Food is a lens through which we see the world, and increasingly our vision is focused on our health, the health of communities, and that of our planet. Through our food choices, we express our preferences, values, concerns, and aspirations—all of which significantly impact the world around us.

Our food choices—linked as they are to both acute and chronic disease prevention and control—are a primary driver of our health. These same choices affect the livelihoods of more than one billion people around the world who work each day to produce and serve our food.

Food and agriculture production has a larger impact on our planet than any other activity, occupying a quarter of all arable land, affecting the state of oceans and wildlife habitat, consuming most of the world’s water and a fifth of the energy we produce, and creating a fifth of greenhouse gas emissions.

When we look at the state of our planet, with increasing rates of both hunger and obesity—and eroding food security igniting social unrest—we want a better future.

When chefs and foodservice industry leaders look at the challenges they face—the need to simultaneously address the rising costs of food; the need to improve the health of their customers and reduce the environmental impacts of their products; increasing demand for supply chain transparency and increasing risks to brand reputation because of how globalized the supply chain is; the complexity of serving an increasingly diverse population with splintering preferences and attitudes; and the overall declining effectiveness of current business models—they, and we, crave the skills and insights to allow us to adapt and lead before the future arrives.

“Compass Group chefs and Registered Dietitian-Nutritionists have seen tremendous value in our participation in Menus of Change since the inception. We have been inspired to take action in all of our businesses to create environmentally friendly menu options that promote both personal and planetary well-being in a business savvier way. With 24 different MOC principles, it gives chefs the flexibility to incorporate those principles that work best for their guests. I have personally seen the collective power of us each make at least one change every day.”

DEANNE BRANDSTETTER, MBA, RD
Vice President of Nutrition & Wellness
Compass Group USA
Threaded through all of this is our modern lifestyles that provide less and less time to cook but increasing appetites for new culinary directions and food that is perceived to be “real” and health-promoting. At precisely the same moment when the world’s interest in food and food choices is growing, we are asking chefs to make more choices on our behalf as we select and prepare fewer meals in our own homes.

As we move further into the 21st century, chefs and culinary leaders are poised to assume a larger, pivotal role in integrating key imperatives of taste, health, the environment, community, business and economics.

Against this background, we see a path forward where:

- Our most delicious foods—by design—can also be health promoting and environmentally sustainable.
- America’s most talented chefs, scientists, and business leaders, along with today’s culinary students, are collectively engaged in driving towards business-friendly solutions to our obesity and healthcare crises—and challenges to the future of our global food security.
- New approaches to collaboration between nutrition and medical experts, chefs, and environmental scientists help the business community develop new models of innovation—and new, long-term business strategies—around opportunities for the future of food and foodservice.

OVERVIEW

Menus of Change®: The Business of Healthy, Sustainable, Delicious Food Choices is a ground-breaking leadership initiative launched in 2012 by The Culinary Institute of America and Harvard T.H. Chan School of Public Health that works to realize a long-term, practical vision integrating optimal nutrition and public health, environmental stewardship and restoration, and social responsibility concerns within the foodservice industry and the culinary profession.

In just its first nine years, Menus of Change has established a compelling new agenda for the foodservice industry through an annual leadership summit at the CIA’s Hyde Park campus, an annually updated compilation of resources on the state of the industry, and an ongoing series of tools and guidance for foodservice professionals. Menus of Change also informs The Culinary Institute of America’s approach to educating the next generation of culinary and business leaders.
The initiative’s thought-leadership includes:

- Showing that changing menus is a powerful, and previously underappreciated, way to drive improvements in our health and our planet, and also is the most important part of doing business in the restaurant and foodservice industry.
- Connecting dietary change and sustainability, and setting the stage for incorporating sustainability into the recommendations of the 20202 Dietary Guidelines Advisory Committee’s report to inform the Dietary Guidelines for Americans.
- Bringing attention to protein, both animal- and plant-based, to show how that macronutrient category has the largest impact on the environment including climate change.
- Making plant-forward dining a mainstream concept in the culinary profession and foodservice industry, with a clear vision for a new way to cook and serve food to others.
- Introducing and advancing new considerations for menus and ingredient choices that are now mainstream, such as the water footprint of food and how to reduce antibiotic use in livestock production.

