

CULTIVATING COMMON GROUND

Linking Health
and Sustainable Agriculture

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Prevention Institute is a nonprofit, national center dedicated to improving community health and well-being by building momentum for effective primary prevention. Primary prevention means taking action to build resilience and to prevent problems before they occur. The Institute's work is characterized by a strong commitment to community participation and promotion of equitable health outcomes among all social and economic groups. Since its founding in 1997, the organization has focused on injury and violence prevention, traffic safety, health disparities, nutrition and physical activity, and youth development.

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INTRODUCTION

As the American populace increasingly focuses on health concerns, with media highlighting obesity as a central epidemic in the eye of this storm, the most critical question is: what can be done? For the most part, considerations of the nutrition and health needs of the US population have been disconnected from considerations of agricultural practices and policy. Public and professional awareness is at an all-time high that food (and physical activity) are key components of serious health threats—including heart disease, diabetes and cancer—with health care costs approaching 15% of the GNP. The issue of poor diet has now been elevated from a personal health issue to a public health crisis. For the first time ever, some health officials predict today's children will live shorter lives than their parents due to obesity and chronic disease-related mortality.

Sustainable agriculture practices are rarely seen as viable solutions for improving nutrition and health. In fact, there are compelling reasons to link the sustainable agriculture and health sectors. In light of the obesity crisis, both sectors are concerned with increasing production of, and access to, fresh, affordable, high-quality farm products, and altering elements of the food system which favor production and distribution of highly processed, high-fat and high-sugar foods. Further, while not widely understood by health and public health professionals, the current system of agricultural production contributes to numerous health problems including cancer, asthma, antibiotic resistance, and nutrition-related chronic disease. These health problems affect everyone but occur at higher rates among people with low incomes and people of color. Thus, improving the food system is not only an issue of health and agriculture, but an issue of social justice as well.

There are leaders describing the health-agriculture connection. Articles such as “How Sustainable Agriculture Can Address the Environmental and Human Health Harms of Industrial Agriculture” published in *Environmental Health Perspectives* have outlined the ties between acute, infectious and chronic diseases and current, resource-intensive and unsustainable industrial agricultural practices, with a specific emphasis on animal agriculture.¹ Further, efforts to link health and agriculture



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LINKS BETWEEN AGRICULTURE AND HEALTH

Over Production of a Range of Unhealthy Food Products

- US subsidies (direct- and in-direct) create incentives to over produce crops that are integral ingredients in cheap, high-fat, high-sugar, processed foods. A high-fat diet and excessive calorie consumption are linked to chronic diseases such as obesity, high blood pressure, diabetes, coronary heart disease, cancer, and stroke.
- At least one-fourth of all energy intake comes from food groups that provide large quantities of refined sugar and fat and few micronutrients.²
- On an annual basis, US corn is consumed as follows: 1.2% as a vegetable, 8.0% as a sweetener, 50.1% as animal feed, 2.6% as starch, 5% as alcohol (ethanol), 22.6% as exports, 10.3% as reserve stocks, 0.2% as the seed.³

Use of and Exposure to Toxins

- Pesticides used in conventional agriculture accumulate in the human body and can cause cancer, birth defects, decreased fertility, neurological damage and other health problems.⁴
- Every day, 9 out of 10 US children between the ages of 6 months and 5 years are exposed to combinations of 13 different neuro-toxic insecticides in the foods they eat.⁵ More than 8 million Californians drink water from systems where some or all of the water is contaminated with nitrate levels above government health standards.⁶
- Hormones found in food may be associated with breast cancer and the increasingly earlier onset of human female puberty.⁷
- The use of agricultural chemicals known to cause cancer in California increased 127% from 1991 to 1998.⁸

Dangers to Farmer & Worker Health and Safety

- Farmers and agricultural workers develop occupation-induced health problems from chemical exposures. Occupational exposures to pesticides have been associated with health problems including miscarriages, birth defects, and decreased sperm counts.⁹
- One health survey of California agricultural workers revealed that the predominantly young male work force is at high risk for chronic disease, due in part to difficulty accessing a healthy diet.¹⁰
- US family farmers typically lose money each year. Their average income declined by over 60% in 2001 alone.¹¹ Suicide is a leading cause of death for farmers.¹²
- Analysis of farm communities in Nebraska and Wisconsin show that the loss of 1 family farm results in the loss of 8 “white collar” jobs and the loss of 7 farms results in the loss of 1 business in town.¹³

Antibiotic Resistance

- The use of antibiotics in animals is linked to antibiotic resistant strains of food poisoning bacteria and may cause reduced effectiveness of related antibiotics used to treat humans.¹⁴
- 70% of US-produced antibiotics are fed to animals to promote growth.¹⁵
- The American Medical Association adopted a formal resolution opposing the nontherapeutic use of antibiotics. The Centers for Disease Control and Prevention considers animal use of antibiotics to be the major cause of foodborne illnesses that resist treatment with antibiotics. The World Health Organization has called for an end to animal antibiotics important to human medicine.¹⁶

Foodborne Illness

- 76 million Americans get sick every year: more than 300,000 are hospitalized, and 5,000 die from foodborne illnesses, according to estimates from the Centers for Disease Control and Prevention.¹⁷
- The crowded conditions of factory farms and the high-speed, automated methods of slaughtering and processing the animals increase bacterial contamination.¹⁸
- Salmonella cases in the US have doubled in the last 2 decades. Similar increases are reported for other foodborne bacteria.¹⁹
- As much as 8% of the weight of supermarket chicken is not meat, but a “fecal soup” from water used in processing chickens into meat.²⁰

Respiratory Illness and Poor Air Quality

- Non-sustainable methods of agricultural production contribute to poor air quality through pesticide drift, field dust, waste burning, gases from manure lagoons, and diesel exhaust from transporting food long distances.²¹ Associated health problems include asthma, cardiovascular disease, lung cancer, and respiratory illness. Poor air quality also limits physical activity, increasing risks for chronic disease.
- Secondhand pesticides from pesticide drift, just like secondhand cigarette smoke, can cause serious adverse health effects.²²
- 2.2 million Californians suffer from asthma, the number 1 cause of hospitalization for children. In Fresno, California’s leading agricultural county, childhood asthma is 3 times the national average.²³

are not new. In 1946, the National School Lunch Program was created with the dual goals of supporting consumption of domestic agricultural products while improving the nutritional status of US children. More recently, the Green Revolution of the 1960's applied advances in genetics, petrochemicals and machinery to achieve dramatic increases in crop yields. Displacing indigenous, more sustainable agricultural techniques, these industrial agricultural methods were promoted with the claim that the new techniques would solve major public health problems of hunger and malnutrition nationally and internationally.ⁱ

The current media and policy attention to obesity and nutrition-related chronic disease has been noted by sustainable agriculture and community food security advocates. These leaders are beginning to frame these food system issues to highlight the connections to health and to engage health professionals as advocates. The rising rates of food-related illnesses and their impact on health resources provides an opening to reach the health sector. However, while there has been some previous success in activating physicians and specialists from environmental health or migrant health to oppose pesticide use, by and large the health community remains unaware of food system issues. In general, the benefits of sustainable agriculture are not adequately described in terms of key health concerns and the health sector does not identify altering the agricultural system as an important public health goal. Indeed, there are challenges in bringing together a sector concerned primarily with how food is produced and distributed with one fundamentally concerned with the impact of nutrition-related chronic diseases on human health. Yet the opportunities to positively impact agriculture, the environment and health make this collaboration not only promising but essential.

CULTIVATING COMMON GROUND

Cultivating Common Ground was funded by the Columbia Foundation and the Clarence E. Heller Charitable Foundation to delineate opportunities for creating a synergistic movement between health and sustainable agriculture, in order to strengthen the momentum for a just, sustainable health-promoting food system. In particular, the project focused on how to engage health professionals as advocates for sustainable agriculture. A fundamental assumption of this project was that engaging the health sector as an advocacy force will make it possible to achieve far greater gains in transforming the food system. *Cultivating Common Ground* suggests a roadmap for collaboration by recommending strategies to build understanding and joint action between the fields. The authors hope that this analysis and these recommendations will help advance initiatives already underway and foster new efforts.

