

Healthy, Local, Sustainable Food in Healthcare

CT Hospital Roundtable

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■ www.noharm.org



The Campaign for Environmentally
Responsible Health Care



- **Mission: To transform the health care industry worldwide, without compromising patient safety or care, so that it is ecologically sustainable and no longer a source of harm to public health and the environment**

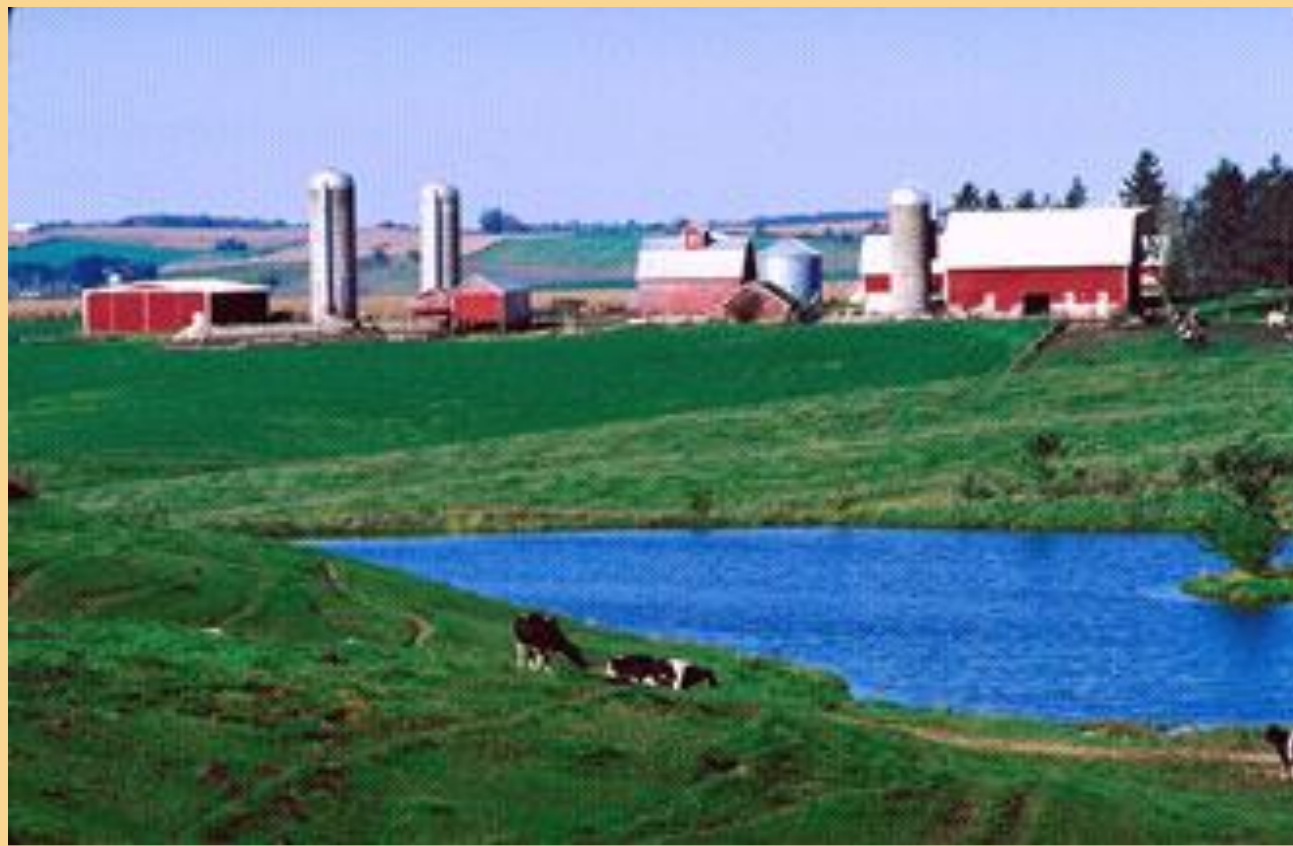
Just as the Hippocratic Oath promises to, "first, do no harm," HCWH is based on the premise that health care providers have a responsibility to eliminate practices that harm people and the environment..



“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change”

Institutes of Medicine

From our Farms of 60 Years ago...



