



# Healthy Food, Healthy Hospitals, Healthy Communities

*Stories of Health Care Leaders Bringing  
Fresher, Healthier Food Choices  
to their Patients, Staff and Communities*



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#### ABOUT IATP

The Institute for Agriculture and Trade Policy promotes resilient family farms, rural communities and ecosystems around the world through research and education, science and technology, and advocacy.

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#### ABOUT THIS PUBLICATION

*Healthy Food, Healthy Hospitals, Healthy Communities:  
Stories of Health Care Leaders  
Bringing Fresher, Healthier Food Choices  
to their Patients, Staff and Communities*

Written by  
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IATP is a member of Health Care Without Harm, an international coalition of 433 organizations in 52 countries working to transform the health care industry so it is no longer a source of harm to people and the environment. This report was developed to inform our joint efforts to transform hospital food purchasing.

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# Introduction

Poor diet can contribute to death and disease, including obesity and diabetes, heart disease, learning disabilities, neurological disease, food-borne illnesses and some cancers. Industrialized methods of growing and distributing food contribute to this problem by increasing human exposure to toxic chemicals, heavy metals, pathogens and antibiotic resistant bacteria. These same methods also contaminate ecosystems. Eating nutritious, sustainably grown whole foods, rich in beneficial fats, vitamins and antioxidants can improve human health and enhance environmental quality while improving the economic viability of family farms.<sup>1</sup>

The average U.S. hospital serves more than a million meals per year.<sup>2</sup> Annual hospital food expenditures exceeded \$5 billion in 2001 (latest available information), \$6 billion when nursing home food purchases are included.<sup>3</sup> Most hospitals not only serve patients and staff but also visitors and the larger community through on-site cafeterias, vending machines and catering services.<sup>4</sup> Given food's significant role in human health, every food purchase a hospital or nursing home makes has the potential to help accomplish its mission of promoting health and combating or preventing disease.

In researching this report, we talked to people working at hospitals, nursing homes and cancer centers across the country, even the National Institutes of Health. What we found were health care leaders passionate about bringing fresh, nutritious food to their patients, staff and surrounding communities, in large part by reconnecting with local foods systems and supporting healthier agricultural practices. Through leadership and the significant purchasing power of their facilities, they are bringing about change by hosting farmers markets and farm stands; by purchasing and serving food produced in ways that are healthier for humans and the environment; and by improving the quality of food in vending machines. For instance:

- ▶ Throughout the U.S., farmers markets and farm stands have operated successfully at medical facilities, including the National Institutes of Health in Maryland, Duke University Medical Center in North Carolina, Allen Memorial Hospital in Iowa and at multiple Kaiser Permanente facilities in California, Oregon and Hawaii.
- ▶ In Iowa, Bartels Lutheran Home purchases 15 percent of its food from local growers and producers, including beef raised without the use of hormones or non-therapeutic antibiotics.
- ▶ In Vermont, Fletcher Allen Medical Center has a new patient menu that focuses on the use of local, fresh food to improve patient health and support local businesses.
- ▶ In Illinois and Oklahoma, Cancer Treatment Centers of America promote optimal nutrition for cancer patients and reduce their exposure to environmental toxins, by placing a priority on certified organic food.
- ▶ In Texas, five hospital systems work together to provide healthier food in vending machines.



This report summarizes these and other exciting stories, highlighting hurdles to overcome and lessons learned. When health facilities offer more local, sustainably produced foods, for example, there can be many unforeseen benefits, even apart from the more obvious nutritional, health and environmental benefits. These can include:

- ▶ Positive publicity
- ▶ Differentiation from competitors
- ▶ Better employee morale
- ▶ Added patient satisfaction
- ▶ More visible nutrition education
- ▶ Improved community relations.

Overall, we found growing recognition that access to quality food is integral to a hospital or nursing home's ability to accomplish its mission of promoting health and combating or preventing disease. But every facility we highlighted has its own unique reasons for undertaking this kind of work. Some put a priority on buying organic food to reduce patient exposure to toxic chemicals. Others want to increase access to fresher, more nutritious food. Still others want their food dollars to have a greater impact on their community's economy, so they consciously support local farmers.

## I. Recipes for change

### *On-site farmers markets and farm stands*

Medical facilities across the country are starting on-site farmers markets and farm stands to serve patients and staff, as well as neighboring communities. Despite subtle differences in size, schedule, location, products offered and target audience, these markets have several things in common including nutrition education components, nominal startup and operation costs and common goals to increase access to fresh, local foods. They are also very successful. For instance, prior to Sept. 11, 2001, the seasonal farmers market held for more than 20 years on the grounds of the National Institutes of Health was the most successful farmers market in Montgomery County, Md., with an estimated annual gross income of \$100,000 (Farm to Hospital Case Study No. 1).

Some markets sell only local, organic produce. Others provide a mix of local products. The farmers market in front of the Duke University Medical Center bookstore was started as an employee benefit (Farm to Hospital Case Study No. 2). Others are open to the community at large, offering better access to fresh foods in neighborhoods where it is not readily available, as is the case with the farmers market operating in the parking lot of Allen Memorial Hospital (Farm to Hospital Case Study No. 3).

Fourteen Kaiser Permanente facilities in California, Hawaii and Oregon also host farmers markets and farm stands (Farm to Hospital Case Study No. 4), some of which serve low-income communities in addition to patients and staff. While everyone can potentially benefit from easier access to fresh produce, the strong association between high obesity rates and low incomes<sup>5</sup> and limited availability of healthy food

choices in low-income communities<sup>6,7</sup> suggests medical facilities can significantly improve the quality of food available in these areas by hosting farmers markets.

This is especially true if the market is authorized to accept food stamps and Farmers' Market Nutrition Program (FMNP) coupons, as are many of the markets highlighted here. Additionally, several publicly funded hospitals in New York City and other parts of New York state distribute FMNP coupons and provide nutritional counseling.<sup>8</sup> In several cases, New York farmers markets have been deliberately located near health facilities to make it easier for people getting FMNP coupons to redeem them nearby. Studies by the U.S. Department of Agriculture and others show that FMNP coupons increase consumption of fresh produce by recipients.<sup>9,10</sup> For more information on the Farmers Market Nutrition Program, go to [nafmnp.org](http://nafmnp.org).

### *Food service (patient food, cafeterias and on-site catering)*

70 to 80 percent of U.S. hospitals operate their own food service.<sup>11</sup> Their food service directors decide what kinds of food to buy and from whom. They can buy from numerous individual suppliers, but more often purchase food through a "prime vendor" or distributor, such as U.S. Foodservice or SYSCO, or a group purchasing organization (GPO) such as Novation. Contracts with these entities generally require 90 to 100 percent of a facility's total food purchases go through them.<sup>12</sup> This percentage is negotiable, but only when contracts are up for renewal.