While *Cultivating Common Ground* looked primarily at the potential for collaboration between sustainable agriculture and nutrition-oriented health practitioners, an

TEN REASONS WHY THE TIME IS RIPE TO LINK AG AND HEALTH

1. Everyone cares about health.
2. Health care is a huge and growing part of the GNP.
3. Health care is one of the top political campaign issues.
4. Obesity and food-related chronic diseases are leading health concerns with long-term consequences for the health of the nation.
5. The health care system is crumbling under the weight of higher costs, patient and physician dissatisfaction and increased demand for chronic care.
6. Health disparities—higher rates of diabetes, stroke, asthma, and other chronic diseases among African Americans, Native Americans, Latinos, and people with low incomes—are a primary public health concern related to the food system.
7. Good eating habits are one key to preventing chronic disease and reducing demands on the health care system.
8. Awareness is growing within the health sector that the environment is an important influence on individual health, both directly and as a mediator for eating and physical activity behaviors.
9. Increasing access to healthy food is an important strategy to prevent obesity and chronic disease.
10. Health sells. There is an opportunity to take back health claims from the processed food industry and attach them to fresh, local food.

ⁱ It should be noted that while the Green Revolution did create short-term increases in crop yields, these techniques did not solve the problem of hunger, which is related to inequitable distribution more than inadequate food supplies. Furthermore, the growing methods were ultimately not sustainable.

BROADER GOALS OF THE HEALTH AND ENVIRONMENTAL SECTORS

Health Sector

- Reduce health disparities
- Decrease cancer toxins
- Decrease asthma triggers
- Maintaining effectiveness of medications
- Decrease food-borne pathogens

Environmental Sector

- Clean air and water
- Preserve open space
- Reduce dependence on fossil fuel
- Preserve species

important finding is that this partnership provides the gateway to building an even more influential movement. Sustainable agriculture advocates are one element of a much larger movement to protect the environment. Similarly, health practitioners concerned about the obesity epidemic are one group within a much broader range of health professionals concerned about illnesses related to aspects of the conventional food system. Thus, it is possible to go beyond the sub-groups to involve the broader environmental and health sectors. Moreover, a wide range of social justice initiatives related to the food system (farmworker rights, health equity, environmental justice, food insecurity, preservation of family farms, and animal rights) can be embraced in an inclusive movement. Engaging the environmental movement, the health sector and social justice initiatives can create a powerful force to advocate for a safe, healthy, just, and sustainable food supply.

Methods

Prevention Institute conducted a series of interviews, facilitated conversations and attended small group meetings with sustainable agriculture, health and public health professionals and advocates. Interviewees were selected by identifying key leaders from each field known to project officers at the Columbia Foundation and Clarence E. Heller Charitable Foundations and Prevention Institute staff. This convenience sample then helped identify a larger group of interviewees through a snowball sampling method. Prevention Institute spoke with more than 40 individuals from the sustainable agriculture and health sectors (Appendix A).

Qualitative interviews focused on identifying mutual current and potential goals and activities, perceived barriers to collaboration, and proposed action steps to build common efforts between those traditionally working in the fields of health and sustainable agriculture. Interviews were reviewed for common themes and key concepts and synthesized into preliminary findings. An advisory committee (Appendix B) representing both sectors reviewed preliminary findings and recommendations and provided feedback for strengthening and refining the approach described here. The authors wish to thank all those who participated in this process and take final responsibility for the content. This report is a synthesis of qualitative data from interviews and meetings and analysis by Prevention Institute.

For convenience, the term *health* or *health sector* refers to both the health care and public health professionals concerned about nutrition-related chronic disease and to those who were interviewed for this paper. The term *sustainable agriculture sector* refers to advocates, policy analysts, farmers, and scientists engaged in promoting sustainable agriculture. While neither sector is monolithic, the analysis presents generalizations about the values and priorities within each field.

DIFFERENCES IN PARADIGMS AND FOCUS

Four differences emerged from the interviews that have implications for joint action. These differences present a challenge to collaboration as they focus the sectors on different solutions and outcomes. While there is a diversity of opinions within each sector, the general trends are described here to aid thinking about potential barriers to collaboration.

DIFFERENT PARADIGM: SYSTEMS ORIENTATION VS. INDIVIDUAL ORIENTATION

People involved in sustainable agriculture are more likely to have a systems orientation. They are concerned about where food comes from, how it is produced and transported to the consumer. This can create challenges in trying to work with a health sector that is more focused on outcomes for individuals. One sustainable agriculture professional described his attempts to explain to public health professionals how sustainable agriculture is related to nutritional concerns: “There was some understanding until there seemed to be an extra leap that stopped any potential collaboration. Ultimately the nutrition people made it a calorie issue.”

Health has largely defined obesity as a problem of individual choices to over-consume, rather than viewing these food choices as shaped by a greater food system. The primary goal of health professionals concerned about nutrition-related disease is to change individual behavior so that people eat a healthier diet. Success is measured in terms of weight loss or changes in specific dietary habits such as increased consumption of whole grains and fruits and vegetables and decreased consumption of fat and calories. Therefore the primary focus is on specific foods and/or nutrients. Even when an individual may be aware of broader food system issues, the current health paradigm makes it difficult to integrate these concerns. Especially for health practitioners concerned with low-income populations, the emphasis on immediate and practical solutions is paramount. As one public health official noted, “If I could put Safeway in some low income neighborhoods, yes, I would in a minute because it would mean better health, and then it would be up to the people with money to encourage and ask the Safeway for organic options.”

An example of how these different perspectives play out relates to food irradiation. As one organizer noted, “Health people I have worked with are concerned about irradiation depending on their world view. Big Systems thinkers tend to be against irradiation, while those working on narrow, very specific issues (such as food poisoning) don’t get it.” From the narrow vantage point, “irradiation extends shelf-life, making it possible to transport food farther with less risk.” The potential human health risks from the increased use, storage and transport of radioactive materials are not part of the equation.



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“My experience from efforts (some of them substantial) to work jointly is that it doesn't really happen. Sustainable ag is about farmers and we are about consumers, and there is a very big gulf between us.”

—NUTRITION ADVOCATE

DIFFERENT PARADIGM: PRECAUTIONARY PRINCIPLE VS. INDISPUTABLE PROOF

Sustainable agriculture has adopted the *Precautionary Principle* in considering risk. This principle emphasizes that “when an activity raises threats of harm to health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.”¹ As one interviewee noted, the precautionary principle means making decisions to protect health with less than perfect information, conducting careful analysis of the evidence, data gaps, and uncertainties.

The health sector tends to want to act only when there is indisputable proof of causal links. Several health sector representatives stressed the need for strong evidence to support the health-promoting aspects of sustainable agriculture in order to engage both the public health and health care communities as advocates. They thought very tangible facts and figures that link the dominant system of food production to health problems would be most persuasive. With persuasive data, sustainable agriculture and health care professionals can find common ground. For example, Health Care Without Harm has been successful in eliminating the use of hazardous substances in hospitals because it is seen as providing “solid science and analysis to establish credibility.”

Recognizing that the health field looks for more precise data, some sustainable agriculture representatives thought that health and nutrition professionals would be more responsive to sustainable agriculture if there was “hard science proof” that its products are better for people’s health. For example, if the food could be shown to be more nutrient-dense, some health people might be more supportive. Quantifying the contribution of industrial agriculture to diseases would also be helpful (e.g., specifying the link between pesticide residues on food and cancer rates in children, or calculating the contribution of air pollution from diesel trucks transporting food and the link to inducing asthma attacks). As one person put it, “while I would love to push sustainable agriculture, it’s expensive and not evidence-based.”

DIFFERENT PARADIGM: APPROPRIATE TECHNOLOGY VS. HIGH-TECH FIXES

The sustainable agriculture community tends to focus on enhancing natural systems to solve farming challenges, and is cautious in regards to new high-tech approaches to growing or processing food such as genetically-modified organisms or food irradiation. Because sustainable agriculture advocates tend to be more cautious, and some even oppose these technologies in principle rather than requiring data to prove they are harmful, their opposition may appear intuitive rather than factually-based and may turn off some health professionals.

In contrast, within the health sector, the introduction of new technologies such as Magnetic Resonance Imaging or laser surgeries are almost always heralded as great breakthroughs. The dominant paradigm in health is to embrace high-tech tools. It is the new breakthrough that generates the publicity. Furthermore, the financial rewards within the health care system are for procedures, not for the relatively low-tech approach of health practitioners *simply* communicating with their patients.

This may make it more difficult to recruit health professionals to join a movement opposed to technologies promoted by industrial agriculture such as genetically-modified organisms or food irradiation. Health professionals look for evidence that technology will directly harm individuals consuming the food they produce. Yet the most powerful arguments against these technologies relate to their systems impact and the argument for the impact on individuals may be more complex.

