employers, of failures in preventive care.
• With their intimate knowledge of the realities of daily nutrition life, the RD could be a key to ensuring that new policies and programs are workable and realistic for ordinary people.
• If there is no agreed upon regulatory process in America for functional foods, the ADA should advise on health claims as new foods arrive in the marketplace.
• Wellness, weight loss, and nutritional health could all become part of a competitive global health and wellness market, as could globally available, and cheaper, bariatric and cosmetic surgery.

THEME 10: CHOOSING ALTERNATIVE HEALTH CARE

Alternatives to conventional medicine have always been widely practiced in the United States for health care, wellbeing, nutrition, and weight loss. Until recently not much was known about how widespread these practices are and how they influence people’s lives.
Trend 10.1. Use of Complementary and Alternative Approaches to Health and Wellness Are Widely Distributed in the American Population

The most recent government survey of Americans’ use of complementary and alternative medicines (CAM) shows that 75% have used CAM at some point in their lives and 62% made some use of alternatives in the preceding 12 months (34).

The alternatives surveyed include diet-based therapies such as Atkins and Pritikin, as well as natural supplements and physical strategies such as yoga, ayurveda, and chiropractic care.

A recent hospital stay seems more likely to drive people to some use of alternative practices, as does chronic or recurring pain, typically in the back.

The use of supplements may change as their benefit claims are proved or disproved, but in the 2002 government survey the top products included Echinacea, ginseng, ginko biloba, garlic, and glucosamine (34).

With greater access to many alternative remedies, typically online, use of alternative approaches is likely to climb. There are opportunities to bring new variations of alternative approaches to new markets, especially to young people, who are less likely to use them today.

Market research shows that people want supplements that are condition-specific, such as for joint, heart, and bone health. People want to know what the supplement will do for them—if possible, proof that the supplement works. This applies to foods with promised health benefits as well. If the message is not clear, or there are too many conflicting messages, possible users feel overwhelmed (35).

Trend 10.2. Expectations for a Magic Pill that Will Solve Diet and Nutrition Problems Are Rising

Younger generations in particular have growing expectations that science will provide them with the magic pill approach to weight loss, weight gain, solutions to potential chronic diseases, or correct for poor nutrition.

Food and pharmaceutical companies may be feeding these expectations with the growth of their own interest and investment in functional foods, nutritional supplements, and so-called food fixes to either medical or nutritional problems. Many of their products are directly advertised to consumers. Distinctions between food and medicine are becoming increasingly blurred.

Young people are especially susceptible to these expectations because (36):

- Many of them grew up with medicated childhoods—the so-called Ritalin generation.
- They are using nutrition, functional foods, and pharmaceuticals in different ways, frequently to enhance and create better performance in test-taking, sports, and partying.
- Americans in general have a strong interest in alternative medicines and health strategies.
- Young people often try to medicate themselves, drawing on possibly incomplete understanding of what they are doing.

Consumers are likely to believe weight-loss supplements are safer and more effective than they are. A University of Connecticut Center for Survey Research and Analysis survey in 2006 found that more than 60% of respondents believed weight-loss supplements are tested and proven safe (65%) and effective (63%) (37). More than half believe their supplements are US Food and Drug Administration-approved when they are not.

Most people want to lose weight without a doctor’s help and without a prescription drug, according to the survey, which was funded by a drug company with a weight loss drug on the market.

Implications for the Profession

- Use of and belief in alternative medicines and health approaches will continue to be woven into people’s lifestyles and health choices. RDs and DTRs may or may not approve of their use, but do need to know how people are using them, and how to work with them.
- Rebuttals from RDs about the effectiveness of supplements are not likely to be heard as long as advertising, sales, and packaging claims say the opposite. Peer-to-peer recommendations and buzz about the latest approach are also powerful influencers of choice.
- RDs should be ready to document, testify, and advocate for more testing and regulation of supplements and alternative medicines.

THEME 11: SCIENCE AND TECHNOLOGY’S REVOLUTIONARY POTENTIAL

Although most of its applications are still beyond the horizon, the potential effects of biology and genetics on food, food science, and how we will choose our diets in the future, are huge.

Today’s medicine and nutrition choices are based on broad generalizations about people, with assumptions about age, lifestyle, sex, racial or ethnic difference, habits, and so on. Tomorrow’s options will be individually specific, enabling treatments and diets to be designed for each person’s genetic makeup, if necessary.