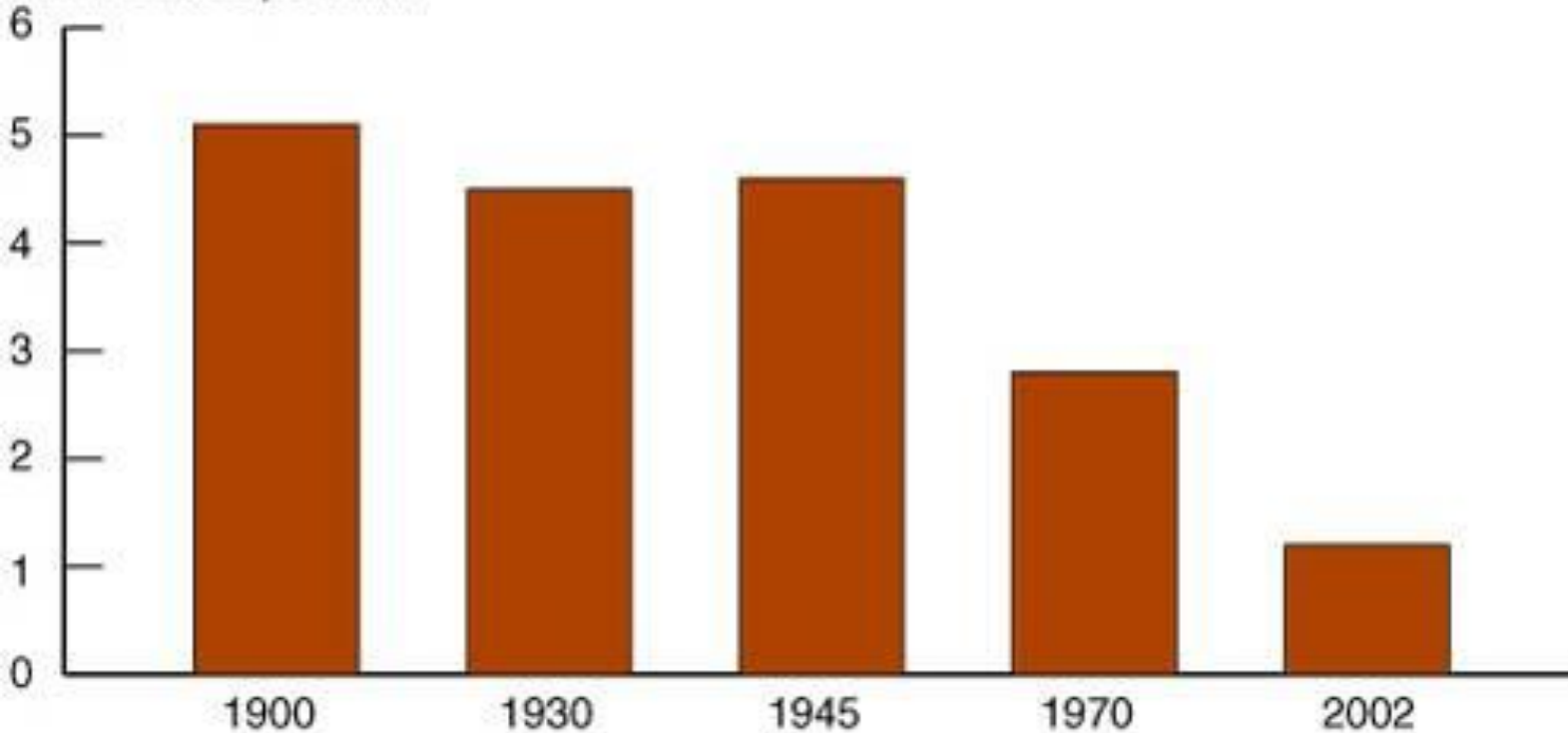
To our Current system of Industrialized Agriculture

Within 50 years our agricultural system has become almost unrecognizable



From Diverse and resilient to Specialized

Commodities per farm



<http://www.ers.usda.gov/publications/EIB3/charts.htm#fig4>

Note: The average number of commodities per farm is a simple average of the number of farms producing different commodities (corn, sorghum, wheat, oats, barley, rice, soybeans, peanuts, alfalfa, cotton, tobacco, sugar beets, potatoes, cattle, pigs, sheep, and chickens) divided by the total number of farms.

Source: Compiled by Economic Research Service, USDA, using data from *Census of Agriculture, Census of the United States*, and Gardner (2002).

From Pasture-based to Confinement based

- **“Confined” = indoors (poultry, swine, dairy)**
 - ✓ **Limited (no) outdoor access**
 - ✓ **Closed worker environment**

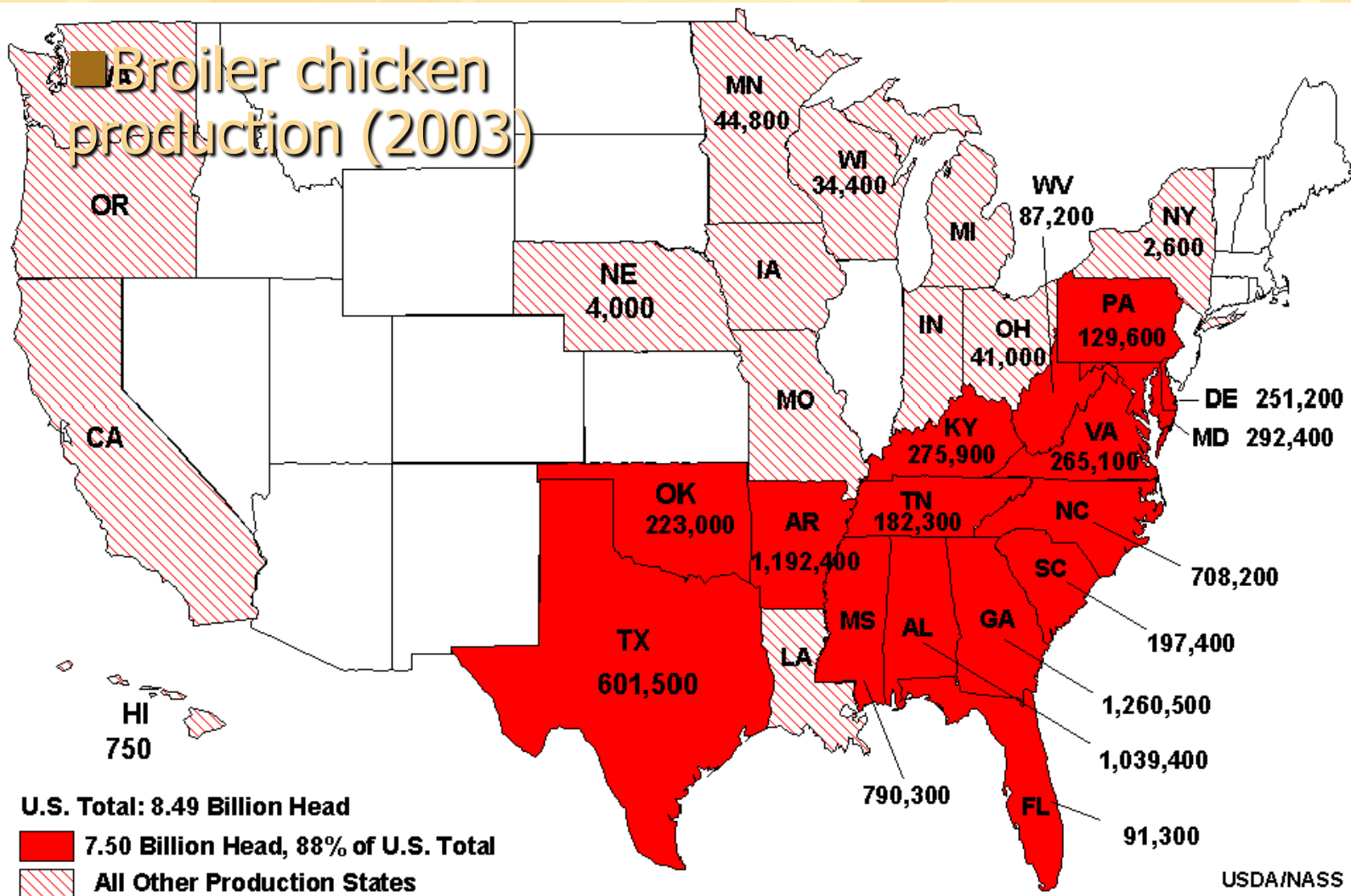


From Animal husbandry To Meat Production

- ❑ Gestation crates
- ❑ Early weaning, debeaking etc.
- ❑ Growth promoting synthetic hormones & feed additives