DIFFERENT FOCUS: MOVEMENT VS. DISCIPLINE

The conceptual differences reflected in the three paradigms derive in part from the different focus of the two sectors. Advocates are the core of the sustainable agriculture and environmental movements, whereas the majority of people in the health sector are professionals trained in a discipline. The mission of sustainable agriculture is generally focused on preserving the natural environment, particularly farms, while the health sector's job is to treat patients. This can create conflict. As one nutrition advocate stated, "My experience from efforts, some of them substantial, to work jointly is that it doesn't really happen. Sustainable agriculture is about farmers, and we are about consumers, and there is a very big gulf between us."

This different focus impacts how particular issues are viewed. As an example, some sustainable agriculture advocates opposed a California bill (SB534, Romero) to regulate hand-weeding introduced into the California legislature, since hand weeding is an important method for eradicating weeds without chemicals. From the standpoint of health professionals concerned about farmworker health, this bill was a positive step towards reducing repetitive stress injuries.

Further, the difference between a movement and a discipline can be seen in the way each approaches change. Health is a discipline that has a practice based on scientific data: data matters and is a driver for change. It has a hierarchical power structure with very well entrenched leadership and established standards of operation, primarily focused on patient care and financial concerns. In contrast, environmentalists are a movement of individuals with a vision for change. While there are professionals who work on policy or science, the real force behind the movement is the members of the general public concerned about environmental issues. The key national organizations recognized as influential on environmental issues derive their power from individual supporters. In a movement, people act on their values. There is a direct line between their values and what they are trying to achieve.

Given these differences, it will take a different approach to engage the health sector in supporting sustainable agriculture. In a discipline or system, people are affected by existing norms and structures. Their perception of how these operate within their organizations will mediate and modify their vision—even when they have a strong belief. For example, the interviewed health sector members often expressed personal support for sustainable agriculture, but could not envision it as a value being adopted by their institution. Developing a vision will not be enough. Organizational norms and structures need to be systematically changed to influence the health sector.

In a discipline or system, people are affected by existing norms and structures. Their perception of how these operate within their organizations will mediate and modify their personal vision—even when they have a strong belief.

OPPORTUNITIES FOR COLLABORATION: INTERSECTING ISSUES

BUILDING ON SUCCESSES

Nutrition

- Surgeon General's Report linking diet and health
- Nutrition Labeling Laws
- Passage of soda/junk food ban in California-across US
- Major fast food chains eliminated lard for frying and added some healthy menu options

Sustainable Agriculture

- Growth of organic sector
- Community response to organic standards
- Preservation of farmland through land trusts
- Expansion of farm-to-school/farmers markets/& urban gardens

Throughout the interviews, a number of activities were mentioned that might provide avenues for mutual efforts. These efforts can follow on the heels of growing momentum for change related to food and the food system over the last decade. During this period, there was tremendous growth in the organic sector, with a doubling of US certified organic cropland between 1992 and 1997 and an exponentially increased availability of organic food in conventional supermarkets. Other successes for the sustainable agriculture movement include the tremendous outpouring of public comments (over 200,000) related to proposed US organic standards, the establishment of land trusts for preserving farmland and an explosion in farmers markets, urban gardens and farm-to-school programs. For health and nutrition advocates, the 1988 *Surgeon General's Report on Diet and Health* represented official acknowledgment by the federal government that there was incontrovertible data to establish the relationship between diet and chronic disease. Policy victories have included the Nutrition Labeling Law and the passage of soda and/or junk food bans at the state or school district level in California and other states.

INCREASING ACCESS TO HEALTHY FOODS IN NEIGHBORHOODS AND INSTITUTIONS

Health professionals are increasingly concerned that their patients have access to healthy, appealing and affordable food. As one health professional noted, "It would make our jobs easier if food tasted better." Farm fresh produce, which includes varieties that would not withstand shipping, has better flavor than fruits and vegetables picked early or held for shipping. Yet this fresh, local produce is not always easy to find. The number one reason given by California adults for not eating more fruits and vegetables is that they are "hard to get at work."²⁵ The food supply is dominated by empty calorie snack foods, beverages and highly-processed convenience foods. As one starting point for collaboration, there is growing interest within the health sector in improving the nutritional quality of food in health facilities and in increasing retail access to fresh foods in underserved communities.

Sustainable agriculture has an interest in expanding markets for smaller farms using sustainable practices, and in fact there has been growing demand. One challenge is to make these products accessible in underserved communities where price is potentially prohibitive. In practice, the sustainable agriculture community has demonstrated commitment to meeting the needs of low-income individuals through implementation of innovative projects. For example, Community Alliance with Family Farmer members have implemented Farm-to-School programs and participated in subsidized farmstand and food box programs to bring sustainably-produced items to people with low incomes at an affordable cost. In some cases, farmers have provided products at a reduced price, or programs have been supported by foundation or government funds.

Several health professionals thought concrete models of health and sustainable agriculture working together to increase food access would help promote further change. For example, the Friday Fresh Farmer’s Market initiated at Oakland Kaiser Permanente was cited by several as an example of collaboration which both brings healthy, fresh foods to staff and nearby community members and supports local farmers.

Health professionals also suggested that case studies of success—such as hospital food services incorporating sustainably-produced foods or local government (of which public health is a part) promoting sustainable agriculture—would be valuable: “Often times it is easier to gain support for something that has already been done.” Another suggestion to expand support for sustainable agriculture was to develop model government policies that require a certain percentage of government food vendors to be, or utilize food from, small, local organic farmers.

PROTECTING THE FOOD SYSTEM

Bioterrorism was mentioned by public health professionals as an increasing component of their mandate. Sustainable agriculture noted that concerns about bioterrorism are one avenue to influence the media and inform the general public about sustainability by pointing out “what a target the huge farms can be.” These farms are vulnerable because they tend to grow only one variety of one crop on many acres of land. In fact, the USDA has formed a Homeland Security Council to look at threats to the US food supply, and public health is clearly identified for its role in preventing, preparing and responding to bioterrorism. One participant felt that it made sense to look for opportunities to leverage defense funding to benefit public health and primary prevention programs in a way that can facilitate collaboration while building infrastructure. According to the interviewee, “The programs suffering most in today’s economy are chronic disease prevention programs. But, there is an opportunity to reframe bioterrorism to create funding for chronic disease prevention by focusing on creating less vulnerable systems of agricultural production.”

OPPOSING COMMON CORPORATE FOES

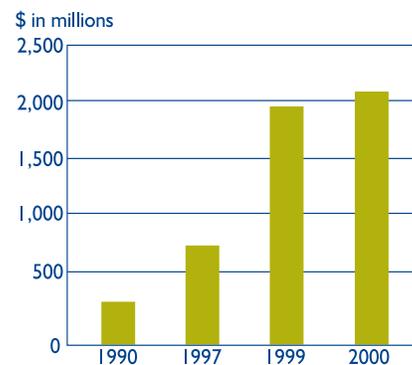
Nearly all sustainable agriculture representatives agreed that media attention to the role of fast food and soft drink corporations in driving the obesity epidemic could open the door to collaboration with health. Parts of the health sector are beginning to challenge industry products and marketing tactics at the level of consumer access, such as opposing soda contracts or fast food courts in schools. These advocates do not necessarily see these problems tied to a greater food system, nor do they define the solution in terms of altering this system.

However, the interviews did reveal three ways in which sustainable agriculture and the health sector are facing common corporate foes. These commonalities help highlight what the sectors have in common and provide the background for developing a mutual campaign.

COMMUNITY NUTRITION GOALS

- Improve healthy food options in preschool, school and after-school programs
- Eliminate soda and junk food in preschool, school and after-school programs
- Provide healthy food options in vending machines and cafeterias in institutions
- Improve access to healthy food options in low-income neighborhoods
- Restrict/eliminate marketing of unhealthy food products to children

GROWTH OF THE ORGANIC SECTOR



Source: USDA, *Recent Growth Patterns in the US Organic Foods Market*, ERS Agriculture Information Bulletin, No. AIB-777, Sept. 2002

1. There are connections between companies promoting industrial agriculture (e.g., Dupont and Cargill) and Big Food (the large-scale producers and distributors that tend to dominate the market, such as Burger King and Coca Cola). This is exemplified by Burger King which both destroys millions of acres of rain forest and sells unhealthy foods.
2. The same pharmaceutical companies that sell antibiotics to people sell them to farmers for livestock (and thus contribute to the development of antibiotic resistance). Further, they are producing pharmaceuticals for people who are overweight and/or have food-related chronic diseases such as diabetes. By emphasizing drug treatment rather than prevention as the solution, these corporations encourage the public to use medicine to solve health problems rather than addressing policies and structures that help foster ill health. Ironically, with animals these corporations focus on drug treatment as a growth stimulator and as “prevention”—creating a norm of prophylactic medication to prevent infections due to overcrowding. This overemphasis on drugs increases the risk of drug-related side effects in humans. It also raises costs within the health care system.
3. Both sustainable agriculture and health are facing backlash from powerful, well-funded industries that are feeling challenged. One interviewee noted that the groups that have a financial investment in the slander of sustainable agriculture fund inaccurate “studies” that identify food poisoning attributed to the use of manure as fertilizer. In the same vein, nutritionists and health advocates are being ridiculed for attacking personal freedom by groups such as The Center for Consumer Freedom. Funded by the food industry, the Center criticizes efforts to promote public policies that limit access to unhealthy foods and beverages.