Trend 11.1. Nutrigenomics Begin to Shape Personalized Approaches to Health and Wellness

Most chronic conditions, and susceptibilities to them, have multiple-gene interactions involved, which makes it difficult to come up with genetic “cures.” However, nutrigenomics scientists are discovering complex interactions that may affect how likely certain people are to get specific conditions. For example, the same amount of coffee drunk daily by two people might produce different susceptibilities to heart attacks if the two people have genetic differences that enable them to metabolize the caffeine in their bodies at faster or slower rates (38).

From the food industry’s point of view, nutrigenomically tailored foods will only make economic sense if they can be targeted to a large enough group of consumers. Those consumers must also be made aware of their susceptibilities as a result of genetic tests for specific forms of a particular gene, and be willing to try a nutrition solution.

Nutrigenomic findings that offer solutions to common dietary problems will be more attractive than those that offer help for rare conditions. For example, a tailored diet for people susceptible to heartburn as a result of their genetic makeup could be an immediate success, as could diets that help individuals predisposed to Alzheimer’s by their genetic inheritance.
<table>
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<tbody>
<tr>
<td>Attitudes to nutrition, health</td>
<td>Those aged 60-70 y not silent and seeking more variety and more healthful choices. Have health concerns and interested in better diets.</td>
<td>A bit more active and exercise more. Trying to eat healthfully, more interested in nutrition, longevity.</td>
<td>More fast foods. Likes supplements for health maintenance. May be uneducated about nutrition, but older Xers are getting the diet–health connection.</td>
<td>Want to know where the food comes from, how it was produced. Interested in organics.</td>
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<td>Attitudes to nutrition, health</td>
<td>Don’t want to waste food. Will exercise. Attributes health to moderate diet, daily activity, and not smoking.</td>
<td>Want to spend the second half of life healthy but over-ambitious in making changes.</td>
<td>Permissive parents, allow children to decide what to eat—kids can nag for favorite foods. Alternatively, pressure kids to be perfect.</td>
<td>Use supplements for the quick fix. The generation of artificial foodstuffs, fast foods, with some exercise.</td>
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<tr>
<td>Attitudes to nutrition, health</td>
<td>Still have gardens, shop frugally, and know how to prepare, store food.</td>
<td>Have food skills, but financial freedom not to use. Some attracted to alternative medicines, others drug-reliant for health, mood.</td>
<td>Producing a generation of overweight children—high-energy snacks, little exercise. Interested in diet only when pregnant or caring for infants.</td>
<td></td>
</tr>
<tr>
<td>Fads and new food habits</td>
<td>Eating out—we’ve earned it! Acquired Starbucks habit, reverting to cocktails later in the day. Eating out or takeout because busy. Boomers always extremists.</td>
<td>Acquired Starbucks habit, reverting to cocktails later in the day. Eating out or takeout because busy. Boomers always extremists.</td>
<td>Starbucks trendy drinks are the new cocktails for this generation. This is the fad diet generation. Sipping from water bottles all day. Confusion about carbohydrates and vegetarianism.</td>
<td>Sipping from water bottles all day. Restaurants are models for meals. Prefer eating out. Would prefer to drink their meals (e.g., supplements, fortified waters) Confusion about carbohydrates and vegetarianism.</td>
</tr>
<tr>
<td>Approaches to life/work</td>
<td>Live to work, or did before they retired. Have had to learn the most: technologies, culture change, and so on.</td>
<td>Motivated by status, power, need for money to fund luxury lifestyles, work all hours.</td>
<td>Motivated by status, power, need for money to fund luxury lifestyles, work all hours. Less loyalty to employers, more turnover.</td>
<td>Less loyalty and desire to please employers. Expect autonomy and self-direction, high-status jobs, but overall, less driven.</td>
</tr>
<tr>
<td>Health: chronic problems</td>
<td>Need a diagnosis before acting. More motivated to take charge of chronic conditions. Maybe half face heart attacks, diabetes, obesity.</td>
<td>More motivated to take charge of chronic conditions, and make changes before problems occur.</td>
<td>More motivated to take charge of chronic conditions, and make changes before problems occur.</td>
<td>Want more information about chronic disease, learning more about diabetes at a young age.</td>
</tr>
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Figure 2. Changing nutrition attitudes and values by generation.
On the other hand, a tailored food for a rarely found susceptibility might have to be custom-designed and, thus, be expensive.