Along the way, the Menus of Change initiative has engaged thousands of leaders in the foodservice industry around this vision. Involvement in Menus of Change has led to substantial changes in what these foodservice operators choose to buy and serve to diners:

- Of recent Menus of Change summit attendees, more than 80 percent have changed their menus and dining formats as a result of attending the annual program series.
- Over half of these same attendees have changed their sourcing practices.
- From corporate dining to multi-unit restaurant groups, operators across the country are adopting the Menus of Change platform and principles as part of their strategic planning process.
- More than 60 college and university foodservice operations—members of the Menus of Change University Research Collaborative—are conducting and sharing research and education in support of culinary-centric, evidence-based food systems innovation within and beyond universities.
Background: A GAME-CHANGING LANDSCAPE AHEAD

Agriculture, population growth, and environmental pressures
The United Nations forecasts that the Earth’s population will swell to nearly ten billion people by the year 2050—putting enormous pressure on agriculture, the environment, and global food prices. In the face of likely increased food insecurity and resulting political instability, current patterns of dietary change in developed and developing countries—increasingly reliant on commodity foods that are energy-intensive and both inefficient and costly to produce—will surely see severe disruption.

The impacts of climate change, water scarcity, and the likely continued escalation of energy costs over the next 20, 30, and 40 years will further upend agricultural production and constrain food choices.

In 2030 global water needs are projected to grow from 4,500 billion cubic meters to 6,900 billion cubic meters, with food and agriculture remaining the largest user of water. According to a recent report, Charting Our Water Future 2030, by the Water Resources Group, this will represent a demand that is 40 percent greater than current, accessible, and reliable water supplies can provide. Quite clearly this will throw the issue of high agricultural water use as a function of food choices into sharp focus.

Today—long before 2030—our global food and agricultural sector is already exhibiting symptoms of intense pressures. Severe weather, drought, and social instability are affecting the profitability of large food companies along with the stability of governments in the Middle East, Asia, and Africa. A host of contemporary environmental and social responsibility issues are challenging the adequacy of our current models of agriculture and food production, from concerns about the cumulative effects of non-therapeutic hormones and other production practices in livestock production to groundwater contamination, soil degradation, and collapsing fisheries.

At the same time, challenges to current models of food systems and large-scale, production agriculture over environmental concerns quickly raise questions about how much we as a society—or as individual consumers—are willing to pay for solutions to such imperatives.
Frontiers of nutrition research
Current nutrition science has confirmed the extraordinary links between diet and health. In these challenging times, the unsustainable rise in health care costs will increasingly be laid at the feet of unhealthy diets and rising obesity rates. Following trend lines into the future, it will become ever more difficult to justify any lack of alignment between food, agricultural, and nutrition policy—creating a wide range of impacts for American business.

Recently the Centers for Disease Control and Prevention (CDC) underlined the approaching severity of the obesity threat. By 2030, 42 percent of Americans are expected to be obese if trends aren’t reversed. But simply preventing an increase over the current rates of obesity in future years could reduce future health care costs by $550 billion between 2012 and 2030. Other recently released CDC data indicate that the number of teens in the U.S. with diabetes or prediabetes has skyrocketed over the last decade, climbing from 9 to 23 percent, nearly one quarter of all young people.

American and European food and drink manufacturers who are increasingly looking to world markets for expansion are now facing dark clouds on that landscape in the form of a rising, global diabetes epidemic. In China, for example, with the rapid change in lifestyle, nearly 92 million Chinese now have type 2 diabetes—and another 148 million Chinese adults have prediabetes. Also in Asia, Singaporeans are on track to incur a 50 percent lifetime risk of developing diabetes.

And finally, on the diet and health front, there is this startling macro calculation: scientists now estimate that fully 80 percent of major chronic diseases are preventable through changes to diet and lifestyle, i.e., eating a healthy diet and avoiding obesity, not smoking, and engaging in regular physical activity.

Consumer attitudes and concerns
On the consumer side, concerns about where our food comes from and how it was produced—in effect, whether it is healthy, environmentally sustainable, locally sourced, and created in a socially responsible manner—are growing rapidly, especially among younger demographic groups. Consumers’ aspirations sometimes outpace their buying decisions—and, additionally, are often contradictory and based more on emotion or personal philosophy than science. But there is no question that a new paradigm of what constitutes “good food” has been taking hold across America. The business community and consumers are also in a prolonged dialogue about whether you have to be a “good food company” in order to serve them.
Food manufacturers are finding growing demand for products that consumers and chefs deem to be “natural” and “whole,” while the public—rightly or wrongly—increasingly holds “processed food” in very low regard. Even during the recent recession, the market for “real food” continued to grow at more than 10 times the industry average, the same rate as prior to 2008. While price still drives most professional and consumer purchases, rising consumer interest and discontent portends change ahead. Despite considerable and growing efforts by the foodservice industry to develop healthier menu choices, there is still much more work to do.