The remaining facilities contract with a private food service company to run their cafeterias and prepare patient meals. Sodexo and Aramark are two of the companies contracted most often by hospitals for this service.<sup>13</sup> For instance, 25 of the top 50 U.S. hospitals that contracted out their food service in 2003 contracted with Sodexo,<sup>14</sup> which overall has about 800 foodservice contracts with medical facilities.<sup>15</sup> And Aramark Healthcare Management Services manages food service for approximately 450 health care facilities in the U.S.<sup>16</sup> These companies bid for food service contracts by promising, among other things, to keep to a certain cost per day for patient food. They in turn contract with food suppliers/distributors, such as SYSCO or U.S. Foodservice, and will have limitations similar to a self-operating food service as to what they can purchase off-contract.

Whether a facility had self-operated food service or contracted the service out to a food service company, several health care leaders have been able to increase the proportion of fresh, local, sustainably produced foods purchased by using these strategies:

- ▶ Avoid signing a contract with a prime vendor. Facilities that do not contract with a "prime vendor" or GPO have fewer limits on what they buy. Robin Gaines, certified dietary manager for Bartels Lutheran Home in Iowa (Farm to Hospital Case Study No. 5), for instance, does not have a written contract with a prime vendor, although she does purchase some discounted items from one through a verbal agreement. On the whole, Gaines feels strongly about having no contractual obligations, thereby retaining the flexibility to work with and purchase more from local vendors. In 2004, she bought more than 15 percent of Bartels food from local vendors.
- ▶ Learn what local, sustainably produced foods the existing vendor might provide. Fletcher Allen Medical Center (FAMC), which operates its own food service, buys locally produced cheeses from a Vermont dairy cooperative through U.S. Foodservice (Farm to Hospital Case Study No. 6). Also,

companies like SYSCO have taken recent interest in providing more local sustainably produced foods to their customers. For instance, SYSCO Minnesota customers can order regional, sustainably produced (mostly Minnesota, but some Wisconsin) milk, cheese, meats, specialty items such as maple syrup and fresh produce as it is seasonally available.<sup>17</sup> Many of these growers are certified by the Food Alliance Midwest—an eco-label program working with SYSCO Minnesota, the Heartland Food Initiative and other local sustainable agriculture groups.

- ▶ Take full advantage of the percentage of foods that can be purchased outside of the prime vendor contract. As noted, most contracts with prime vendors allow some percentage of total food purchases—between 3 and 10 percent based on our conversations with hospital food purchasers—to be obtained from other suppliers. Whatever the percentage, it is a good place to begin making changes, as FAMC has found. Diane Imrie, FAMC’s director of nutritional services, buys vegetables, dairy, coffee and other products through several local suppliers/distributors without violating their contract with U.S. Foodservice.
- ▶ Use contract renewal to increase the off-contract purchasing percentage. Though it may take some time, contract renewal is an obvious time to take concrete steps to increase institutional purchases of local sustainably produced foods. Some options are to increase the percentage of food that can be bought outside the contract, to stop using a prime vendor, or to use the request for proposal process to solicit bids from local vendors of these foods. Though not a hospital, Gale Secor, food stores administration purchasing coordinator for the University of Northern Iowa, was able to increase her off-contract purchases to 30 percent during the last contract negotiation so she could buy more local food.<sup>18</sup>
- ▶ Communicate a preference for local, sustainably produced food to contractors. Some food service companies may take it upon themselves to prioritize the use of fresh, local, sustainably produced foods or be responsive to customer requests. For instance, Aramark staff does their best to source organic food for the Cancer Treatment Centers of America’s Midwest Regional Medical Center even though it is not in their contract (Farm to Hospital Case Study No. 7). However, if a food service company or supplier is not responsive, health care staff and administrators can use contract renewal to establish a preference for these foods in writing. (See Section II. Purchasing preferences and food policies.)

Aside from contract issues and regardless of who runs the food service at a particular medical facility, similar barriers arose as staff sought to expand food choices. Common challenges included:

- ▶ Kitchen design and culinary skill of staff. The increased use of precooked and highly processed foods that have become the norm in institutional kitchens over the years can make it challenging to prepare and serve meals made from fresh ingredients. For instance, preparation of fresh food often requires more skill than heating up precooked and highly processed foods. In addition, the design of institutional kitchens has changed over the years to reflect the increased use of processed foods, and as such may not have the equipment needed to prepare meals from fresh ingredients. Two of the medical institutions highlighted in this report took advantage of kitchen remodeling projects to start incorporating more fresh foods. When the kitchen was remodeled at Bartels Lutheran Home, a new freezer was installed that was large enough to allow the dietary manager to order and store the meat from whole animals that she had custom slaughtered. The nutritional services director at Fletcher Allen Medical Center took advantage of a kitchen remodel project to start a room service model for preparing meals from fresh, local foods that patients order off a menu.



- ▶ Safety. Medical institutions must follow local health regulations and those of the Joint Commission on Accreditation of Healthcare Organizations related to food safety. Food safety is an important issue in general but especially for medical institutions given that their patients are more vulnerable than the general population. Though the food service directors highlighted in this report often mentioned safety as a consideration, they were generally able to find local suppliers that meet these standards.
- ▶ Availability. Institutional food purchasers have grown accustomed to ordering a wide variety of food, packed in a predictable way, and delivered on a predetermined schedule, as is the case with large distributors such as SYSCO and U.S. Foodservice. There are distributors that specifically supply organic or locally grown foods. However, most local growers lack the time and resources to direct market their wares. The health care facilities that source from local growers have learned that flexibility is important. Their advice: start small, talk to the growers, communicate your needs and listen to theirs, and be patient. Source local produce when it is available in season. Products such as meats and dairy products are potentially available year-round, but purchasers should keep in mind that it may take some time before the supply of local, sustainably produced foods equals the demand.
- ▶ Costs. Nursing homes, hospitals and other institutions generally need to stay within a budgeted price per patient meal. According to one reliable source, raw food costs per-patient-day, excluding labor, averaged \$5.73.<sup>19</sup> Facilities operating their own food operations spent slightly more on average (\$6.26 per-patient-day) than did those with contract food services (\$5.20 per-patient-day).<sup>20</sup>

By and large, cost is a consideration for the facilities highlighted here, but not the bottom line. One facility in particular, CTCA, prioritizes the use of organic food at its facilities and pays more than double what other facilities with contract food service pay per patient day to provide it. However, buying local sustainably produced food does not always equate to increased costs, even if certified organic often is sold at a premium. Bartels Lutheran Home purchased 15 percent of its food from local growers and producers without spending more money than previous years. While some foods such as produce may cost more, savings can be realized on other foods such as meat.