From Geographically dispersed to highly concentrated



Characterized by resource (fossil fuel) intensity

- Energy intensive
 - Chemical fertilizers
 - Herbicides, pesticides
 - Indoor fans, lights
- Water intensive
- Transport Intensive
 - Food miles



Pesticides exposure begins in the womb

(Whyatt et al. 2001)

- Meconium (first stool) assayed in 20 newborns (NYC):
 - Looked for DEP & DETP, 2 ethyl-metabolites common to several organophosphate insecticides: chlorpyrifos, diazinon, parathion
- Detections: 19 of 20



Pesticides

- Use of agricultural chemicals known to cause cancer in CA increased 127% from 1991 to 1998.
- In CA 90% of pesticides used are prone to drift.
- In CA farmworkers are 59-70% more likely to develop various forms of cancer than the rest of the population.

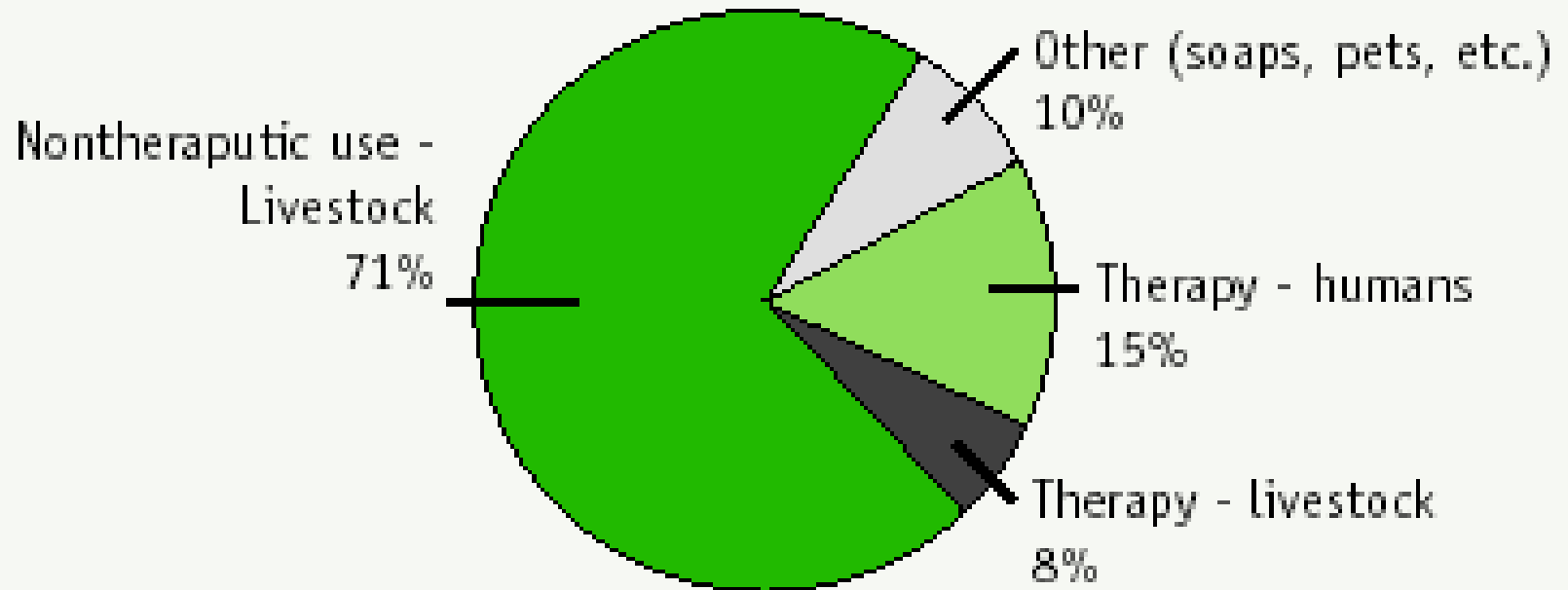


Maggie Hailahan

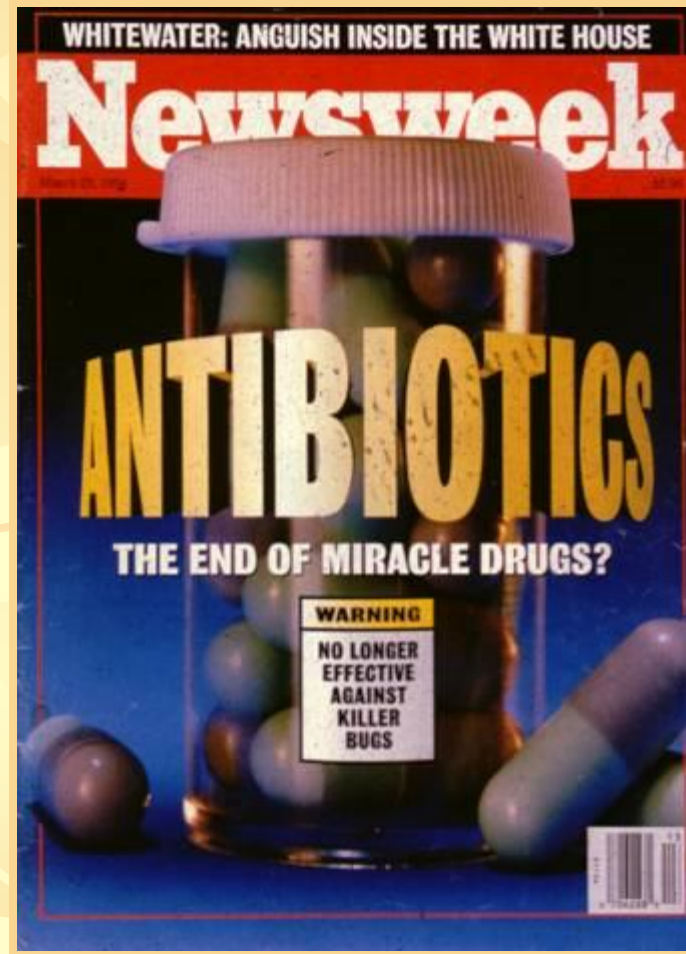
Women and Mexican Americans have the highest body burden levels of several organochlorine pesticides measured by CDC.