A few participants raised tactical considerations about the approach to challenging industry. While corporations may be one clear shared enemy, they can also be allies for both sectors. Another cautioned that in building collaboration, the movement needs to be careful not to increase the divide or burn bridges with elements of conventional agriculture and food industries that may ultimately need to be part of the solution. An alliance between sustainable agriculture and public health needs to pick allies and enemies strategically.

REDUCING ANTIBIOTIC RESISTANCE

One area of mutual concern is antibiotic resistance. Sustainable agriculture advocates are concerned about the overuse of antibiotics in animal husbandry and subsequent contamination of meat, poultry and the water table (through manure) with antibiotic-resistant bacteria and antibiotic residues. Physicians are facing a challenge in treating infections due to antibiotic-resistant bacteria. One health practitioner noted that campaigns to encourage physicians to reduce antibiotic prescriptions infer that physicians are primarily to blame for the problem. They would be interested in the data that far more antibiotics are given to poultry and livestock than to humans and that this is also a contributor to antibiotic resistance in humans.

“I think antibiotic resistance is a good hook. The more physicians see the problem having a direct impact on clinical practice, the more they will care and the more they will respond.”

—HEALTH PROFESSIONAL

It was suggested that campaigns to change this element of agricultural production may easily draw physician support. As one person put it, “I think antibiotic resistance is a good hook. The more physicians see the problem having a direct impact on clinical practice, the more they will care and the more they will respond.”

SHIFTING AGRICULTURAL SUBSIDIES TO SUPPORT PRODUCTION OF HEALTHY FOODS

One issue that has risen to the top as a potential starting point for collaboration is agricultural subsidies. Media stories linking soft drink and fast food production to federal agricultural support programs for corn (in the form of corn syrup and cattle feed) have raised awareness within public health about the connection between consumption and agricultural policy. In particular, agricultural subsidies for corn have been attributed to driving down the cost of corn syrup and contributing to supersizing of soda. Supersizing, value meals, and other special low-cost pricing strategies are helping to increase consumption of high-fat, high-sugar foods and excess calories by the general public. High-sugar foods not only contribute to chronic disease (through empty calories) but also contribute to tooth decay, especially in children. In contrast, healthier foods are more expensive and harder to find in convenience stores and at take-out counters. While this affects everyone, people with limited incomes face the greatest challenges in accessing healthy, affordable food. Therefore, the health sector is interested in the possibility of shifting agricultural subsidies towards fruits and vegetables (and other healthier foods). At the same time, there was caution raised by a farm policy expert about how the agriculture subsidy issue is approached. A recent analysis suggests that simply removing subsidies from corn will not significantly increase the cost (and thus decrease the availability) of soda and beef.²⁶ Careful policy analysis is needed to craft an overarching agricultural policy that meets the needs of farmers and consumer health. While subsidies for agricultural commodities have caught the public eye, research may reveal other federal and state regulations, tax incentives or subsidies that support both industrial agriculture and Big Food.

PROTECTING THE HEALTH OF FARMERS AND AGRICULTURAL WORKERS

Farmer and agricultural worker health were also identified as points at which the concerns of the two sectors intersect. Past examples such as the medical community’s support of United Farm Worker efforts support this. In addition to addressing farmers’ and workers’ direct toxic exposures to pesticides, both sectors share concerns about how to keep farmers and agricultural workers healthy—providing adequate health care for the families as well as addressing key determinants of health such as housing. Globalization of industrial agriculture is leading to an economic and resource squeeze on small and mid-size farm families. The resultant poverty and stress are linked to poor mental and physical health outcomes. One of the few health surveys of US agricultural workers recently revealed that the predominantly young male work force is at high risk for chronic disease, and this was

AGRICULTURAL SUBSIDIES

Over \$1 billion; 1985 - 2002

1. Corn subsidies	\$ 34,552,627,460
2. Wheat subsidies.	\$ 17,247,966,489
3. Conservation Reserve Program	\$ 13,018,173,430
4. Soybean subsidies	\$ 10,967,530,537
5. Cotton subsidies.	\$ 10,663,566,847
6. Rice subsidies	\$ 7,795,799,116
7. Sorghum subsidies.	\$ 3,193,985,171
8. Livestock subsidies.	\$ 2,256,567,708
9. Dairy Program subsidies.	\$ 2,018,407,457
10. Barley subsidies.	\$ 1,411,386,147
11. Peanut subsidies	\$ 1,265,735,609



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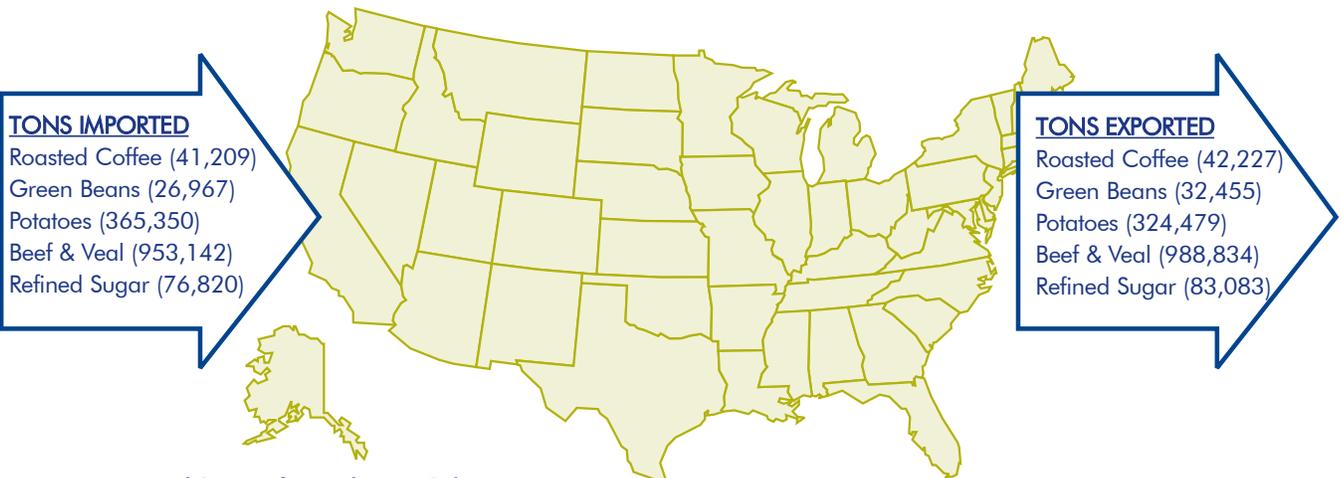


attributed in part to difficulty accessing a healthy diet.²⁷ Agricultural workers in California are, ironically, food insecure—many have difficulty accessing an affordable, nutritious, culturally appropriate diet. In response to some of these concerns, the California Sustainable Agriculture Working Group (CALSAWG) has adopted principles to support fair wages, health, safety, and other critical social justice issues for farmworkers.²⁸ This platform, or something similar, may serve as a vehicle for collaborative efforts between health and agriculture. At the same time, it needs to be acknowledged that given the economic realities of sustainable agriculture, at times there will be tensions between the sectors related to issues such as health care for farm workers and their families, housing and salary, and other benefits.

MINIMIZING FOOD TRANSPORT

Promoting locally-grown food and thus reducing food transportation miles is another good rallying point. From the sustainable agriculture perspective, there are numerous reasons why locally-produced food is part of a sustainable system. These include fuel conservation, decreasing the need for packaging and subsequent waste disposal, preserving farmland, and supporting biodiversity of crops evolved to fit the local ecology. From the health perspective, promoting locally-grown food dovetails well with several health concerns. Reducing diesel fuel emissions can help reduce asthma attacks. There is some concern about endocrine disruptors and other toxic substances leaching into food from plastic packaging. Transportable produce, because it is picked unripe and is less flavorful, may not be as desirable.