If the food is being sold in a cafeteria there is more opportunity to pass on the costs to consumers. For instance, the price of coffee at Saint Louise Regional Hospital in Gilroy, Calif., nearly doubled when they switched to fair-trade coffee with no negative feedback.<sup>20</sup> Still others have found a way to offset the costs of purchasing fresh food. For instance, Stillwater Medical Center in Oklahoma has taken a creative approach to resolving this issue. In January 2004, they changed their cafeteria pricing structure so that prices for “healthy” foods were decreased by 20 percent while prices for “unhealthy” foods were increased 20 percent.<sup>22</sup> A tracking mechanism in their cash register shows that employees are choosing more healthy foods. In this way, they were able to have a positive impact on employees eating habits without impacting their bottom line. In 2004, the American Society for Healthcare Food Service Administrators honored Ruth Blair, director of nutrition services for Stillwater Medical Center, for their efforts.

## *Vending (food and beverages)*

Staff and visitors to hospitals can be awake at all hours, often getting food from vending machines when cafeterias are closed. Given that vending machine food choices tend to be high in fat,<sup>23</sup> this is another area of opportunity for medical facilities.

Since 2003, the Healthy Vending Initiative—a project of Bexar County Community Health Collaborative (“The Health Collaborative”) that involves at least 12 hospitals from five hospital systems in San Antonio, Tex.—has provided healthier vending machine food options for patients, visitors, and staff (Farm to Hospital Case Study No. 8). A labeling system also was developed so consumers could clearly identify the healthier options, all accomplished at no increased cost to venders or to hospitals.

## *Other*

- ▶ On-site gardens. Some facilities are creating gardens on hospital grounds. White Memorial Hospital in East Los Angeles, Calif., hosts a community garden open to everyone on property it owns adjacent to the hospital.<sup>24</sup> Organic vegetables and edible plants are grown by staff and volunteers at Dominican Hospital in Santa Cruz, Calif., and served in their cafeteria.<sup>25</sup>
- ▶ Fast food. Other institutions are working to remove fast food chains from their premises. For instance, the Cleveland Clinic, a leading center for treating heart disease, removed Pizza Hut and is engaged in a legal battle to terminate McDonald’s 20-year contract.<sup>26</sup> Angela Calman, Cleveland Clinic spokeswoman, says they are looking at every vendor on the hospital campus to see if they represent what they are trying to recommend to patients.<sup>27</sup> Also, the New York City Health and Hospital Corporation closed the McDonald’s at the Harlem hospital, does not intend to renew the McDonald’s contract at another hospital and has not decided on renewal of a third.<sup>28</sup>

## II. Utensils for change

### *Food labels*

No one label or certification can identify the local sustainably produced foods a health care administrator or nutrition director may want to purchase. However, the labels listed below are a good place to start. More information about labels can be found at the excellent site, [eco-label.org](http://eco-label.org).

- ▶ Certified organic. A USDA-certified label that means foods are grown or produced without the use of pesticides, antibiotics, hormones, genetically modified organisms and sewage sludge. Avoiding foods grown with these conventional agricultural inputs can also mean avoiding health risks associated with them. In addition to reducing the health risks, at least one study shows that organic farming methods may increase cancer-fighting antioxidant levels up to 30 percent in fruits and vegetables.<sup>29</sup> Other studies show that “organic crops contain ... significantly more vitamin C, iron, magnesium, and phosphorus and significantly less nitrates than conventional crops.”<sup>30</sup> In addition to the CTCA medical centers, several facilities, including Sutter Maternity and Surgery Center in California and several hospitals in Minnesota, are purchasing organic produce year-round.<sup>31,32</sup>



- ▶ Locally produced. The Eat Well Guide, [eatwellguide.org](http://eatwellguide.org), lists more than 5,000 local sources of sustainably produced meat and dairy products in a database searchable by state or ZIP code. Many states also are developing labels to help consumers identify foods grown locally. Minnesota has a “Minnesota Grown” label and publishes an annual guide, [minnesotagrown.org](http://minnesotagrown.org), which lists local growers and producers and how to contact them. Contact your state department of agriculture to learn about programs in your state.



- ▶ Food Alliance certified. The Food Alliance certifies farmers and ranchers who have adopted practices that protect and conserve water and soil resources; reduce, if not eliminate, the use of pesticides; conserve and enhance wildlife habitat; provide safe and fair working conditions for employees; and do not include the use of genetically modified organisms, growth hormones or sub-therapeutic antibiotics. For more information see [foodalliance.org](http://foodalliance.org). Their growers are concentrated in the Midwest and Pacific Northwest, but some are scattered throughout the country.
- ▶ Fair-trade certified. Some hospitals, including Fletcher Allen Medical Center in Vermont and Saint Louis Regional Hospital in California,<sup>33</sup> are serving fair-trade coffee. For coffee to be fair trade certified, it must be grown by small farmers who belong to a cooperative and who are paid a fair minimum price.
- ▶ Other sustainable certifications. Other certification programs include Protected Harvest, Rainforest Alliance, Salmon Safe Agricultural Program and Certified Humane Raised and Handled.



### *Purchasing preferences and food policies*

Some of the largest food retailers in the country, such as Bon Appétit and McDonald's, have adopted policies and purchasing preferences for local and more sustainably produced foods.

Group purchasing organizations such as Consorta<sup>34</sup> and Premier<sup>35</sup> have been leaders in adopting purchasing preferences for environmentally preferable materials and supplies used in hospitals such as alternatives to tubing made with polyvinylchloride, and are just beginning to adopt the same approach for food.

An institution's food purchasing policies can address a broad range of issues related to sustainable food production or address a single issue. For instance, Bon Appétit's policy addresses issues of freshness and nutritional value, human and environmental health, support of local economies and sustainable farming and fishing practices.<sup>36</sup> McDonald's has a specific policy on purchasing meat raised without the use of several classes of antibiotics as animal growth promoters, or for other routine purposes other than treating disease. These antibiotics are also important to humans and the animal use contributes to rising antibiotic resistance that is making people ill with harder-to-treat infections.<sup>37</sup>

Antibiotic resistance is particularly important to medical practitioners, and thus health care institutions may want to start by adopting a food procurement policy that specifically addresses this issue.

Adopting a food policy may take time, but is a worthwhile effort because among other things, it:

- ▶ Sends a strong message to food producers, suppliers and distributors that they will need to offer more local, sustainably-produced foods.
- ▶ Shows a strong commitment to the health of patients, staff and the local community.
- ▶ Institutionalizes food purchasing preferences so that the effort will not wither with the loss of leadership from a key employee.
- ▶ Informs the request for proposal process and contract language.