- "Average" person has 13 pesticides in their body
- Exposure to all commonly used pesticides ... has shown positive associations with adverse health effects.- Ontario College of Family Physicians .

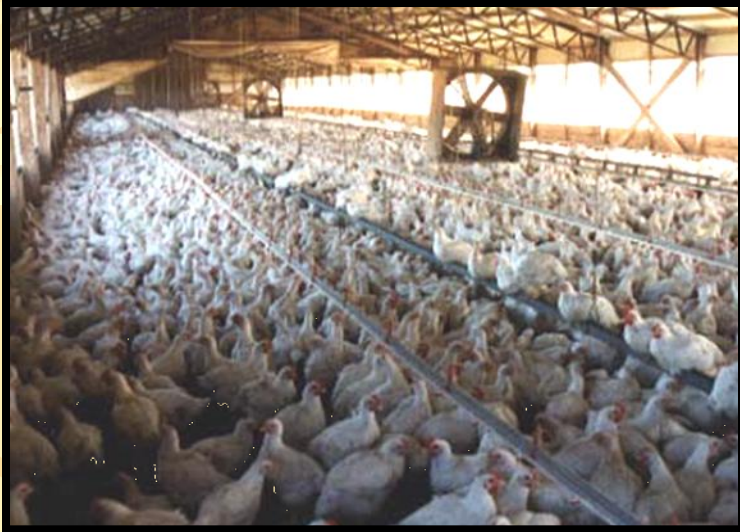
U.S. Antibiotics Consumption



We're running out of working antibiotics



Chemical Additives – Arsenic



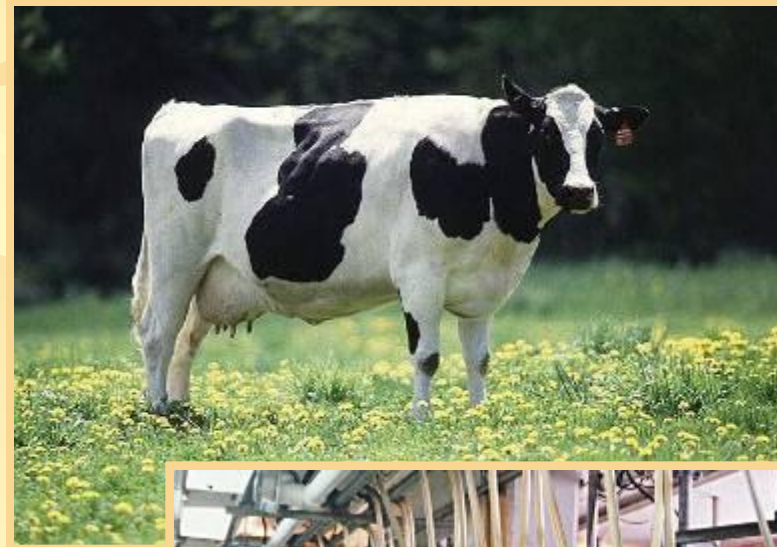
■ Uses

- Growth promotion
- Pigmentation
- “Prophylaxis” -
compensate for growing
conditions
- Not approved in Europe

■ 70 percent or more of 8.7 billion broiler chickens annually are fed arsenic (EPA)

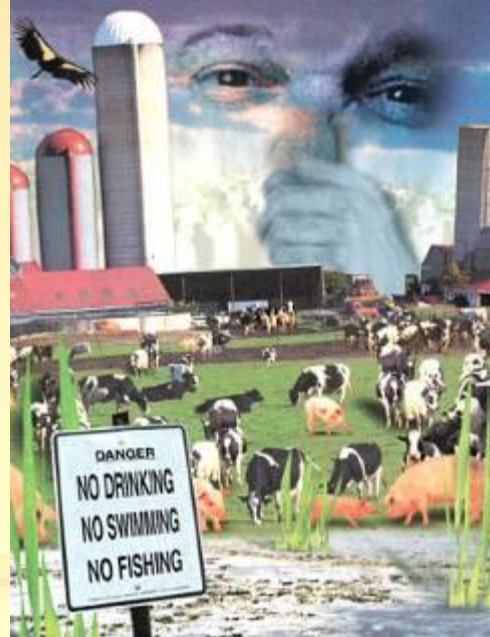
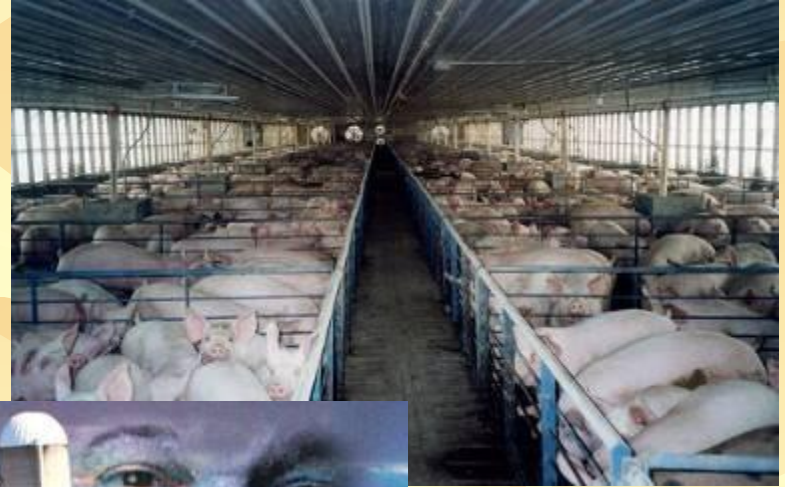
Chemical Additives – Recombinant Bovine Growth Hormone (rBGH)