SELECTED IMPORTS AND EXPORTS TO THE UNITED STATES



Source: International Society for Ecology & Culture

IMPORTANT ISSUES TO RESOLVE BEFORE BUILDING PARTNERSHIPS

THE CONCEPT OF SUSTAINABLE AGRICULTURE

The term *sustainable agriculture* means different things to different people. In terms of partnerships with health, the primary characteristics of sustainable agriculture need more clarification.

Sustainable agriculture encompasses different elements including organic, local and conservation of water and soil. *Organic* (the elimination of synthetic fertilizers and pesticides from production) is the one term that has some standardization, whether in the California Certified Organic Farms standards or the contested new National Organic Program. Other aspects of a sustainable food system are less well-defined, such as the concept of *local*. The issue of scale also arises in considering whether huge organic farms operated by multi-national corporations are as desirable as smaller, locally-owned farms.

In some cases, more clarity and precision is needed regarding the meaning of the term sustainable agriculture, for example to analyze proposed policies or implement preferential buying. As one person stated, in order to engage the health sector in supporting sustainable agriculture, “we need very concrete solutions to act on.”

In other cases, more flexibility is needed as the term sustainable can be negatively characterized as a complex, rigid set of rules. For example, the residents of Berkeley, generally ahead of the curve on progressive causes, defeated a recent ballot referendum to permit the purchase and sale of only shade grown, fair trade, organic coffee within city limits.

As the starting point to build collaboration between health and sustainable agriculture, the authors’ initial impression is that an emphasis on *local* and *fresh* (not highly processed) may be more beneficial in attracting the support of the health sector than an emphasis on *organic*. Among the health representatives interviewed, most people believed that organic foods are more desirable. However, concerns about cost may prohibit this from always being the primary standard. Highlighting local and fresh is a direction that several sustainable agriculture organizations have already moved toward when working with local anti-hunger and/or nutrition coalitions.

Closely related to fresh, an important element of sustainability from a health standpoint is promoting less processed foods. This is not necessarily part of the current definition of sustainable or at least organic, as even the organic food industry creates an ever-greater number of chips, high-calorie beverages, instant meals, and other processed foods. Rather than advancing a vision of sustainable agriculture that simply replaces the current food supply with organic equivalents, a health-sustainable agriculture collaborative needs to promote a vision of real food—fresh or lightly processed. Additionally, these foods must not only be available to those



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who can afford to purchase California cuisine from restaurants and specialty stores, but also to people with limited household incomes. The concept of fresh is relatively easy to grasp and support. It fits well with health goals and can lead naturally to the support of other sustainable agriculture objectives.



PERCEPTIONS OF ORGANIC FOODS

Organic food is viewed positively by the general public and the market for organic food has increased exponentially in recent years. Similarly, health professionals expressed a positive attitude towards organic/sustainable food, and frequently indicated that it was a personal preference. At the same time, there was concern that it was beyond the scope of health institutions to embrace organic. As a health sector member noted, there is a “deafening silence around the issue of organics” within the field. Organic is viewed as elitist, inaccessible except to those households with a fair amount of disposable income. In order to promote organic, the health sector needs to be convinced that it is about more than “boutique foods.” In another vein, the term organic harkens back to the counterculture for others. As one health person suggested, it would be valuable to “get it out of the hands of the hippies,” to have broader appeal with health professionals. In some cases, these perceptions were associated with sustainable agriculture as well.

More rarely, organic was associated with health risks by health professionals. In its most extreme form, a major health institution warned pregnant women away from organic food as a potential source of bacteria. More subtly, staff at one health institution considering the use of sustainable foods noted these products could only be incorporated into foodservice if they met “acceptable standards for safety.” For most health professionals, the germ theory and the risk associated with bacteria on food has far more salience than concerns about toxic chemical residues on food.

Finally, the spirituality that infuses some segments of sustainable agriculture will not appeal to many in the more science-based health communities who look for research and data about impacts on health to determine which strategies they support.

SORTING OUT CHEAP FOOD

“Cheap food” is a potentially divisive issue. Cheap food, the relatively low retail price of food in the US, is rejected by many in the sustainable agriculture movement because the retail price reflects neither the farmer’s costs of production nor damage to the environment. Industrial agriculture contributes to environmental degradation and utilizes excessive energy for transport, packaging and waste. When all these costs are added up, the food actually costs much more than the price that consumers pay at the point of purchase. Much of this cost differential is indirectly borne by the general public in the form of taxes that are used for commodity programs and to subsidize water, intensive animal production, and other expenses, as well as pay for environmental reclamation. Therefore, consumers need to understand that cheap food comes at a price and that retail costs of food may need to increase in order to have a better food system.

“I think everyone regardless of income deserves the benefits of organic and pesticide-free food, but since these options are usually more expensive, it’s hard to make the case from a strictly anti-hunger perspective.”

—ANTI-HUNGER ADVOCATE

On other hand, health professionals most immediately focused on filling a dire need to bring affordable, nutritious food into low-income communities want food to be as cheap possible. While some of these efforts have tapped into local and/or sustainably-produced food, this is not always true. For example, public health department staff described the challenge of convincing their colleagues of the importance of purchasing organic or locally-produced food; the expectation was that they would help residents access the cheapest possible sources. Concern was also expressed about the limitations of “local,” and that public health should be assisting people in accessing a wide variety of reasonably priced foods. Considerations of price may also be institutionalized, as those working in governmental organizations are often required to seek bids for contracts, such as food sales and distribution, and are often constrained to accept the lowest bidder. The health sector does care that people have access to nutritious foods, but health professionals are looking for ways to provide healthy foods with the price, convenience and appeal that can compete with fast food and junk food.

Currently, there is a polarization between these two positions. Collaboration will be furthered by reframing the issue to focus not on cheap food but on federal and state regulations, policies and financial incentives that favor industrial agriculture and the production of highly-processed, unhealthy foods. A health-sustainable agriculture coalition could support a realignment of the incentives to create a food system that balances the needs of people with low-incomes, farmers and agricultural workers and the environment.

SUSTAINABLE AGRICULTURE CAPACITY

One health care representative noted that in exploring the option to purchase organic food, “the food service contractors said the large scale capacity for distribution just wasn’t there and that the quantities needed to meet the demand just didn’t exist. It wasn’t available and so the overall cost of producing a meal would have skyrocketed. It just wasn’t feasible.”

Achieving national nutrition goals requires dramatically increasing consumption of high-fiber plant foods (produce, legumes and whole grains) while decreasing fat and sugar intake. It is unclear whether an immediate transition from the current industrial food production system to one dependent strictly on sustainable practices could meet the food needs of the public. One interviewee questioned the “romanticized notion that sustainable agriculture is the end-all solution to chronic disease resulting from agricultural production.” A long-term transition to sustainable agriculture is necessary, but meeting the need for fruits and vegetables to reduce chronic disease requires involving conventional agriculture. According to this interview participant, it is an oversimplification to believe that if everyone just supported organic and sustainable foods the transition would occur. This is not actually viable, and the transition to sustainable agriculture needs to be understood as a slower, more evolutionary process. There needs to be specific policy changes to support the development of a stronger infrastructure for sustainable agriculture, including distribution mechanisms.



CLARIFY RELATIONSHIP WITH INDUSTRY

Despite some common interest in challenging its practices (described previously, in *Opposing Common Corporate Foes*), the sectors generally have different relations with, and outlooks about, industry. All in all, “Big Industry” could be characterized as an adversary of sustainable agriculture and a key partner for health. Health care is one of the largest industries. Increasingly, it is managed by administrators with business and profit as their goal, and even the nonprofit and government sectors are highly attentive to bottom-line considerations.



Secondly, the predominant thinking within the health sector is that the food industry, seen as the major suppliers of food, ultimately needs to be part of the solution. The nutrition field in particular has longstanding relationships with the food industry. Registered dietitians are regularly employed within food companies and most nutrition research is subsidized by the food and pharmaceutical industry. Food companies commonly provide conference support and nutrition educational materials. Generally it is only on the fringes of the health professions that professionals are beginning to reject these relationships. For example, members of the American Dietetic Association successfully argued for the removal from the ADA website of a National Beverage Association sponsored “fact sheet,” which minimized the negative impact of sodas on health.