**Changing appetites**

On the culinary front, looking to the future, a shrinking sense of the world will make formerly “foreign” foods, flavors, and culinary ideas commonplace, creating an explosion of possibilities for American chefs, foodservice operators, food producers, and home cooks. Every ingredient, culinary technique, and flavor strategy from Asia, Latin America, Europe, Africa, and the Middle East will be instantly within consumers’ easy reach—and the reach of those in business catering to their needs. In response, Americans are increasingly embracing bolder flavors, culinary diversity, and “adventure” in ways that are transforming the market.

**Demographic shifts**

In 2050, very much within the career timeframe of current culinary school graduates, the U.S. Census Bureau forecasts that Caucasian Americans will be in the minority. By then, Hispanics and Asians together with their non-European food cultures will comprise more than one-third of the population. Expectations about food will be driven both by time spent in the U.S. and also the nature and diversity of this rapidly growing demographic group’s cultural and culinary traditions. This trend alone is a formula for a paradigm shift within the foodservice and food manufacturing sectors.
“The partnership between The Culinary Institute of America and Harvard has produced some of the most meaningful changes in what we eat. The CIA and Harvard have identified key nutrition science findings for the food industry and translated them into practical advice for business and culinary professionals. With the increasing convergence of findings around food issues in both public health and environmental disciplines, the Menus of Change initiative promises to make even more significant changes in how we think about food and what we choose to eat.”

WALTER WILLETT
MD, DrPH
Chair of the Menus of Change Scientific and Technical Advisory Council
Professor of Epidemiology and Nutrition and Past Chairman, Dept. of Nutrition
Harvard T.H. Chan School of Public Health

Convergence of trends and issues
Between now and 2030, and 2050, these trends and imperatives will begin to converge, accelerating challenges and opportunities for American business. Because of the nature of professional, academic, and social interests, these trends and issues are now often addressed individually, with little reference to possible synergies or competition with other trends and challenges. For business leaders and entrepreneurs working in the food and foodservice industry sectors, such lack of integration will surely undermine the pace of innovation—and the staying power of such innovation through the turbulent changes ahead.

With this background, Menus of Change has been designed to address a number of key questions:

- How do business leaders and entrepreneurs get ahead of these changes and start to design and build new models for innovation and business success? How can these models start to anticipate the acceleration of trends as we head into successive decades leading up to 2030, 2040, and 2050?

- Students graduating from culinary schools and young entrepreneurs starting food-related businesses right now will see these changes unfolding throughout their careers. How do they need to prepare?

- What is the leadership potential of chefs and other culinary and foodservice professionals to help frame and communicate new models for the business of healthy, sustainable food choices in ways that substantially increase consumer acceptance? How can we make these foods delicious as well as affordable and accessible?

- How can we work to preserve the best of food traditions around the world—and honor cultural diversity—through this upcoming period of change?

- How do we leverage the emerging fields of culinary science and technology to increase our success in integrating nutrition, sustainability, and culinary insight—in a landscape of diminished budgets and challenging labor markets?

- What might be the best approach to integrating our current scientific understanding of optimal human nutrition, environmental sciences, food systems, business and management with the culinary arts and sciences within academia to achieve the best theoretical and practical outcomes?
GOAL OF THE INITIATIVE

The goal of Menus of Change: The Business of Healthy, Sustainable, Delicious Food Choices is to create and grow a world-class structure of collaboration between leaders in nutrition research and public health, the environmental sciences and sustainability, the culinary arts, and business and management to consider and incubate new models of food and foodservice innovation that anticipate future imperatives and are economically sustainable. Menus of Change also strives to provide the next generation of culinary and business leaders the skills and knowledge to work at the intersection of health, environmental, and social concerns.

OBJECTIVES

1. Create a cross-disciplinary community and leadership forum for the food and foodservice sectors and related academic fields that foster innovation around the integration of health and wellness, environmental sustainability, social responsibility, business and economics, and the culinary arts.

2. Build evidence-based models for healthy, sustainable, and delicious food choices that can serve as a gold standard and reference point for current and near-term industry innovation.