- Banned in Canada, Western Europe, Japan, and Australia
- Cancer risks
- Antibiotic resistance concerns
- Animal welfare concerns



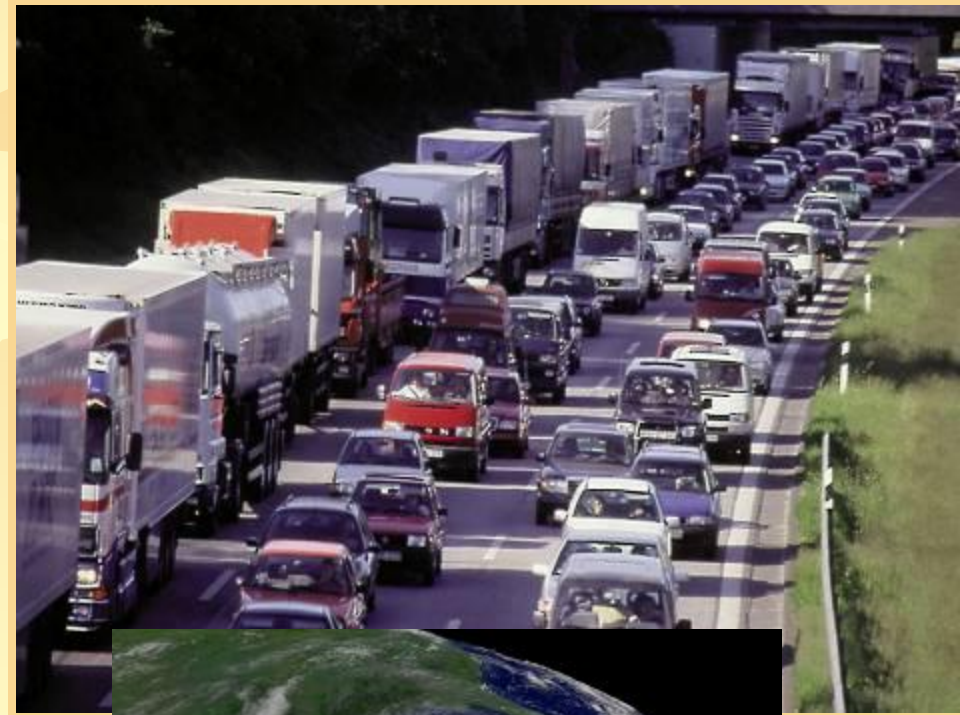
Combined Animal Feedlot Operations (CAFOS)

- Generate an estimated 575 billion pounds of animal manure yearly
- Manure uneconomical to transport distance, typically stored in open or covered pits or lagoons
- Public health problems, including the overuse of antibiotics and food borne illness.
- Geographically concentrated



Food Production and Climate Change

- Typical produce item now travels about 1,500 miles from farm
 - Trucks moving food freight account for 40% of road freight in UK
- Indirect impacts
 - GWG gases
 - Ozone
 - PMs and asthma
- Largest retailer in UK initiating carbon “label” process



Bisphenol A (BPA) / Polycarbonate

- Coating in metal cans, plastic in food containers, refrigerator shelving, baby bottles, water bottles, returnable containers for juice, milk and water, micro-wave ovenware and eating utensils.
- BPA contamination is also widespread in the environment.
- Experiments with mice reveal that chronic adult exposure to bisphenol A causes insulin resistance. Insulin resistance in people leads to Type II diabetes.