In any event, claims for individually tailored diets will be made well ahead of the science that could support them, creating new opportunities to confuse consumers.

**Trend 11.2. Genomics and Nanotechnology May Revolutionize Food Science**

Although widespread advances from nanotech and genomics are probably decades ahead, the potential of these sciences to change how food is designed, grown, processed, packaged, and delivered is enormous.

In recent decades, materials scientists have been able to design materials from the molecular level up to finished materials with custom properties. Food scientists expect to be able to follow their example. For example, they would like to be able to shrink the fat particles in ice cream, making it lower in energy but still rich-tasting.

Most food scientists are moving slowly and carefully because the long-term environmental and food safety effects of nanotechnology in food are unknown. In the food industry today, nanotech is being used for conditioning frying oil, antimicrobial coatings for pipes in food processing plants, so-called tongue sensors to detect trace pathogen buildup in food, candy coatings, and synthetic lycopene (39). Smart food and consumer goods packaging to improve the safety and quality of products will use nanotech innovations, although probably only in higher end products at first.

Consumer groups advocate regulation of nanotechnologies as additives to food and food supplements, but the US Food and Drug Administration is resisting this idea because nanotechnology and its uses are not fully defined, and because if the use of nanotechnology expands, it would be an impossible task. One likely development will be attempts to agree on safety testing standards for nanotech innovations.

### Implications for the Profession

- Nutrigenomics is a potential future charter for RDs but only if they keep up with the science and its implications, and develop products...
and services that can make use of the new findings.
• Nutrition counseling could become complex in a nutrigenomic future, as people strive to design a diet for themselves that avoids all the possible conditions they could be susceptible to.
• Family meals could become more difficult if each person needs to eat different foods—individual grazing will become even more the norm.
• Genetic testing could be used for many different purposes, with future health and wellness only one outcome. RDs must explore the ethical issues involved with seeing individual genetic knowledge and it how it may be used.
• RDs and DTRs will need to be aware of the fears and anxieties people may have about nanotech augmented food, although US consumers are more likely to welcome new products that will allow them to eat and enjoy foods with fewer calories but the same taste.

WORKING WITH THE DIFFERENT GENERATIONS
Most food and nutrition professionals seem to be encountering wide generational differences in attitudes and behavior around food, nutrition, and wellness. Based on their comments, Figure 2 shows some of these differences, with the warning that in each generation many people diverge from their life stage’s norm. Also, what is observed of one generation as a group is not necessarily true for any individual within it.

EARLY SIGNALS OF CHANGE
RDs and DTRs are in a unique position to be able to observe and report even small changes in the systems and people they deal with daily. These systems include food, nutrition, and health/wellness, and also education, culture, society, and changes in attitudes and values. In the survey there were many observations of what could be early signals of change (some of these are discussed earlier, as trends). For example, food’s role in the culture is changing. Traditional practices of bonding through eating with the family seem less important. People are more likely to use food for self-solace, and for confirming their individual identity and place in society.

In addition, there are new questions about the identity and purpose of RDs in a changing society. The old roles do not seem as viable as they once did, and RDs need to know how to manage contemporary eating patterns.

Another manifestation of technology’s ability to make our lives easier and reduce physical activity is the introduction to the market of robots that do home chores.

Most RDs believe that a magic-pill diet is a vain hope and chastise the public for expecting it to appear. However, nutrigenomics, as an aspect of genetics, might give individuals nutrition advice that is genetically tailored to work for them.

Self-reliance, in diet, health, nutrition, wellness, and personal management and decision-making will be the next big social trend emerging as a result of information availability, and the preferences of younger generations. It will be important to the survival of most health care systems to encourage people to engage in their own prevention program.

THE FUTURE OF EDUCATION FOR THE PROFESSION OF DIETETICS
More education is going on online, or will be computer-based, making the process more solitary, and colleges more dependent on income from distance education. At least one in six students (3.2 million) enrolled in higher education took an online course in the fall of 2005 (40).

Online courses may still be a novelty to older students and today’s students, but they will be standard to the next generation who are already signing up for courses online, taking language instruction on their cellular telephones, or participating in global learning videoconferences.