A sample policy has been developed by Health Care Without Harm, an international coalition working to transform the health care industry so it is no longer a source of harm to people and the environment. It can be found at <http://www.noharm.org/details.cfm?ID=893&type=document>

### III. Conclusion

In the eyes of many, spiraling U.S. health care costs at least in part stem from our forgetting that human health is only a part of a larger whole. Making costs and convenience the chief criteria for how we buy our food may seem prudent in the short term, but perhaps not in the long term when we fully account for the major contribution of unhealthy food to obesity and other related chronic disease. Given that hospitals and nursing homes buy a lot of food, it is significant that administrators and nutrition directors are beginning to recognize their role in perpetuating the harmful eating habits that contribute to disease and environmental degradation, and are changing the way they do business.

# National Institutes of Health, Bethesda, Maryland

## *Health complex based seasonal farmers market*

### **Purpose**

Increase community, staff and patient access to fresh, healthy foods and encourage incorporation of healthy foods into diet.

### **Summary**

Perhaps the first and longest running hospital-based farmers market was operated seasonally on the grounds of NIH until Sept. 11, 2001.

### **Background**

In 1979, Rene Johnson from the Montgomery County Department of Agriculture approached the National Institutes of Health (NIH) in Bethesda, Md., about starting a farmers market on the grounds. Randy Schools, president of the NIH-NOAA Recreation and Welfare Association, facilitated the effort within NIH. The intention was to bring farm fresh, locally grown produce to employees in a convenient and timely way. From the beginning the market succeeded. According to Montgomery County's Department of Economic Development, it was the most successful farmers market they have had. It would still be operating if not for security concerns following 9/11.

Target audience: Staff and the surrounding community.

Partners: NIH, NIH-NOAA Recreation and Welfare Association, Montgomery County Farmers Market Association and Montgomery County Department of Economic Development/Agriculture Department.

Logistics: The market location within the NIH campus provided easy access and parking for both growers and customers. In 1979, the steps needed to gain approval for holding a farmers market on government property were minimal. The NIH

facilitator spoke to the head of grounds regarding the truck traffic and notified the guards. A day and time for the market (Tuesdays from 2-6 p.m., May through November) was selected to avoid competition with other markets. No concerns were ever raised about the market competing with coffee carts and cafeterias.

At the Montgomery County Farmers Market Association's annual meeting, a grower was chosen to be the designated "Market Master" for each market and put in charge of logistics—making sure the market started and closed on time, resolving disputes, sending out yearly applications to growers, etc. The association's membership committee determined who was eligible to participate—no more than 10 percent can be farmers from outside Montgomery County. Growers were authorized to accept food stamps.



Marketing and education: The market was promoted to NIH employees through the Recreation and Welfare Association's monthly newsletter *R&W News* and the *NIH Record*, which reached more than 20,000 people. They also periodically published healthy recipes for using local produce available at

the market. The county publicized the locations of all of its markets, including the one at NIH.

Goods provided: Fruits, vegetables, baked goods, jams and apple cider were sold by local growers; farmers monitored each other to make sure no one was buying wholesale and passing off as fresh grown. At least three of the 11 regular growers were organic.

### **Costs**

No out-of-pocket costs for NIH, just staff time. No permit was needed to operate. Liability insurance was not a concern: each individual farmer had their own, as did the county and the state of Maryland. In addition, the Recreation and Welfare Association added it to their umbrella insurance policy.

### **Benefits**

- ▶ Increased community, staff and patient access to healthy foods.
- ▶ Encouraged incorporation of healthy foods into diet.
- ▶ Supported local growers by providing non-weekend market opportunities. At one time, the gross income from the NIH market was estimated to be \$100,000 a year.
- ▶ Generated goodwill: shoppers established relationships with growers over the years.
- ▶ Growers donated produce for other NIH-sponsored projects.

### **Lessons learned**

A farmers market located on hospital grounds can be very successful.

### **Future developments**

Farmers markets at multi-building medical facilities can be hugely successful, easy to administer from the facility's standpoint and do not have to cost a lot. This market had to end due to circumstances beyond their control, but the success of the market led to another one being located half mile away. In addition to the market, fresh, local eggs and seafood was provided to NIH employees for a time.

### **Contact**

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# Duke University Medical Center Durham, North Carolina

## *Employee-focused seasonal farmers market*

### **Purpose**

Increase staff access to fresh, healthy food and encourage incorporation of healthy foods into their diet.

### **Summary**

Since 2001, a farmers market has been held in front of the Duke University Medical Center Bookstore. The farmers market is offered as an employee benefit through Duke's "LIVE FOR LIFE" employee health promotion program.



### **Background**

The market was started after data compiled from pre-employment surveys and voluntary health checks showed that employees did not consume enough recommended fruits and vegetables or eat enough fiber. Duke human resources employee Kevin J. Harrell recruited vendors and also worked with Duke security, transportation and hospital administrative staff to identify a good site. Though hospital staff is the primary target, students and patients also make use of the market while on campus.

Partners: All Year Nursery, Angel's Nest Farm, Brock's Produce, Busy Bee Apiaries, Flat River Nursery, Grayson's Café, Harrington Farms, Lyon Farms, Pao Lim Asian Bistro, Sunshine Lavender Farm and Windy Acres Farm.

Logistics: The market is held on Fridays, April through September, from 11 a.m. to 2 p.m. At producers' request, the market occurs weekly from April through June and every other week July through September. Harrell worked with parking, transportation and hospital administration staff to

identify a good site for the market. Duke has been experimenting with additional locations to help reach more faculty and staff and have met with some success in providing at least one alternative location that has consistent attendance.

Harrell coordinates the logistics and determines which vendors can participate. The market has become so successful that there is a waiting list for vendors. In order to keep parking and other logistics manageable, Duke has limited the number and types of vendors, prioritizing fresh fruits and vegetables over other products such as arts and crafts. The vendors bring everything they need to set up, operate and clean up. Duke provides the space and customers. Many growers are part of Goodness Grows, a program of the North Carolina Department of Agriculture and Consumer Services.

Vendors must show proof of liability insurance. If the vendor sells cooked foods, they must have a favorable inspection of a commercial kitchen. Duke did not need a permit to operate the market.

Marketing and education: Duke promotes the market to faculty and staff by direct mailings, newsletters, email listservs, bulletin boards, cafeteria table signage and posters. LIVE FOR LIFE educational materials and nutritional information are provided to employees, as are recipes that feature in-season fruits and vegetables. Blood pressure checks have been provided on occasion but are not as successful as when they are part of a scheduled health check. Duke does not promote the market to the community at large for lack of parking.