3. Develop future scenarios—tied to periodic intervals leading up to 2050—that integrate our understanding of the frontiers of nutrition research, healthcare trends, environmental issues and trends, population and demographic trends, and food supply and security issues so as to establish a science-based, long-view context for business planning, economic modeling, and entrepreneurship.

4. Stimulate and support innovation across all scales and types of food businesses and sectors, from small and regional to large, national, and international, tied to this integrated vision of these issues.

5. Design an industry-standard culinary education curriculum serving both students and professionals that for the first time integrates these issues and imperatives in a way that is easily grasped—and is actionable—by students in and graduates of culinary, continuing education, and industry leadership programs.

6. Provide an online and social media platform that brings this information and these ideas to all interested parties in the foodservice industry, related academic fields, and beyond.

7. Leverage this collaboration in order to inspire change and innovation outside the foodservice sector, in agriculture, retail, food manufacturing, food marketing, the media, and in home kitchens.
OUR APPROACH

• Begin by understanding the state of the art of what current nutrition and environmental research and social responsibility imperatives tell us about the shape of optimal diets.

• Be clear about what is currently unhealthy and environmentally unsustainable.

• Honor the historical role of our industry to create special-occasion foods and celebratory dining experiences.

• Recognize that, increasingly, Americans are turning to chefs and foodservice providers for healthy, everyday meals, snacks, and beverages.

• Consider costs and economic modeling with reference to a variety of possible consumer behavior responses and policy shifts.

• Work backwards from our best projections about how the world of 2030, 2040, and 2050 will likely transform the business environment then and over the next three decades.

• Consider the balance between public health, policy initiatives, and the freedom of individual choice in a competitive marketplace—and how the calculus of this balance may change over time because of such pressures.

• Recognize that business cannot always avoid change that runs counter to its immediate economic interests, and that the next best thing is to have clear intelligence about the contours of the future business, consumer, scientific, and policy environments in order to facilitate planning and mitigate risk.

• Consider the potential of the culinary community of trained chefs and other professionals to provide the business community and policy makers with approaches to the evolution of food and menu choices that increase the appeal for consumers and reduce potential negative reaction.
DEFINING PLANT-FORWARD:
GUIDANCE FOR OUR INDUSTRY

PLANT-FORWARD
A style of cooking and eating that emphasizes and celebrates, but is not limited to, plant-based foods—including fruits and vegetables (produce); whole grains; beans, other legumes (pulses), and soy foods; nuts and seeds; plant oils; and herbs and spices—and that reflects evidence-based principles of health and sustainability.

HEALTHY, SUSTAINABLE, PLANT-FORWARD FOOD CHOICES
This distilled guidance about the future of our food choices, for individuals and professionals, is an outgrowth of multiple, joint leadership initiatives of The Culinary Institute of America and the Department of Nutrition at Harvard T.H. Chan School of Public Health, including Menus of Change; Healthy Kitchens, Healthy Lives®; and the Teaching Kitchen Collaborative. It reflects the best current scientific evidence supporting optimal, healthy, and sustainable dietary patterns while addressing vital imperatives to achieve short- and long-term global food security.

Healthy, sustainable, plant-forward food choices—when informed by culinary insight—can transform palates and spur next-generation innovation, as is evident in the success of new menu, restaurant, and retail product concepts thriving in the marketplace. In short, this is a practical, achievable vision for a delicious future. For more information, please read the Principles of Healthy, Sustainable Menus at menusofchange.org.

Plant-forward is primarily envisioned as a B2B term, not a way to describe dishes on menus. For that, operators are encouraged to lead with descriptors that convey flavor, quality, deliciousness, sense of place, ties with local producers, seasonality, culinary adventure, cultural contexts or heritage, fun, and/or innovation or invention—according to their distinct restaurant or foodservice concept.