Higher education on campus is becoming more expensive, and distance learning can relieve the burden of cost and time for many adults. However, there are many technical and human difficulties in developing and running effective online education. One, for example, is that teaching expertise in the classroom does not always translate to an e-mail discussion.

In the ADA survey respondents cite shifting educational needs for RDs and DTRs, including:

• A demand for advanced degrees to improve professionals’ decision-making skills and earning capacities (although some respondents believe a master’s degree will not improve salaries for RDs).
• Additional skills that will enable RDs to do specialized practice, such as geriatric.
• Language, cross-cultural skills, and knowledge of other cultures that will help RDs and DTRs work with recent immigrants and different cultures.
• Training in working with behavior and psychiatric issues, particularly in dealing with eating disorders or disordered eating.
• Knowledge and skills in using new media approaches to client education and communication.
• Business and marketing skills to use in developing individual private practices.
• A more scientific and evidence-based approach to nutrition and to nutrition solutions.
• Ability to work with media and policy makers, locally or nationally.
• Greater ability to work in collaborative teams with other professionals.

WHAT IS THE FUTURE FOR THE PROFESSION OF DIETETICS?
Whether they like it or not, RDs and DTRs see their future as moving away from traditional dietetics practice and values and into new areas. In the survey, they acknowledged that:

• Genetics and biochemistry are reshaping food science and nutrition.
• The food industry has a growing interest in the wellness market.
• Technology continues to make food “easier.”
• More medical and surgical solutions to weight management are developing.
• Medical advances will both change and ensure more long-term management of chronic conditions.
• Misinformation about food, nutrition, and health is growing, along with real information.
• Genetic profiling may be able to predict new risks for disease and lead to individual nutrition counseling.
Greater diversity in US society, including food practices, ethnicity, cultures, language, and family types, present new opportunities and challenges.

Clearly there is a strong need for someone to help clients/patients with these developments. Professionals will meet the need, but they might not be RDs or DTRs. The opportunities are there, but there is no guarantee that RDs and DTRs will get them.

RDs and DTRs have identified the challenges and have the opportunity to be the ones to define solutions to these emerging needs.

RDs want to be better known, more visible, and more respected in society for their values and their expertise in problem solving. To do that, do they need an identity makeover?

Advice to ADA
Get the message out! Communicate and advocate for food and nutrition professionals and for their expertise and capabilities in a world that needs their help.

The Future for Associations
Americans are not bowling alone despite the interesting thesis of Robert Putnam’s book by that name (41). In fact, they are finding new ways to socialize, collaborate, and associate. Those new ways are hard to measure. We do not know if they are as good or as effective as the traditional approaches associations offer. We do know that people are turning to the new ways regardless of how well they compare to traditional ways of associating.

Today, professional associations are struggling to change how they serve professionals’ needs. There are still vital roles for professional associations to play. The trick is to find out how associations can compete with businesses, online communities and networks, and ad hoc gatherings, either online, or face to face.

Professionals continue to look to their associations to provide:

- Public relations/promotion of the profession
- Advocacy
- Education
- Information
- Tools
- Collaboration opportunities
- Social networking
- Credentialing

For each of these needs there are opportunities for associations to use technology and new approaches to serve professionals better. But there are new competitors challenging the association.

How different will future associations be? They may:

- Hold meetings in online virtual places, with each attendee interacting as an avatar (a graphical figure representing a person)
- Offer training/credentialing courses via two-way video on mobile devices
- Have nondonus revenue earned for cyber services, brokering information and opportunities, ad hoc information, and training via cellular telephone
- See member retention and longevity drop
- Be focused on microspecialties and highly specialized interests and needs
- Unbundle services and membership packages, offering a la carte options
- Use alliances with other groups to put together events (cyber and live)
- Offer 24/7 communities members can be in touch with, like today’s social networking sites (eg, Facebook, the social networking site)
- Create ways and places to nurture their identity in the community, going well beyond informative Web sites
- Develop options for members to share and contribute their energy cooperatively with others, not at meetings only, but on-line and in an ongoing way

Figure 3. Potential outcomes for associations, based on recent trends.

Some associations have reached a crisis of viability and/or identity because of these broad forces of change.

Demands on Time and Resources. Strong economic and time pressures are shaping professionals’ lives. Their overall effect is to make professionals and their employers increasingly conscious of the value of time and money expended. That means it may not be enough to offer an annual meeting that is fun, held in a nice place, with the chance to reconnect with old friends. All of those things have strong appeal in the abstract, but are weak in the face of demonstrating value under current realities.