Goods provided: Fruits, vegetables, dried and fresh flowers, potted plants, honey, greenhouse tomatoes and baked goods. Due to concerns about refrigeration issues, including the potential for employee use of on-site refrigerators to store items meant for work-related storage of medical products, products such as eggs, cheese and meats are not sold. One of the growers is organic. Vendors are not necessarily locally based and can sell produce that they purchased from other states, but local produce is preferred. Two restaurants serve vegetable-based dishes for lunch and another vendor provides baked goods, infused cooking oils and salads.

### **Costs**

Minimal out-of-pocket. The farmers market is incorporated into LIVE FOR LIFE staff responsibilities. Most costs are related to marketing materials.

### **Benefits**

Duke's primary goal is the health benefit provided to employees through increasing access to healthy foods. According to information taken from health risk assessments, consumption of fruits and vegetables among Duke faculty and staff has increased since the start of Duke Farmers Market. There was a significant improvement with regards to fruit, vegetable and fiber consumption. When asked a question concerning readiness to adopt five-a-day eating behavior, more participants were in the action and maintenance stages during the 17 months of the farmers market than in the period before the market began. In satisfaction surveys, 89 percent of respondents reported that the market motivated them to eat more fruits and vegetables.

### **Future developments**

The market has been very successful in affecting the health of Duke faculty and staff. The market has impacted the workplace by creating a culture of health. Additionally, the market has been successful from an attendance standpoint.

### **Contact**

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# Allen Memorial Hospital, Waterloo, Iowa

*Community-focused, seasonal farmers market*

## **Purpose**

Meet community need for greater access to fresh produce.

## **Summary**

Each summer since 1999, Allen Memorial Hospital has sponsored a farmers market on the hospital grounds at minimal cost to the hospital and great benefit to the staff and surrounding community.

## **Background**

A farmers market has been operating seasonally at Allen Memorial Hospital since the summer of 1999. The market serves hospital staff and patients, but was started mainly to fill a community need. The community around the hospital is very diverse and predominantly multifamily homes with little space for gardens. Transportation for area residents is very limited.

The market was an outgrowth of a community needs survey conducted by a group of nursing students for a community health course at Allen College, a sister organization of Allen Memorial Hospital. Eventually, through community discussions, residents expressed a desire for a local farmers market to meet their need for fresh produce. Three Allen Health System staff were key to getting the market started, the nursing faculty member who taught the community health course, a community outreach coordinator, and a dietician who helped to start a neighborhood garden.

Target audience: Community at large, including hospital staff and patients.

Partners: The market is sponsored by the MAPLES Neighborhood Association which consists of several partners, including Allen Memorial Hospital, Mt. Carmel Senior Housing Project, Prairie Park Hous-

ing Project, Logan Middle School, the local emergency medical service and St. Paul's Church.

Logistics: The administrative council of Allen Health System approved the use of the hospital site. The market is held each Thursday, 2-5 p.m., from June through September in the north parking lot of the hospital. The day and time were chosen so as not to compete with other markets in area.

No concerns have been raised regarding competition with coffee carts or the cafeteria within the hospital. One of the vendors acts as the "Market Master" and selects the other vendors based on their ability to meet state criteria and reports to the state. The vendors sign a contract and sell their own food/product at the market. Some of the vendors sold directly to the hospital until the hospital signed a contract with Aramark for food service. It took several years, but the market is authorized to accept food stamps and USDA WIC Farmers Market Nutrition Program coupons.

Marketing and education: Vendors pay a fee used for advertising the market as well as other area markets. Email is also sent out to the neighborhood and staff. Educational materials are provided at the market, as are blood pressure screenings and other types of community medical services.

Goods provided: Regionally produced fruits, vegetables, flowers and baked goods. Products such as eggs cannot be sold due to health department criteria. None of the growers are organic.

## **Costs**

Operating costs are minimal. The hospital's parking lot is used for free. Vendors pay a fee to participate and it covers advertising costs. No additional liability insurance was needed.

## **Benefits**

- ▶ Increases community, staff and patient access to healthy foods.
- ▶ Encourages incorporation of healthy foods into diet.
- ▶ Supports local growers by providing non-weekend market opportunities.
- ▶ Generates goodwill and draws people out of their homes and into the community.
- ▶ Creates new community partnerships.

## **Future developments**

The number of vendors and customers has increased over time and the market is considered a success. However, the hospital is running out of parking space so a different location within the neighborhood will need to be chosen.

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# Kaiser Permanente, California, Hawaii and Oregon

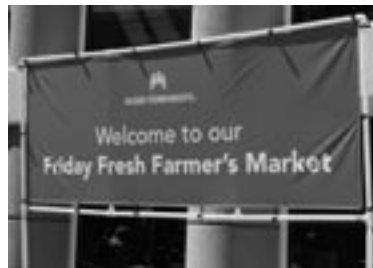
## *Multiple farmers markets/farm stands*

### **Purpose**

Increase access to fresh, healthy foods and encourage incorporation of healthy foods into diet. Target audience varies among facilities with some serving staff primarily and others staff, patients and the local community.

### **Summary**

Over the last two years, health leaders at Kaiser Permanente (KP), a large nonprofit health plan headquartered in Oakland, Calif., have started 14 farmers markets and farm stands at medical facilities in California, Oregon and Hawaii with a goal to have 29 markets in place by the end of 2005. The success of the markets has spurred a change in KP's overall approach to providing food for patients, staff and the communities they serve, emphasizing issues of freshness, nutritional value, reduced chemical inputs and sustainability. Ultimate goals include enhanced staff morale and meeting their health mission by improving the food and eating of staff, patients and the surrounding community.



Mild climates in California and Hawaii permit KP's farmers markets and farm stands to provide fresh, locally grown fruits and vegetables on a weekly basis all year long. Some of them feature local organic producers approved by the California Certified Organic Farmers Association. This allows KP to meet dual goals of protecting the environment by supporting sustainable agriculture while improving access to healthy, affordable food in and around KP facilities. Each facility also offers an opportunity to further educate KP members, staff and the local community about the benefits of healthful eating, often tying in with an existing in-hospital program.



### **Background**

Dr. Preston Maring, a physician at Kaiser's Oakland (Calif.) Medical Center with an interest in food, thought his hospital should provide an alternative to the usual hospital lobby vendors, one more consistent with its health care mission. Momentum took over, and within a short time, Dr. Maring had formed a committee that eventually led to the launching of Kaiser's first on-site farmers market in May 2003. Since then several more markets and farm stands have started at KP facilities (see table, below).