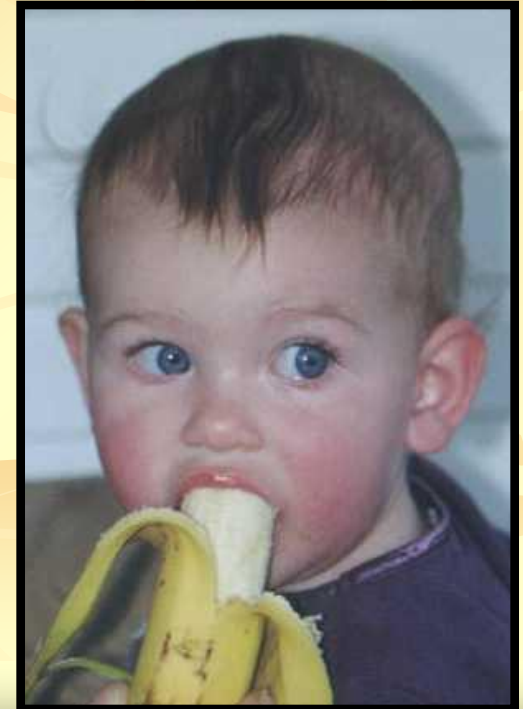


Organic diet lowers pesticides in children to non-detectable levels

■ Lu et al. 2006. Environ Health Perspect 114:260–263

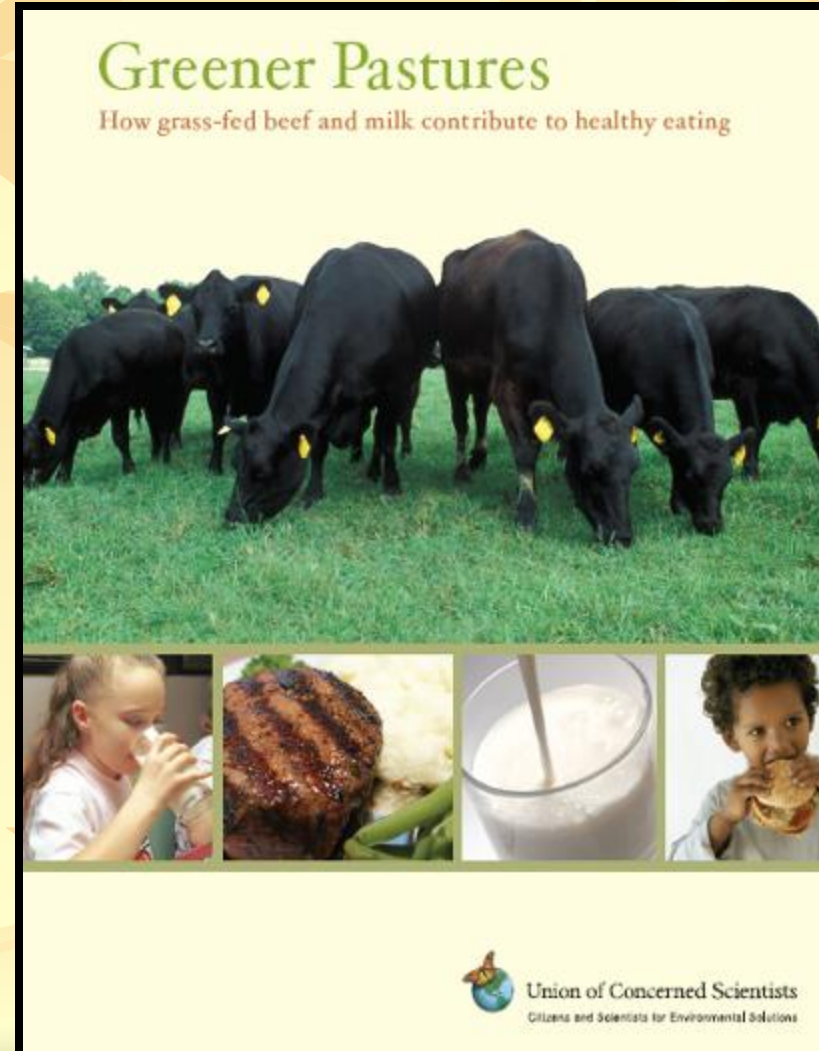
■ *"Organic diets significantly lower children's dietary exposure to organophosphorus pesticides"*

- "We found that the median urinary concentrations of the specific metabolites for malathion and chlorpyrifos decreased to the nondetect levels immediately after the introduction of organic diets and remained nondetectable until the conventional diets were reintroduced.



■ Feeding beef, dairy cattle on grass improves the fat profile of the beef, dairy

- Grass-fed or pasture raised cattle:
- ❑ Almost always produce steak, ground beef lower in total fat than conventional
- ❑ Tend to have steak with higher levels of the omega-3 fat, ALA, and sometimes with higher levels of EPA/DHA.
- ❑ Tends to produce milk with higher levels of ALA



Healthy Food in Healthcare Principles

As **places of healing**, hospitals have a natural incentive to provide food that's healthy for people and the environment in which we live.

Food supply can be met in a variety of ways which have consequences in terms of nutrition, disease risk, public health, environmental health, social and economic well being.

These are **linked** in complex ways. From the way food is grown, to the way it's packaged, shipped, consumed and discarded, **hospitals' food purchasing decisions can play an important role, both directly and indirectly, in our ecological health.**

Hospitals Respond

- Health Care Without Harm is working with hospitals to adopt food procurement policies that:
 - provide **nutritionally improved food** for patients, staff, visitors, and the general public, and
 - create food systems which are **ecologically sound, economically viable, and socially responsible.**
- By adopting food procurement policies that are ecologically sound, economically viable, and socially responsible, **health care systems demonstrate an understanding of the inextricable links between human, public, and ecosystem health.**



Benefits

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

Duluth hospital goes organic

by [Stephanie Hemphill](#), Minnesota Public Radio

November 23, 2005

Most people think one of the unpleasant things about hospitals is the food. That boring mush that passes for a meal. The white bread, the processed meat, the jelly. Could it possibly be good for you? In Duluth, two hospital food managers are trying to change all that. They're adding organic fresh fruits and vegetables to the menu. Here are some of the beginning moves in what could change the hospital dining experience.

Duluth, Minn. — St. Luke's is the smaller of Duluth's two hospitals. Their motto is, "We try harder." Several years ago, the hospital put two chefs in charge of the housekeeping, laundry, and food.



Two gourmet chefs managing the kitchen at St. Luke's Hospital in Duluth are adding organic vegetables to the menu. (MPR photo/Stephanie Hemphill)

very seriously.

In the kitchen, there's the usual stoves and dishwashers, and a long assembly line where workers fill trays for patients, based on what's ordered.

"The patient fills out the menu, indicating what entrée and salad and beverage they want," says Mark Branovan. "Then, as the tray moves down the conveyor belt, they look at the menu and put on the appropriate products." Branovan was a gourmet chef at restaurants in California's wine country. In that part of the world, they take their fresh fruits and vegetables

Setting the Table

Start a Conversation About Healthy Food

- Create a multi-disciplinary food committee or “**team**” composed of staff from: Food and nutrition services, Purchasing, Administration, Nursing, and clinicians, public affairs, ethics and quality improvement personnel.
- Explore a new understanding of healthy food and how institutions can support food production that is socially responsible, economically viable and environmentally sustainable.

EXAMPLE

John Muir Health System, CA

- A Food Committee: dietitians doctors, nurses, marketing and PR staff, employee wellness, employee education, food service managers, administrators, community benefits director, purchasing and plant operations.
- Meets quarterly, developed strategic plan; works with Green Team

“Prevention isn’t just something that happens in the doctor’s office....Our members cannot be healthy if the communities they live in are not healthy.”