In contrast, there are stronger currents of opposition to working with conventional agriculture within the sustainable agriculture movement. In part, this derives from different visions of how change will occur. Within sustainable agriculture, many advocates believe that the best way to transform the food system is to establish and build an alternative system that will eventually replace industrial agriculture. However, some are concerned that this approach leaves sustainable enterprises working on the margins of an industrialized food supply without ever leading to change in the whole system. Some sustainable agriculture organizations are reaching out to conventional agriculture, considering how to engage both farmers and key institutions in taking incremental steps towards sustainability. It appears that a dual approach that seeks to develop alternate systems while also engaging conventional agriculture in change holds the most promise.

As collaboration moves forward, it is important to be strategic about when and where to mount challenges and to set clear criteria for partnerships with industry. The health sector has a positive and prominent record of taking on some industries with results—notably tobacco, alcohol and firearms.

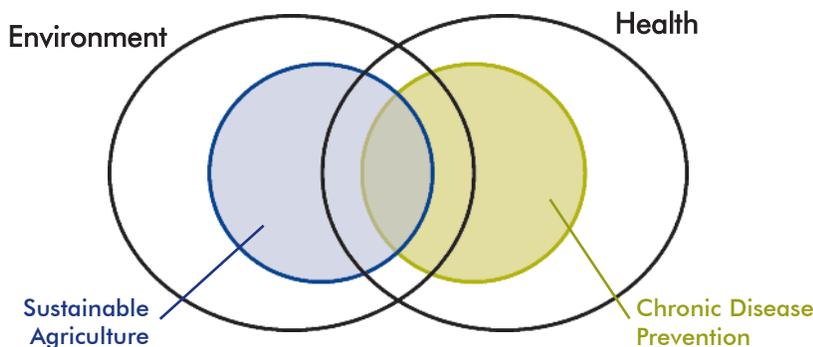
RECOMMENDATIONS TO DEVELOP A COLLABORATIVE MOVEMENT

Food—from systems of food production and distribution to consumption—is one of the most fundamental issues affecting human health and the health of the environment. Therefore creating a sustainable food system that supports healthy consumption habits has the potential to be a central goal for both fields and to have resonance community-wide. It is far-reaching, relatively clear and specific.

Nearly every sustainable agriculture representative described attention to obesity in the news as a potential impetus for promoting positive changes in the agricultural system. Health practitioners revealed interest in the potential of sustainable agriculture, but were looking for clearer delineation of its relationship to health outcomes. Despite this openness—and in some cases, enthusiasm—collaboration is not straightforward. The passion both fields share may make it harder to work together as each is intently focused on fairly defined objectives. Nevertheless, creating a cross-sectoral approach has power. Even where objectives of the two sectors fit imperfectly, both can benefit significantly from melding their objectives into a common campaign. However, the common ground that exists between the sectors does not translate simplistically to common activities and the activities of each sector are often not articulated in ways that seem relevant and appealing to one another. Therefore advancing a common agenda will require a nuanced approach.

BUILD THE BIG TENT TO FOSTER CROSS-SECTOR COLLABORATION

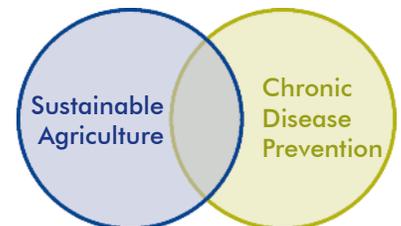
Transforming the agricultural system requires a broad movement. *Cultivating Common Ground* was initiated to explore collaborative action between sustainable agriculture and health professionals concerned about chronic disease. Both sustainable agriculture and nutrition-related chronic disease prevention are important sub-groups, within much larger fields: the environmental and health sectors, respectively (see figure below). The two sub-groups will be most effective if they disseminate a consistent vision to their respective sectors: that food production and consumption are interrelated in their impact on health and the environment. Engaging the full health and environmental sectors is key: creating a “Big Tent.”



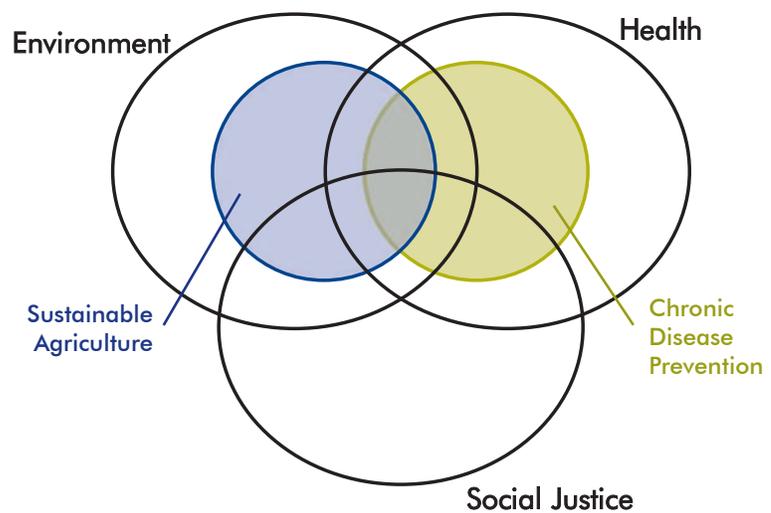
RECOMMENDATIONS FOR CULTIVATING COMMON GROUND

- Build the Big Tent to foster cross-sector collaboration
- Build familiarity and develop a cross-sector strategy
- Frame the issues to be inclusive of all sectors
- Conduct training and cross-training
- Develop campaigns to promote changes in policy and organizational practices
 - ▼ Provide fresh food in health care institutions
 - ▼ Ensure fresh food in every neighborhood
 - ▼ Promote agricultural subsidies for fresh food
 - ▼ Eliminate the nontherapeutic use of antibiotics

CULTIVATING COMMON GROUND



It is important to conduct these efforts in a way that prioritizes social justice. Improvements in both health outcomes and the environment have frequently failed to reach people of color and low-income communities. Improvements in the food system must benefit the whole community and pay particular attention to those who are most deeply affected by current health and food access inequities. Therefore, the “Big Tent” should include—and would be strengthened by—bringing in those concerned about food from a social justice perspective. Social justice organizations will add energy and forceful advocacy to the movement. These include people concerned with health equity and with food security/hunger, and also those concerned with farm worker well being, environmental justice, survival of family farms, and animal rights (see figure below). A social justice perspective will also tap into the strong commitment to helping people that typically brought health practitioners into their profession in the first place.



The power of a movement where health, environment, and social justice advocates all work together has immense potential to influence and even forge partnerships with, industry, labor, conventional agriculture, government and policymakers.

BUILD FAMILIARITY AND DEVELOP A CROSS-SECTOR STRATEGY

A strong partnership will take effort and there will be a number of controversies to overcome. A leadership group of broad thinkers—sustainable agriculture, health, environmental, and social justice—should be brought together to engage in a deliberate process of interdisciplinary strategy development. There are already several important collaborative efforts to engage the health sector around environmental issues. These efforts are a vital cornerstone and should be supported. In order to make further progress, participants need to be able to value one another’s paradigms and goals, move forward on points of common ground and not be blocked by failure to come to agreement on all issues. In order to build familiarity and understanding between the sectors, the leadership group should systematically assess the

status of current efforts and examine key elements such as the objectives, data, methods, infrastructure, and values of each sector. It should also discuss the implications of the differences that emerge. The key themes raised in this report highlight differences and areas of mutual interest and can be used to seed this discussion. Following this familiarization process, the sectors should agree on specific actions that contribute to supporting the transformation to a sustainable food system.

FRAME THE ISSUES TO BE INCLUSIVE OF ALL SECTORS

There were a number of differences noted above in how the sectors viewed end goals and concepts such as sustainable, organic, or cheap food. While this report primarily delineated issues related to sustainable agriculture and health, strategy discussions and focus groups with leadership should be utilized to further clarify the “frame” that can draw in all constituencies, portraying not only how sustainable agriculture is a health issue, but the points where it is most relevant for social justice and broader environmental goals as well. The authors of this report recommend that the overall frame, best reflective of all the elements of sustainable agriculture and responsive to the concerns of health and social justice, be “fresh food” or “farm fresh.” The concept of fresh food carries the overall vision of sustainability without tying it too rigidly to the specifics and details that may lead to objections. Fresh food can become the public persona of sustainable agriculture, a rallying cry for better food and a better food system.