Logistics: Farmers markets at KP facilities vary in their unique setups, in particular with respect to their hours of operation, costs and stated focus. But their establishment and successful operation have had many shared features, including:

- ▶ Minimal out-of-pocket costs, such as for permits, although staff time invested can be significant.

- ▶ Buy-in secured from key KP leaders, such as the leaders in the food service area, operations, community and government relations, public affairs and legal departments, as well as from any cafeteria or coffee cart that operates on-site.
- ▶ Effective community partners. Successful operations benefit from a community intermediary who manages and coordinates the market's operation, including securing permits, getting produce from farms to site, setting up the market, garbage disposal, etc.
- ▶ Support from internal partners including legal review and promotion of the market internally to staff and KP members through newsletters and Web site, and externally to the community via press releases, meetings, articles, etc. Typical markets also have an important health/nutritional education component developed by KP experts.
- ▶ Cooperation and buy-in from neighborhood restaurants and associations, grocery stores and civic leaders.

### **Costs**

Operating costs for the markets have been minimal for the most part, depending on permit costs and the scope of the effort. Permits are mostly free, although one facility paid \$1,300. Other costs include banners and other marketing, educational materials and tables.

### **Benefits**

- ▶ Increases access to healthy foods.
- ▶ Encourages incorporation of healthy foods into diet.
- ▶ Supports local growers by providing non-weekend market opportunities.
- ▶ Generates goodwill.
- ▶ Creates new community partnerships.
- ▶ Promotes association between KP, health and nutrition.
- ▶ Educational component piggy backs on other KP programs.
- ▶ Saves staff time on weekends, enhancing morale and perhaps avoiding absenteeism on Fridays.

### **Future developments**

The existing markets are generating interest within the KP system for markets in other states including Colorado and Michigan. In addition, KP is developing a comprehensive food policy that not only encourages the expansion of farm stands and farmers markets to other facilities, but also broadens the scope of sustainable agriculture to include food served to patients and staff within KP facilities.

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*Or see "Produce to the People" by Preston Maring, MD, KP organizer of the first market. <http://xnet.kp.org/permanentejournal/spring04/produce.html>*

*Features of select KP farmers markets and farm stands*

	<b>Oakland Medical Ctr.</b>	<b>Santa Teresa Medical Ctr.</b>	<b>San Fran. Medical Ctr.</b>	<b>Richmond Medical Ctr.</b>	<b>Nanaieola Clinic</b>
Location	Oakland, Calif.	San Jose, Calif.	San Francisco, Calif.	Richmond, Calif.	Leeward Coast, Oahu, Hawaii
Produce provider (PP)	Pacific Coast Farmers market Association	Pacific Coast Farmers market Association	Pacific Coast Farmers market Association	EcoVillage Farm Learning Center	Ma'O Organic Farm
Role of PP	Obtained permit; provides staff and tables and performs clean-up	Obtained permit; provides staff and tables and performs clean-up	Obtained permit; provides staff and tables and performs clean-up	Operates farm stands and transports produce from farms to the stands	Just brings the produce; KP staff take care of setup, take down and clean-up
Type	Farmers market	Farmers market	Farmers market	Farm Stand	Farm Stand
Make-up	8 farm stands, 1 health education table			Multiple farms, one stand at two locations, one on-site, one off-site	One farm, one stand
Focus	Encouraging healthy living primarily among staff, but attracts KP members and local community	Support KP's Employer of Choice Program, promoting healthy lifestyles and freeing up staff time on weekend	Same as Oakland	Enjoy eating fruits and vegetables for taste and health, 5-a-day recommendation	Increase access to healthy foods and to use clinical/dietary knowledge to influence food prep and the incorporation of healthy food into a healthy lifestyle
Day/time	Friday, 10 am to 2 pm	Friday, 11 am to 4 pm		11 am to 2 pm; 3 pm to 5:30 pm	Wednesday, Noon to 1 pm
Frequency	Weekly; Year-round	Weekly; Year-round	Weekly; Year-round	Weekly; Year-round	Weekly; Year-round
Education Components	Table w/ pamphlets on blood pressure, cholesterol, and healthy nutrition	Table w/ health education materials Blood pressure screenings	Registered Dieticians from Nutrition Clinic conduct noon hour talks Adding healthy cooking demos	Distribute 5-A-Day education materials Healthy cooking class started as a spin-off	Cooking demonstrations once a month

*(continued next page)*

Unique Features	<b>Oakland Medical Ctr.</b> First hospital-based farmers market w/ organic produce	<b>Santa Teresa Medical Ctr.</b> Allow community interest tables, contract with PCFMA allows KP final say in selection Time slot includes all three shifts Location ADA accessible	<b>San Fran. Medical Ctr.</b> Registered Dieticians from Nutrition Clinic conduct noon hour talks Adding healthy cooking demos	<b>Richmond Medical Ctr.</b> Multi-partner collaboration between KP, NGOs, and County KP provided \$10,000 to start project, mtg. space, and admin; County obtained permit, purchased a van to transport produce from farms to stands, and solicited applications for a group to operate stands; NGO helped to set-up an ordering system and chose farms to provide produce Farmers themselves do not sell produce, saving their time and staff Eco-Village has at-risk kids working for them	<b>Nanaikeola Clinic</b> Ma'O is a nonprofit farm that teaches agricultural skills to young people who have dropped out of school
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# Bartels Lutheran Home, Waverly, Iowa

## *Local purchasing*

### **Purpose**

Provide improved quality, wholesome and safer food to better serve patients and symbolize Bartels' commitment to the community.

### **Summary**

Starting in 2000, Bartels Lutheran Home spent more than \$40,000 per year buying food from local producers. During 2004, more than 15 percent of its food purchases were produced locally.

More than  
15 percent  
of food  
purchases  
were local in  
2004

### **Background**

Bartels Lutheran Home is a 200-bed facility that provides retirement, nursing, assisted living, skilled and Alzheimer's care. Robin Gaines, Bartels' certified dietary manager since January 1999, makes all food purchasing decisions. When patients at Bartels requested fresh, locally-grown tomatoes she began to consciously focus on sourcing local foods. In trying to meet requests, Gaines met Dr. Kamyar Enshayan, who in 1997 had started the Local Food Project at the University of Northern Iowa (UNI). The project aids institutional food buyers, including hospitals and nursing homes, in purchasing a greater portion of their food from local farmers and food processors.