Loel Solomon, Ph.D., Kaiser Permanente, National
Director Community Health Initiatives
Nutrition-A Fresh Approach
Health Leaders Media 12/2004

Sign the Healthy Food in Health Care Pledge

- The Healthy Food in Health Care Pledge is a framework that outlines steps to be taken by the health care industry to improve the health of patients, communities and the environment.
- Demonstrate leadership by sending an important signal to the marketplace and policy makers about their interest in local, nutritious, sustainable food and importantly, beginning to model healthy food practices.



The Healthy Food in Health Care Pledge

Bartels Lutheran Retirement Community - IA

[Fletcher Allen Health Care - VT](#)

Good Shepherd Medical Center - OR

St. Luke's Hospital - MN

Hackensack University Medical Center - NJ

Oregon Health and Science University Hospital - OR

Fairview Hospital - MA

[Cooley Dickinson Hospital - MA](#)

Sinai Hospital - MD

Baystate Health - MA

[Advocate Lutheran General Hospital - IL](#)

The Center for Discovery - NY

Spaulding Rehabilitation Hospital - MA

Littleton Regional Hospital - NH

Swedish Covenant Hospital - IL

Carroll Hospital Center - MD

Arroyo Grande Community Hospital - CA

Bakersfield Memorial Hospital - CA

Barrow Neurological Institute - AZ

CA Hospital Medical Center - CA

Chandler Regional Hospital - AZ

Community Hospital of San Bernardino - CA

Dominican Hospital - CA

French Hospital Medical Center - CA

Glendale Memorial Hospital and Health Center - CA

Marian Medical Center - CA

Mark Twain St. Joseph's Hospital - CA

Mercy General Hospital - CA

Healthy Food in Health Care



A Pledge for Fresh, Local, Sustainable Food

Nutrition-related chronic diseases are placing new demands on an already overburdened health care system, and taking their toll on human productivity and quality of life. Our current large scale, industrial food system from animal products and highly-refined, preservative laden, calorie-dense foods, rather than fresh fruits and vegetables, whole grains, and other high fiber foods important for health. It is a system misaligned with dietary guidelines. Moreover, the way our food is produced and distributed impacts our health and the environment in which we live. For example:

Antibiotic Resistance

The routine use of antibiotics contributes to growing antibiotic resistant bacteria. Each year 20 to 30 million pounds of antibiotics (including related antimicrobials) are used in agriculture—by volume, about 7-10 times the total antibiotics used in human medicine. Industrialized food systems that produce poultry, pork, beef, and farmed fish routinely use antibiotics as growth promoters rather

period an average of 1,500 miles to reach its destination. Through the use of diesel and other fossil fuels, vehicles unnecessarily contribute to global warming. Fertilizers and pesticides contaminate ground water in many locales and some pesticides have been found regularly in rainfall. Large-scale animal feedlot operations contribute to water pollution when untreated animal waste releases biologically active hormones, nitrites and other toxic breakdown products into watersheds.

Worker Health and Safety

Widespread pesticide use in industrial-scale food production exposes farm workers and their families to dangerous chemicals, often at levels that exceed established "safety" limits. Longer-term, low-level pesticide exposure has been linked to an array of chronic health problems including cancer, birth defects, neurological, reproductive, and behavioral effects, and impaired immune system function. Industrialized meat packing is recognized as one of the most dangerous occupations every year, over one worker

Menu of Change

Healthy Food in Health Care

A 2008 Survey of Healthy Food
in Health Care Pledge Hospitals



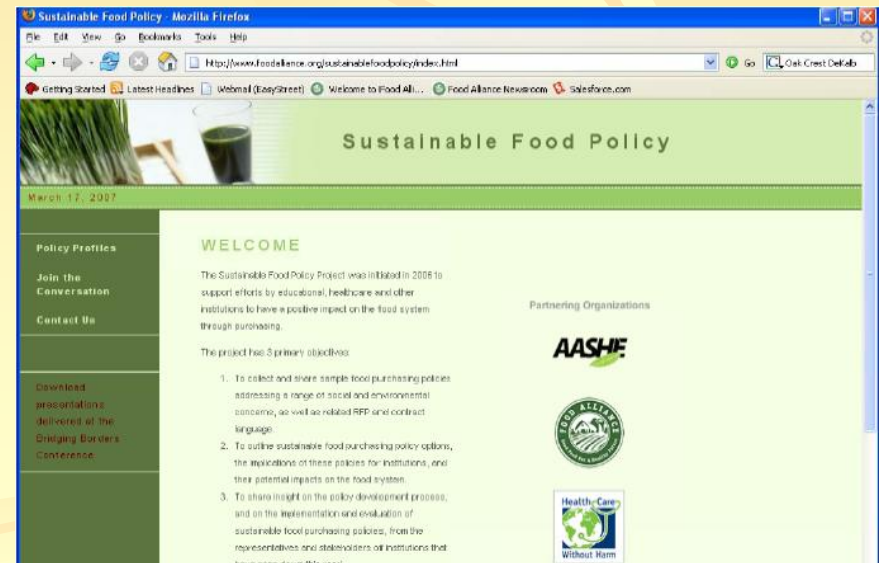
Establish a Hospital Food Policy

Strategies

- Develop a broad, integrated food policy that can then guide your facility's future efforts.
- Health care facilities and systems can play an important role in supporting the health of their staff, patients, and local and global communities by understanding that healthy food includes more than nutritional quality.

- Tool: Guide to Developing Sustainable Food Purchasing Policy

www.SustainableFoodPolicy.org



Vision for a Healthy Food System

"Kaiser Permanente aspires to provide healthier food for members, employees and visitors in a manner that promotes agricultural practices that are ecologically sound, economically viable, culturally appropriate and socially responsible.

"

-- Adopted by

KP Environmental Stewardship Council, Nov. 2004




Chez Kaiser's food revolution

Hospital experiment putting locally grown produce on patients' plates

- Carol Ness, Chronicle Staff Writer
Sunday, August 6, 2006



A cherry tomato seems hardly the stuff of revolution.

The background of the slide features a stylized, low-poly illustration of several large, overlapping leaves in shades of light yellow and orange. The leaves are arranged in a way that they appear to be part of a larger plant, with some leaves in the foreground and others receding into the background. The overall aesthetic is clean and modern, with a focus on natural elements.