HEALTHY, SUSTAINABLE, PLANT-FORWARD FOOD CHOICES ARE THOSE WHICH:

• Feature minimally processed, slow-metabolizing plant-based foods: fruits and vegetables (produce); whole grains; beans, other legumes (pulses), and soy foods; nuts and seeds; healthy plant oils; and herbs and spices.
• Place animal-based foods in a reduced or optional role, with a special emphasis on decreasing purchases of red meat and minimizing foods sourced from animals raised with the routine, non-therapeutic use of antibiotics. These choices prioritize fish and poultry among animal-based proteins, with dairy options and eggs playing a supporting role (if desired).
• Might include vegetarian and vegan choices.
• Highlight the value of fresh, seasonal, locally produced foods; minimize sugary beverages and added sugars and sweeteners; and reduce sodium and unhealthy additives.
• Emphasize healthy dietary patterns and a rich diversity of whole foods versus an undue focus on specific nutrients and percentages; avoid excess quantities of calories but first ensure calorie quality.
• Celebrate cultural diversity, personal needs and preferences, and the unapologetic elevation of deliciousness, including room in our diets for foods of special occasions.
• Begin with transparent ingredient sourcing that supports sustainable farming methods and fisheries.
• Through food purchasing patterns, encourage innovation and sustainable practices in retail food and restaurant concepts and business models to advance public health, social wellbeing, and our food system.
Chefs, Restaurants, & American Foodservice

Chefs are at the heart of the American foodservice industry, from fine dining and casual independent restaurants to K-12 and university foodservice, corporate contract foodservice, and chain and multi-unit restaurants.

The influence of chefs today extends far beyond restaurants and foodservice to the shaping of consumer attitudes and appetites from the supermarket to the home. They are flavor experts, masters of technique, and researchers of world food traditions—and they are in the best position to make healthy foods craveable. They are ubiquitous on television and in the pages of most glossy lifestyle publications. Chefs advise multi-billion-dollar food and foodservice companies on menu and product strategies, and are increasingly the face of food marketing.

And in addition, many chefs are passionate and actively engaged in advancing healthier food choices in restaurants and schools, and advancing issues of sustainability and social responsibility, in part driven by the interests and concerns of their customers.
Acknowledging the well-established link between diet and health and wellness, the CIA is actively engaged in developing strategies and solutions to increase the presence—and success—of healthy menu choices throughout the foodservice sector. While honoring the historical role of our industry to create special occasion foods and celebratory dining experiences, we also recognize that increasingly, Americans are turning to chefs and foodservice providers for healthy, everyday meals, snacks, and beverages. The CIA fosters collaboration between the foodservice industry, public health experts, academic researchers, policy makers, manufacturers, growers, and other suppliers in order to generate greater leadership in health and wellness both within foodservice and across our nation.

Our national, industry leadership conferences and other special initiatives, such as our Flavor, Quality, and American Menus Leadership Retreat, presented in partnership with UC Davis, explore important elements of sustainability while considering agricultural innovation and supply chain issues.
During the past decade, the CIA has partnered with the Harvard T.H. Chan School of Public Health—Department of Nutrition and Harvard Medical School to stage a series of influential, health-focused leadership conferences and initiatives. Harvard T.H. Chan School of Public Health brings together dedicated experts from many disciplines to educate new generations of global health leaders and produce powerful ideas that improve the lives and health of people everywhere. As a community of leading scientists, educators, and students, we work together to take innovative ideas from the laboratory to people’s lives—not only making scientific breakthroughs, but also working to change individual behaviors, public policies, and health care practices. Each year, more than 400 faculty members at Harvard Chan School teach 1,000-plus full-time students from around the world and train thousands more through online and executive education courses. Founded in 1913 as the Harvard-MIT School of Health Officers, the School is recognized as America’s oldest professional training program in public health.

Through its CIA-Harvard Worlds of Healthy Flavors and other programs, the college has given the leadership of the volume foodservice sector direct unprecedented access to the world’s top nutrition scientists in order to gain insights on likely outcomes and future directions of diet and chronic disease research. When paired with the CIA’s deep knowledge of culinary and flavor strategy, these efforts have given participating corporations powerful tools to positively impact menu development in their national and global operations. This long-standing CIA-Harvard collaboration has been pivotal in driving trans fats out of most American foodservice kitchens, and in fostering other significant, health-promoting changes in our industry. (Helping to lead initiatives around sodium consumption and health, the CIA has also represented the foodservice industry on the Institute of Medicine’s national committee.)

Knowing the potential for leadership and change within the American community of physicians, nurses, dietitians, and other healthcare professionals, the CIA and Harvard Chan School annually host Healthy Kitchens, Healthy Lives: Caring for Our Patients and Ourselves. This ground-breaking Harvard CME-granting leadership conference “bridging nutrition science, health care, and the culinary arts” each year welcomes more than 400 physicians and senior-level healthcare professionals to the CIA’s California campus.
Take the Lead

Join the world’s premier culinary and medical colleges in leading the future of foodservice. For more information, please contact:

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