Though Gaines buys from local and national distributors in addition to local growers, she does not have a written contract with any of them. She prefers to retain flexibility to work with and purchase from more local vendors. Local foods served at Bartels include fruits and vegetables, whole and skim fortified milk, honey, pork, fresh Thanksgiving turkey and beef. Gaines also tries to source foods that are sustainably grown. Last year, Thanksgiving turkeys

were free-range and raised without the routine use of antibiotics. Approximately half of Bartels local meat purchases come from Craig Clausing, a local cattleman whose animals are raised on a strict diet of plant protein and without hormones, estrogen implants or non-therapeutic antibiotics.

### **Costs**

Bartels pays approximately the same amount per meal to buy locally as it had prior to this project—though in 2004 they are paying more due to increases in overall beef, pork and milk prices. The average meal cost is between \$1.46 and \$1.56 per resident, less than \$5.00 per patient per day. Gaines pays 10 cents per pound above market for the beef, which is still less than she would pay a distributor or a local locker.



### **Benefits**

- ▶ Provides better quality, wholesome and safer foods.
- ▶ Provides greater patient satisfaction.
- ▶ Shortens distribution chain and allows both producer and buyer to benefit from savings.
- ▶ Encourages success of small, locally owned businesses.
- ▶ Builds relationships with local growers.
- ▶ Symbolizes Bartels' commitment to the community.

### **Lessons learned**

- ▶ **Be flexible:** Finding local sources for the variety of items an institutional kitchen requires was difficult at first. Early on, a UNI intern facilitated interactions between Bartels and its farmers. Once relationships were established, an intermediary became unnecessary. UNI still provides support in the form of a weekly email regarding the availability of local produce.
- ▶ **Communicate:** The local dairy agreed to fortify milk with vitamins A and D so that Bartels could buy from them.

### **Institutional concerns**

As a facility that serves an elderly, vulnerable population, issues beside cost must be considered when making food service decisions. Food safety is a particular concern. Liability insurance is not an issue for Bartels, but meat and dairy products have to come from facilities that have a retail license and are USDA inspected. Dairy products must be pasteurized.

### **Future developments**

In 2005, Robin aims to expand the program by finding local sources for free-range chicken and cheese.

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# Fletcher Allen Health Care, Burlington, Vermont

## *Local purchasing preference*

### **Purpose**

Increase staff and patient access to healthy food.  
Support the local economy.

### **Summary**

For 10-15 years, Fletcher Allen Health Care (FAHC) has been buying food and disposing of food waste using practices that benefit patients, staff, the local economy and the environment. The hospital purchases locally grown—often organic—food, hormone-free milk and free-trade coffee. It also composts its food waste. In 2005, a new patient menu will focus on the use of local, fresh foods.

### **Background**

FAHC is a private nonprofit health care system with three main campuses in Burlington, Vt., and other patient care sites throughout Vermont and northern New York. The main facility contains Vermont Children's Hospital and the Vermont Cancer Center. It is also a teaching and research hospital affiliated with the University of Vermont. The health center's food service is self-operated. Most food items except produce are provided under contract with U.S. Foodservice.

### **Purchasing preferences**

FAHC's food service staff purchases local products



### **Green City Farm, the Intervale and Fletcher Allen**

During the 1990s, Fletcher Allen Health Care (FAHC) contracted with Green City Farm, an organic operation started by Vermont's Intervale Foundation, to provide fresh organic vegetables, mainly greens, for hospital food service.

Green City Farm served as a community-supported agriculture institutional buying model. The institution, FAHC, contracted with Green City Farm during the winter to purchase vegetables that would be available the following season at a set dollar value per case. Throughout the growing season, Green City would fax a list of what was available and FAHC would fax in their orders. Per the contract, Green City packed the way a regular supplier would and made deliveries two to three times a week. As farming is unpredictable, Green City would round out its supply from area farmers, but at times there were availability issues and the hospital would have to go to other suppliers to meet their needs.

The Intervale Foundation no longer operates Green City Farm. Instead, they provide start-up assistance to farms that agree to farm organically on Intervale land—an area of land within Burlington's city limits with a long history of agricultural use. They currently support 11 independent farms that provide about 6 percent of Burlington's fresh produce.

available through their contracted supplier, U.S. Foodservice, such as Cabot Creamery cheeses. Though they are limited in what they can buy outside of their contract with U.S. Foodservice, they currently use several local suppliers and distributors including Black River Produce, Burlington Food Service and Squash Valley. For several years, they purchased fresh, organic vegetables directly from a local farm (see sidebar).

In addition to local cheese and produce, FAHC serves hormone-free milk from Hood Milk and offers organic and fair-trade coffees from Green Mountain Coffee, a Vermont-based supplier. Local establishments are promoted by inviting chefs to

the cafeteria to promote a recipe. Until two years ago, local vegetables were available for employees to purchase twice a week, 2-5 p.m., from an on-site farm stand.

### **Composting food waste**

FAHC has been composting food waste from the production side (not off trays) for at least 12 years. According to Lydia Moriarity-Flynn, FAHC's director of environmental services, they send approximately 20,000 pounds of food waste per month to The Intervale, a nonprofit "center for sustainable, ecological ventures focused on farming, and value-added food, fiber and fuel production," where it is later sold in bags and bulk to the community as organic compost. FAHC employees can purchase The Intervale compost at a discount.



### **Costs**

FAHC pays a premium for organic produce. Green City Farm's prices were often more expensive on a per case basis than the regular supplier. As a large milk purchaser, they get good pricing on Hood's hormone-free milk. Composting food waste costs no more than previous disposal means.

### **Benefits**

According to Diane Imrie, FAHC director of nutritional services, the benefits of local purchasing include:

- ▶ Developing a sustainable, local community.
- ▶ Improving patient health.

The benefits of composting food waste include:

- ▶ Diverting 240,000 pounds of waste per year from landfills.
- ▶ Contributing to organic compost supply used to grow local, organic food that may be served on a hospital food plate.

### **Future developments**

In 2005, the FAHC Nutrition Department will implement a new patient menu that focuses on using fresh, local foods. The menu promotes a philosophy of home cooking and use of local foods. Patients will order from a list of 30 entrées that will be prepared in a kitchen newly renovated to provide this service.

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# Cancer Treatment Centers of America Zion, Illinois and Tulsa, Oklahoma

## *Certified organic purchasing preference*

### **Purpose**

Promote optimal nutrition for cancer patients and reduce their exposure to toxins and pesticides.

### **Summary**

Cancer Treatment Centers of America (CTCA) prioritizes the use of certified organic food in its inpatient regional medical centers.

### **Background**

CTCA operates two inpatient facilities where food is served—Southwest Regional Medical Center (SRMC) in Tulsa, Okla., and the Midwestern Regional Medical Center (MRMC) in Zion, Ill. A third facility, the Northeast Regional Medical Center is scheduled to open in Philadelphia, Penn., in October 2005.