This recommendation along with other considerations of framing should be discussed in detail within the leadership group. How issues are framed is a significant tactical decision that influences whether constituents from the three sectors are engaged as well as the public and policymakers. Different frames may be better for different audiences, though it is critical that there be a consistent and coherent approach. There are a number of considerations in framing for a health audience. For example, the health sector will be attracted by a greater emphasis on data and research. For this audience, the negative health impacts of industrial agriculture and the potential of sustainable agriculture to have a more positive impact on health outcomes need to be clearly articulated and supported by data. It is also important for the health field that the frame for sustainable is perceived as flexible. If the approach is too rigid—for example excluding coffee and pineapples because they are not local products—many in the health field will reject the concept.

Health allies can also be recruited by building on the idea of food as “the new tobacco.” Tobacco was the romantic victory of public health. Tobacco control efforts are frequently mentioned as the model for changing community behavioral norms, and challenging industry was a fundamental aspect of this victory. Referring to this success and comparing it to the need to confront “Big Ag” and “Big Food” (as some journalists have already done) to successfully address nutrition-related chronic disease, may serve to better draw in the health community to support the transition to a healthier, more sustainable food supply. Further, tapping into the experiences of health professionals who have had success challenging

The overall frame, best reflective of all the sectors, is “fresh food” or “farm fresh.” The concept of fresh food carries the overall vision of sustainability without tying it too rigidly to the specifics and details that may lead to objections.



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other powerful industries (including the alcohol, automobile, infant formula, and gun industries) will also be valuable—both to convince nutrition and chronic disease professionals that they can (and should) challenge industry, and to present important tactical lessons.

There may need to be some preliminary discussions within each of the three sectors to get buy-in for a larger process. For example, environmental organizations may need to explore how sustainable agriculture is related to broader environmental priorities, or social justice organizations may need to explore how the links between food access, environmental justice and food production relate to social justice.

CONDUCT TRAINING AND CROSS-TRAINING

Successfully implementing organizational changes and policy will be more effective if there is broad support across sectors. Therefore resources should be devoted to providing the sectors with information about the issues and an action agenda for organizational and policy change. Presentations and materials should be appropriately framed and targeted for each sector. Key steps for reaching the sectors would include the following:

- Aggressively look for opportunities at the multiple conferences conducted by each sector to promote discussion around these issues. Conduct presentations,

UNDERSTANDING MORE ABOUT THE HEALTH SECTOR

The field of health is dominated by the health care sector and the task of treating the ill has far more funding and prominence than the responsibilities of preventing illness, creating safe environments and keeping people healthy. The health sector accounts for nearly 15% of GNP, and powerfully influences society, but only a small fraction is spent on prevention. For the most part, America's obesity epidemic has been characterized by the health sector as a health problem requiring treatment, including weight loss drugs, and reimbursable medical interventions such as bariatric surgery.

Public health is a more likely partner to the sustainable agriculture community than is health care. Public health has historically looked at the links between the environment and illness, for example by addressing unsafe water, crowded living conditions, or toxic exposures. Unfortunately, the focus on population-based approaches to improving health has waned in public health practice in recent decades. The public health field has increasingly become focused on providing medical services in communities.

Within California, the primary public health leadership sits in local government. While other organizations play a leadership role, such as academic institutions, the Northern and Southern California Public Health Associations, nonprofits such as Public Health Institute and Prevention Institute, or advocacy organizations such as Physicians for Social Responsibility or Health Care Without Harm, this role is usually less significant. Each County has a **Health Director** as well as a **Director of Public Health** who generally reports to him or her. (In the smaller counties, these people are often one and the same.) In California's larger counties, the **Director of Health** is typically hired for management more than medical expertise, and in most cases responsibilities include running a public hospital which consumes the largest portion of health resources. So the "public's" interest in health is predominantly providing quality in-patient and out-patient clinical services in a cost-effective manner. The **Public Health Director** is apt to take cues from his or her boss—an individual with a medical management background and thus is rewarded for pitching in by providing these community services.

The segments of public health not focused on clinical services are divided into silos that focus on specific aspects of health. These silos make it more difficult to draw connections that cross the areas of expertise of different divisions and create significant barriers to collaboration within health departments. For example, environmental health is generally viewed as on the fringe in most public health systems and power structures. It tends to be brought in on risk management concerns and has limited resources for prevention. Chronic disease prevention programs implement strategies to improve eating and activity habits, yet this group does not have the training to look beyond the individual to address the impact of the local food system on eating behaviors. Similarly, asthma prevention is primarily focused on stabilizing asthma through proper medication rather than addressing air pollution that triggers asthma attacks.

utilizing the appropriate frame, to highlight the links between social justice, the environment, agriculture, and health and promote key collaborative actions.

- Encourage existing groups exploring these issues to convene stand-alone educational events targeted to their constituencies.
- Ask local public health leadership to convene health departments and related community agencies to discuss food. Within health, groups working on different elements related to the food system rarely consider it collectively. (See Understanding More about the Health Sector)
- Promote meeting on one another's turf, for example, by conducting farm tours, health tours or neighborhood tours in which everyone can participate.

Extensive education and outreach will help establish an advocacy cadre that can be recruited to participate in campaigns such as those described below.

DEVELOP CAMPAIGNS TO PROMOTE CHANGES, ORGANIZATIONAL PRACTICES AND POLICY

Successful efforts in other fields reveal that the strongest partnerships often emerge through joint campaigns aimed at changing organizational practices and government policy. Campaigns provide a focal point for propelling the movement for change and achieve important outcomes for improving the food system. Changing the practices of organizations influences the perceptions of everyone associated with these institutions about what is normal. Because the industrial food system is supported by a web of regulations that favor specific commodities and large-scale, resource-intensive, polluting methods of production, the policy-making processes of government present a critical opportunity for intervention.

The leadership group should select campaigns that have a cross-sectoral interest. Four issues appear to have the most potential for mutual effort. All of these will require thorough preparation before initiation—researching current policies, identifying elements that can be changed, analyzing potential impact of proposed changes, and shaping the best framing for success. The issues are:

- Provide fresh food in health care institutions
- Ensure fresh food in every neighborhood
- Promote agricultural subsidies for fresh food
- Eliminate the use of non-therapeutic antibiotics

Provide Fresh Food in Health Care Institutions

A number of health organizations are starting initiatives to utilize local and sustainably-grown produce in their facilities or to establish farmers markets. There are several reasons why promoting changes in health care institutions is a good, concrete starting point for promoting a better food system. As noted earlier, the health care sector is a significant part of the economy and is a relatively large purchaser



that can influence suppliers. Health care leaders, and physicians in particular, have a lot of credibility and political clout. Making fresh food available to staff, patients, and nearby community residents through cafeterias, farmstands, farmers markets, or food boxes will help build the appreciation of staff and community for these products. It is important that every institution supportive of these concerns have an organizational policy supporting sustainable agriculture and sustainably-grown food in its facilities. These changes in health institutions can help set a norm for the rest of society. Promoting these changes generally engenders intense discussion within the institution, and opens the door for further mobilization. If health care places a value on sustainable agriculture, this value is more likely to diffuse to other aspects of society.

The campaigns to institute changes and the changes themselves will help mobilize a health constituency by sending a signal that support of sustainable agriculture is a health value. In the last few years, the fast food industry has begun to infiltrate some hospital systems, providing inappropriate foods and sending the wrong message about healthy eating. A fresh food campaign can help reverse this trend. As part of the process of promoting the adoption of preferential purchasing policies for sustainably-grown food, clear definitions and parameters of sustainable that can be reasonably instituted need to be developed. The power of beginning institutional changes with health care, and public health institutions, was seen clearly in the tobacco movement. In many communities, these were some of the first places where smoking was restricted and this led to restrictions in other workplaces and institutions.



Ensure Fresh Food in Every Neighborhood

Given the higher burden of nutrition-related chronic disease on communities of color and underserved communities, making sure all neighborhoods have a good selection of affordable, healthy, culturally-appropriate foods is essential. Many neighborhoods where people live near the poverty line do not have supermarkets or other places to buy produce and healthier foods. Small stores tend to have a poor and overpriced supply of produce and feature packaged, processed foods. Fast food tends to be more easily accessible, and the low-price specials these venues offer are a logical choice for working parents with limited incomes and time. There are a variety of models for improving food access in neighborhoods ranging from farmers markets, to improving food in small stores, to farmstands, or to re-establishing a supermarket. For fresh food to truly be available, a combination of strategies needs to be put in place. Promoting this neighborhood transformation to ensure healthy food for all can be a rallying point for cross-sector collaboration. By joining forces, social justice, environmental, sustainable agriculture, and health organizations can generate the combination of neighborhood support, political support, and technical skills needed for the success of specific food ventures. Further, they can help ensure that there is a transition from single efforts to broader policy and organizational changes that will institutionalize and enhance neighborhood improvements. Promoting fresh food can open the door to supporting smaller farmers and build toward the long-term goal of all products being sustainable.