Professionals face a lot of demands and time pressures. At the same time, because of the power of the network and innovative business models, they are growing to expect on-demand information sources, services, and a nearly 24/7 culture.

Customization is an enticing possibility and people already look for choices and options from the services they consume. The result is a rising expectation that professional information and tools are available on demand and in custom forms, anywhere, anytime. Can an association offer those things? What might it mean to the association’s business model and revenue picture?

Specialization. Professionals are also becoming more specialized, and their associations have to find ways to serve specialties and subspecialties. The search power of the Internet means that people are getting used to finding more and more specific infor-
information and people to share and discuss it with. The proliferation of online forums demonstrates the power and appeal of such microspecialty information sources.

**Multicarrier Work Lives.** Current and emerging generations of professionals do not choose a profession for life. Most will change careers one or more times. They look for the chance to have new experiences and seek training and growth opportunities along the way. With professional work lives likely to extend into older age, there will be even more interest in new skills and career changes.

**Technology to Meet Needs Ad Hoc.** By offering access from anywhere to anywhere, the Internet and mobile communications will continue to create ways for meeting professional needs such as education and collaboration at the moment of need.

**Business’ Focus on Budget, Performance, and Execution.** Organizations face intensifying competition. At the same time, they’ve sharpened their habits of bottom-line scrutiny and their focus on how they use time and money. These new habits will endure, and will bring a tight focus on not only the cost of professional training and travel, but also on how time is spent. The annual meeting and conferences may continue to suffer lower attendance. But associations can step up by providing professionals information and training at the moment of need, and by providing opportunities for virtual meetings, and mentoring by mobile and online collaboration, for example.

**Expansion of Education Options and Offerings.** There are plenty of competitors emerging for association training and educational programs. During the next decade we can expect much Web-based learning, often ad hoc and delivered via mobile device or at the workplace. Broadband wireless technology means that personalized learning can be multimedia, including interactive video and smart systems that dynamically tune themselves to a professional’s needs.

**The Aging Population and Aging Professional Cadres.** Aging affects association membership in several ways. It can make for association communities that are pitched toward their older members’ interests and thereby make it harder to draw new members. It also creates new opportunities for the association in serving late career needs such as retraining, helping members with phased retirement and retirement planning, brokering part-time opportunities, and helping retirees return to work.

**The Rise of the Cyberworld as a Place to Associate**

New realities in people’s professional lives include collaboration, and alliance with people elsewhere, through the medium of the network. It’s easy, fast, often cheap, and often agreeable to connect with peers that way. Today’s generation of young adults will have come of age in a world where instant messaging and e-mail, along with use of video, photos, and podcast media on a handheld, are routine. When they face joining an old-fashioned association, they see nothing much like what they are used to. They may get much more “associating” done with peers they went to school with, no matter where those friends work. They may be more used to contributing to a social networking site or an online virtual world than to an official membership organization.

As technology improves, more of this virtual associating will be broadband, and will simulate at least aspects of reality much more fully and usefully. And in any case, an online participant will not demand that the experience be perfectly realistic. The power in the technology is ubiquity and connectivity anytime, anywhere, and that allows a compromise on things like the image quality and feel.

For an association, creating, or tapping the cyberhabits of potential members may be a key to future success. Find them where they are, rather than try to draw them to you. The open, loose alliances that online communities represent belie the energy, power, and intensity of participation. A blogger, for example, may lay down new thinking on an issue or a new product and get hundreds of comments on the blog within hours. That’s a lot more powerful than the Q&A session at a conference, or even the listserv activity of a traditional professional community. Blogs help deliver highly specialized information and opinion, allowing millions of people to find and share information. Worldwide, there were at least 57 million blogs as of October 2006—about 100,000 new blogs are created each day, and 1.3 million posts are added each day—and the blogosphere doubles every 6 months. As of November 2006, Technorati.com listed 673 blogs about nutrition (42,43).

How does one defend, reinforce, and reinvigorate professional communities? People today and in the future will still like to gather locally. Activities like mobbing and raves show how young adults still want to be with others. But they mediate and enrich that experience with cyberworld activities. They add dimensions of connection and contribution via the network. They plan and promote being together via mobile technology, blogs, and instant messages. And they read the buzz from online messages and decide what’s cool or important or valuable.