ARAMARK is contracted by CTCA to provide food service for patients, employees and visitors. Each facility has a full-service kitchen and very little preprocessed food is purchased. Emphasis is placed on serving only the highest quality food products: fresh food first, frozen second and canned food last.

Organic food has always been available to CTCA patients, but recently has become a cornerstone of their treatment program. MRMC serves certified organic fruits and vegetables, soymilk, dairy products, dry goods and meats when available. Until recently, the food service director found it difficult to find organic produce wholesale suppliers in the Midwest. As of January 2005, MRMC purchases from Roots and Fruits Cooperative, a USDA-certi-

fied organic handler in Minneapolis, Minn. Roots and Fruits will substitute local organic products whenever they are available.

If an organic product cannot be purchased by ARAMARK, CTCA follows USDA's suggestions for reducing chemical exposure from foods, such as:

- ▶ Wash and scrub produce.
- ▶ Peel produce when possible, discard outer leaves of leafy vegetables.
- ▶ Trim excess fat from meats.
- ▶ Remove skin from fish and poultry.
- ▶ Consume low-fat dairy products.
- ▶ Increase food variety.

CTCA nutritionists counsel patients to purchase organic food for home consumption during outpatient treatment or follow the above guidelines.

CTCA's commitment to reducing a patient's exposure to toxins and pesticides goes beyond the food they serve to filtering drinking water and replacing PVC tubing with safer alternatives.



## **Cost**

MRMC spends approximately \$15 in raw food costs per patient day, nearly triple the \$5.20 per patient day spent by the average medical facility with contract food service in 2003.

## **Benefits**

- ▶ Optimal nutrition and reduced exposure to pesticides for cancer patients and their families.
- ▶ High quality, better tasting food for patients, visitors and staff.
- ▶ Support for local, organic producers.

## **Institutional concerns**

Given that CTCA serves a particularly vulnerable population, extra care is taken to assure that suppliers meet federal safety requirements and that their facilities are inspected. For example, eggs that contain hairline cracks cannot be used.

## **Future developments**

CTCA is committed to serving patients and their families the highest quality food products and certified organic food for the foreseeable future.

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# Bexar County Community Health Collaborative San Antonio, Texas

## *Healthy vending*

### **Purpose**

Provide healthier vending machine options and develop a system for identifying and labeling healthy items.

### **Summary**

Through the Healthy Vending Initiative, at least 12 hospitals from five hospital systems in San Antonio, Tex., have provided healthier vending machine food options for patients, visitors and staff since 2003. The Healthy Vending Initiative is a project of Bexar County Community Health Collaborative (“Health Collaborative”). Initially, hospitals served as pilots for healthy vending guidelines that would later be instituted at area schools as part of the Fit City/Fit Schools campaign, but hospitals have continued to participate beyond the pilot.

### **Background**

The Health Collaborative is a nonprofit organization formed by local health systems to improve community health. In late 2001, the Health Collaborative convened a steering committee of area health institutions and hospital systems, local governments, vending suppliers and dietitians from the San Antonio Dietetic Association. The steering committee developed science-based nutrition standards for snacks and beverages which turned into healthy vending guidelines. A labeling system was also developed so that consumers could clearly identify the healthier options.

In 2002, the guidelines were pilot tested in hospitals and local government vending machines. Early in 2003, compliance standards were developed to guard the integrity of the system. Later that year, the Healthy Vending Initiative was implemented citywide. Nine vending companies are partners in

the initiative and have agreed to adhere to the Fit City healthy vending guidelines, correctly label and stock approved healthy items in machines marked with Fit City signage, and introduce the program to existing and prospective customers.

### **Participating hospital systems**

Baptist Health System, CHRISTUS Santa Rosa Health Care, Methodist Healthcare, Southwest General Hospital and University Health System.

### **Guidelines and labeling**

Snacks and beverages are divided into three categories: Healthiest, healthier and excluded. Products meeting the guideline for healthiest are labeled with yellow dots or markers, and healthier products with purple dots or markers.



<b>Snack criteria</b>	
Healthiest	3 g or less total fat/serving 30 g or less carbohydrates/serving Fruit in any form
Healthier	5 g or less total fat/serving 30 g or less carbohydrates/serving Fruit in any form
<b>Beverage criteria</b>	
Healthiest	1 percent or nonfat milk any flavor Pure water Juice, at least 50 percent fruit or vegetable
Healthier	Flavored or vitamin enhanced water 12-ounce servings with less than 50 calories

For a copy of the Healthy Vending guidelines, see <http://www.healthcollaborative.net/assets/pdf/vendingcriteria.pdf>

### **Compliance standards**

Compliance standards were developed to be workable and not be punitive for mislabeled items. Vendors are contacted if a product is mislabeled and they are asked to fix it. If noncompliance is persistent, the vending company will no longer be promoted as compliant.

### **Marketing**

The Healthy Vending Initiative is publicized via Fit City Today, the Health Collaborative newsletter and local media.

### **Costs**

There is no real cost to vendors or hospitals. Signage on the machines is provided by the Health Collaborative as is staff time. Vending companies continually make adjustments to what is stocked in a machine based on what sells.

### **Benefits**

Measuring success is difficult. The number of machines and their locations is proprietary information and thus confidential. L.C. Vending, a vending partner, says they have experienced an overall sales increase and the healthy items are moving, but there are too many variables involved to be able to quantify the impact of stocking healthy items. Additional benefits mentioned by partners include:

- ▶ Attracting new customers to machines.
- ▶ Increasing healthy options provided by suppliers.
- ▶ Overall institutional participation.

### **Lessons learned**

Vending companies were critical partners in determining what would work and what would not, according to Health Collaborative Director Joan Miller. In addition to building trust, their involvement taught lessons such as:

#### **Item labeling**

While pilot testing the color-code system, they learned that stickers kept falling off. Through trial and error, they found new ways to label. As a result, venders can choose which works better: either labeling an entire machine or using individual stickers (window clings). Venders themselves do the color coding.



#### **Machine stocking**

Some manufacturers pay a premium for location such as top three rows on left side, so vendors needed to come up with stocking solutions that would not put them at a financial disadvantage and also make it easier for the stocker. For example, they could add an additional machine that had all the healthy items. These concerns led the Health Collaborative to decide that as long as items were labeled correctly, vendors have the option to do what is easy for them.

#### **Future developments**

While vending machines are not generally the primary source of nutrition in hospitals, they are relied upon by staff on the run, and staff, visitors and sometimes even patients in off hours. Participating hospitals have taken an important step toward improving the food available to staff and visitors.

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