Promote Agricultural Subsidies for Fresh Food

There has been tremendous public attention to the relationship between agricultural subsidies for corn and cheap, high-calorie foods. As US Secretary of Health and Human Services, Tommy Thompson, recently acknowledged on a Peter Jennings broadcast, “Maybe we have been supporting the wrong things.” This opens the door to a campaign to shift these commodity subsidies to support production of healthy, sustainably-produced products that reach the market as fresh foods. While concerns regarding the appropriateness of cheap food remain, it is notable that experimental studies manipulating food prices have shown that lowering the prices on healthy foods increases their sale.²⁹ Commodity supports have not been the sole driver of the inundation of supersized soda and triple cheeseburgers in our society. However, making the link that corn subsidies are not primarily for a vegetable but rather subsidize diabetes, stroke and dental disease is a persuasive argument. Subsidies can serve as a starting point to build public support for shifting agricultural and related policies. Developing a campaign will require careful research to identify the policy levers that will achieve the desired results. There needs to be both strong collaboration, and careful analysis to ensure that policy solutions balance decent wages for farmers, affordable prices for consumers, increased production of healthy foods, and environmental preservations.

Eliminate the Nontherapeutic Use of Antibiotics

Antibiotic resistance is a good focus for a collaborative campaign. Although it is only distantly related to concerns about chronic disease, it most directly builds a bridge to clinical practice. A campaign to eliminate nontherapeutic antibiotics can both educate physicians in a very direct and immediate way that there is something wrong with industrial agriculture and engage them in advocating for change. This campaign will be more effective in broadening the movement for long-term change if it is framed to reveal that much inappropriate antibiotic administration results from the practices in factory farms that unnecessarily raise the risk of infection. Further, only a small percentage of the health community are aware that antibiotics are used as a growth stimulator and certainly would see this, for the most part, as inappropriate. This issue potentially also has strong public appeal, as the loss of antibiotics—a miracle treatment of the 20th century—should attract the attention of a general public highly concerned about its own health and the health of its children. There are already campaigns underway to highlight this issue and these need to be strengthened and expanded through the support of a broad coalition.



CONCLUSION

Cultivating the common ground between the health, environmental and social justice sectors is both a necessity and an opportunity. Food and health are immediate and personal concerns. Framing initiatives around this central relationship provides an excellent entry point for attracting constituents from each of the sectors to support a broader agenda. Promoting “fresh food” as the key to human health and the health of the environment can change policies, norms and vision throughout the state and across the nation. By building trust and momentum between the sectors, a just, healthy, sustainable food system will emerge.

ENDNOTES

- 1 Horrigan L, Lawrence RS, Walker P, How Sustainable Agriculture Can Address the Environment and Human Health Harms of Industrial Agriculture. *Environmental Health Perspectives*. 2002; 110:n.5. 445-454.
- 2 Block G, Foods Contributing to Energy Intake in the US: Data From NHANES III and NHANES 1999-2000. *Journal of Food Composition and Analysis*, 2004, 17: 439-447.
- 3 Ohio Corn Marketing Program. All About Corn: The Many Uses of Corn. Available at: www.ohiocorn.org/about_use_many.htm. Accessed September 10, 2004.
- 4 Schafer K, Reeves M, Spitzer S, Kegley S. *Chemical Trespass, Pesticides in Our Bodies and Corporate Accountability*. Pesticide Action Network, May 2004.
- 5 Wiles R, Davies K, Campbell C, *Overexposed: Organophosphate Insecticides in Children's Food*. Environmental Working Group. January 1998: 1-54.
- 6 Funders Agricultural Working Group. *Roots of Change: Agriculture, Ecology and Health*. San Francisco 2001, pg.174. Available at www.fawg.org.
- 7 Funders Agricultural Working Group. *Roots of Change: Agriculture, Ecology and Health*. San Francisco 2001, pg.174. Available at www.fawg.org.
- 8 *Hooked on Poison: Pesticide Use in California 1991-1998*. Pesticide Action Network and Californians for Pesticide Reform, San Francisco, 2000.
- 9 Solomon G, Ogunseitun OA, Kirsch J. *Pesticides and Human Health, A Resource for Health Care Professionals*. Physicians for Social Responsibility and Californians for Pesticide Reform, 2000.
- 10 Villarejo D, Lighthall D, Williams D, Souter A, Mines R. *Suffering in Silence: A Report on the Health of California's Agricultural Workers*. California Institute for Rural Studies. The California Endowment, November 2000.
- 11 USDA n.d. USDA and Biotechnology Frequently asked Questions Available at www.USDA.gov/agencies/biotech/faq.html [Courtesy of International Society for Ecology and Culture, Slide Show Narrative, Local Food, Globally]
- 12 Woods L, Kuhn E, Nie C, Hargarten S, Losing Wisconsin dairy farmers to suicide: A Presentation at the 130th annual American Public Health Association, Tuesday November 12, 2002, CAFF personal communication www.caff.org
- 13 Funders Agricultural Working Group. *Roots of Change: Agriculture, Ecology and Health*. San Francisco 2001, pg.174. Available at www.fawg.org.
- 14 United States General Accounting Office. *Food Safety, The Agricultural Use of Antibiotics and Its Implications for Human Health*. April 1999.
- 15 Horrigan L, Lawrence RS, Walker P, How Sustainable Agriculture can Address the environment and human health harms of industrial agriculture. *Environmental Health Perspectives*. 2002; 110:n.5. 445-454.
- 16 Union of Concerned Scientists. Food and Environment Faqs: Myths and Realities about Antibiotic Resistance. Available at: www.ucsusa.org/food_and_environment/antibiotic_resistance/page.cfm?pageID=248#faq_3 Accessed September 9, 2004
- 17 Horrigan L, Lawrence RS, Walker P, How Sustainable Agriculture can Address the Environment and Human Health Harms of Industrial Agriculture. *Environmental Health Perspectives*. 2002; 110:n.5. 445-454.
- 18 Ibid.
- 19 Tauxe R, 1997. Emerging Foodborne Diseases: An Evolving Public Health Challenge, *Emerging Infectious Diseases*. 3(4) October-December [Courtesy of International Society for Ecology and Culture, Slide Show Narrative, Local Food, Globally].
- 20 Grace Factory Farm Project. Facts and Data. www.factoryfarm.org/facts/.
- 21 Funders Agricultural Working Group. *Roots of Change: Agriculture, Ecology and Health*. San Francisco 2001, pg.ix. Available at: www.fawg.org.
- 22 *Second Hand Pesticides: Airborne Pesticide Drift in California*. Pesticide Action Network; California Rural Legal Assistance Foundation; Pesticide Education Center; Californians for Pesticide Reform, San Francisco 2003.

- 23 Brown ER, Meng Y, Babey S, Malcolm E, Asthma in California in 2001: High Rates Affect Most Population Groups. *The California Health Interview Survey Policy Brief*. May 2002.
- 24 Wingspread Statement on the Precautionary Principle, Racine, Wisconsin, January 1998. Accessed through the Global Development Research Center www.gdrc.org/u-gov/precaution-3.html, August 24, 2004.
- 25 Foerster SB, Wu S, Gregson J, Hudes M, and Fierro MP. California Dietary Practices Survey: Overall Trends in Healthy Eating among Adults, 1989-1997, *A Call to Action, Part 2*. California Department of Health Services, Sacramento, CA, 1999.
- 26 Ray DE, De La Torre Ugarte DG, Tiller KJ. *Rethinking US Agricultural Policy: Changing Course to Secure Farmer Livelihoods Worldwide*. Agricultural Policy Analysis Center. University of Tennessee, Knoxville. September, 2003.
- 27 Villarejo D, Lighthall D, Williams D, Souter A, Mines R. *Suffering in Silence: A Report on the Health of California's Agricultural Workers*. California Institute for Rural Studies. The California Endowment, November 2000.
- 28 California Sustainable Agriculture Working Group. Website, brief summary from the Farm Labor Workshop convened at the Sustainable Agriculture Congress (January 2003), www.calsawg.org/projects/sustainable_agriculture_congress.shtml, accessed September 14, 2004.
- 29 French, SA, Jeffrey, RW, Story, M, Breitlow, KK, Baxter, JS, Hannan, P, Snyder, MP. Pricing and Promotion Effects of Low-Fat Vending Snack Purchases: The CHIPS Study. *American Journal of Public Health*. Vol. 91, January 2001.

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