The meteoric rise and sudden decline of online communities and services may make people wary of trusting them or investing their time and money. Cycles such as those affecting Napster, YouTube, MySpace, and FaceBook are likely to continue. Users, particularly younger ones, are in the habit of moving quickly to the next, more interesting thing that comes along. That fickleness could be felt by associations as well. Already careful about big investments in technology-based systems, associations will have to expect and plan for cycles in their programs and offerings, particularly those offered online.

**Information Found and Managed in New Ways**

The information world has been profoundly transformed by harnessing customers, users, and readers for their comments and reviews. Amazon may be the leader on this, but hundreds of other online information sources, such as blogs and Web sites, have done similar things by soliciting comments, user ratings, customer reviews, diggs, and tagging. What this all means is that organizations are using online access to have their customers, members, users, and readers shape information through ratings and comments. Information becomes much more dynamic and gains a dimension of immediacy.

As a recent report, Mapping the Future of Your Association, pointed out,
technology will create pressure for unbundling (44). What people get from the network now is a la carte information access and access to peers. When they weigh value for money as association members, they will likely look at what they are paying for, what they do and don’t need.

Wikipedia shows the power of online communities. Anyone can register and add or edit information on Wikipedia. It is remarkable for how several million people have collaborated to produce a useful, if sometimes inaccurate information resource that changes daily with changing facts and new information. Its dynamism and the power of the cooperative effort may outweigh problems of deliberate or inadvertent errors posted there.

Readers may be tempted to see the foregoing ideas as relevant mostly to young adults and tomorrow’s professionals, not today’s association members. However, these changes are being driven by a much wider group than merely teens and young adults. Baby Boomer professionals are avid users of technology, particularly blogs, listserves, and online news and information. They are the ones who have discovered what technology can do, however imperfectly, for busy lives. They will embrace association use of cutting-edge technology.

Outcomes for Professional Associations
As shown in Figure 3, among the likely implications for professional associations of these forces of change are:

- Increased interest in associations or sub-groups of associations that address specialties.
- Shorter member tenures, with professional retooling, retraining, relocating, and changing professions more often during their work lives. Professional associations could help members find their next professional focus and opportunities and learn to market to potential members of the profession, and to help them ramp up quickly to work in the profession.
- Globalization of issues, trends, and sometimes membership as industries, research, and businesses continue to internationalize. A more international presence of their association may be a member value for professionals.
- The opportunity to build new information networks, sharing, and communications technologies in the association’s activities, or suffer competition for member attention from others that do so.
- Future chapter and subspecialty meetings will often take place in cyberspace, including in virtual worlds where participants appear as graphic figures on screen (avatars) or join via virtual reality in a simulated presence.

Figure 4. Typical Integral Futures Scan Survey responses.
• Technologies like today’s instant messaging that offer members a mentor or peer to share ideas with at the moment of need—while they work.
• Peer ratings and reviews on products, services, information sources, videos, and podcasts.
• Associations have to be ready to adopt new technologies, and then do so again, and again, and again. The best things people are experiencing elsewhere in their professional lives, online, and in their workplaces, will create their expectations for what their association can do.

ABOUT THE SCAN: WHAT IS AN INTEGRAL SURVEY?
RDs and DTRs are in a unique position to observe how society is changing in regard to aspects of motivation, behavior, culture, and social change that relate to food, nutrition, and health. The 2006 Integral Survey attempted to tap into these capabilities of observation and experience through an online survey, as well as through face-to-face discussions among the membership. Trend information was collected for:

• Food, nutrition, and health
• Trends 5 to 15 years out—the longer term
• Attitudes toward the profession
• Generations
• Views on political and/or regulatory policy issues
• Economic outlook
• Educational outlook
• Technological outlook
• Societal changes
• Changes in the profession

An integral survey aims at a fuller picture of what is going on in society than can be provided by the collection of trend data alone. So besides trends, respondents were asked to consider and report on their experiences with:
• Motivation—how people make choices
• Changes in culture—what’s happening culturally around issues of nutrition
• The behavior and attitudes of clients—changes in what clients are doing and how they are responding to nutrition issues

The response to these questions in the survey was especially rich and descriptive. See Figure 4 for an example of the additional kinds of information collected in the survey.

References