“It is important that we recognize the connection between a healthy earth and healthy human beings...If we don’t have a healthy planet, we won’t have healthy human beings.”

Sr. Mary Ellen Leciejewski
Ecology Program Coordinator, Catholic Healthcare West
Hospitals Go Organic for Patients Sake
The Associated Press, 9/24/2006

CHW Food & Nutrition Services Vision Statement

CHW recognizes that food production and distribution systems have wide ranging impacts on the health of people, their communities and the ecosystems in which they live; and so

CHW recognizes that “healthy food” describes not only nutritional quality, but equally by a food system which is ecologically sound, economically viable, and supportive of human dignity and justice, and so;

CHW aspires to develop a healthy food system

We will work within our system to develop policies, procedures, contracts and education for staff, patients, suppliers, and local and global community that reflect this vision.

Creating the Dishes

Strategies for Healthier Food in Hospitals

- Antibiotic-free meat/poultry
- rBGH-free milk
- Organic and other certified foods
- Locally-sourcing food
- Menu Changes
- Certified coffees
- Farmers' markets
- Hospital gardens
- Fast-food free zone
- Compost and Reduction of food waste
- Vending machines
- Hospital food policy

Where to Begin???

- Look for the low-hanging fruit...
- Start small, build success...
- Find out where you have interest and support within your facility...
- Assess community resources...



Fletcher Allen Health Care - VT

- Compost food waste
- Organic
- rBGH-free milk / Cheese
- Fair trade coffee
- Patient menu focus on fresh and local
- Farm stand
- Signed Pledge
- Biobased disposables
- Work highlighted in FSD 9/15/2006



Baystate Health



- Signed the Pledge
- Living on Earth – NPR radio coverage
- Local Produce via CISA
- Sustainable grass-fed beef



INITIATIVE

Healthy Food in Healthcare

1. Educated leadership and staff
2. Visited hospitals with similar initiatives and networked with local farmers to establish foundation for relationship, understanding of needs, and expectations
3. Altered recipes and menu, eliminated fryer

OUTCOMES

1. Increased knowledge of sources and benefits of fresh, local produce
2. Use of healthier products (e.g. hormone free milk, fair-trade coffee, all natural yogurt and locally grown produce)
3. Improved eating habits by incorporating more nutritious, less processed foods and creating healthier menus

Employee and Patient Health & Safety

1. Visited local farmers
2. Filtered out products that contain trans-fat
3. Provide nutrition facts for daily menu and café items
4. More use of whole grains in menu, and increased availability of whole grains to employees and patients
5. Made a change in vendors



1. Ensured safety and quality of food products
2. Reduce employee and patient exposure to harmful fats
3. Nutrition facts assist employees and patients in making informed, healthier choices
4. Increased consumption of whole grains, decreased consumption of refined grains
5. Less exposure to pesticides and hormones; use of environmentally friendly cleaning products

Sustainable and Local Agriculture

1. Collaborated with agriculture students
2. Sent letters to local farmers with produce specifications
3. Initiated a barter system with a local grower for food compost
4. Purchased a healthy food kiosk
5. Purchasing environmentally friendly, disposable products
6. Recycling cans, glass, and cardboard
7. Developed a vegetable garden on the hospital's campus

1. Purchasing fresh herbs from local high school
2. Purchasing fresh, locally grown produce
3. Receive fresh produce in return for our composting
4. Host a Farmer's Market on campus, which raises awareness and promotes local agriculture
5. No Styrofoam products used
6. Less rubbish
7. Use of the fresh vegetables in our kitchen



Fairview Hospital
BERKSHIRE HEALTH SYSTEMS



Swedish Covenant - Chicago

- Local organic apples
- Grass fed Beef
- Local Produce
- Ethnic Korean / Latino Scratch Cooking
- Seasonal menus
- PlaneTree
- Food Pledge



St. Luke's Hospital-MN



- Local/Organic food
- Compost food waste
- rBGH-free milk
- Fair trade coffee
- Holiday tea
- Signed Pledge
- Lake Superior fish

Good Shepherd Medical Center-OR



- Whole foods and scratch cooking
- Organic/Local
- rBGH-free milk
- Locally grown
- Meats produced w/out hormones or non-therapeutic abx
- Biobased disposables
- Signed Pledge

Examples

Deaconess Billings , MT

- Uses Antibiotic-free Turkey
- Longstanding contract with Seder Ridge Turkey Farms to purchase locally produced, free-range turkey without antibiotics
- In 2001, hospital's contract with Sodexo ended hospital's purchases from Seder Ridge
- After pressure from the board and the community, hospital worked with Sodexo to reinstate Seder Ridge as a supplier for the cafeteria and inpatient meals.



Overlake Hospital Medical Center, WA

- Serves seafood fish that is tested for mercury and PCB.



Purchase rBGH Free Dairy Products

Issues/ Benefits

- Antibiotic resistant bacteria
- Reduce exposure to added growth factor (IGF-1)

Strategies

- Purchase dairy products without rBGH.
- There are two categories of non-rBGH milk:
 - Organic - in addition to being rBGH-free, also prohibits the use of pesticides in feed and prohibits the use of antibiotic use in cows
 - Non-organic - allows the use of pesticides and antibiotics and can be similarly priced to conventional milk.
- Work with your GPO and your distributor to purchase rBGH-free milk.
- Ask suppliers for availability and verification methods for rBGH-free dairy products.



Purchase Certified Coffee

Issues/ Benefits

- Buying certified coffee supports community development, health, and environmental stewardship.

Strategies

- Many different types of certified coffee that can address these issues, like *fair trade*, *shade-grown* and *organic*.



Examples

Cooley-Dickinson Hospital in Northampton, MA - “Way Cooley Coffee”

- In 2004 initiated a program, “Way Cooley Coffee” in conjunction with local fair-trade certified coffee roaster
- Way Cooley Coffee, 100% fair-trade and organic, is served in the coffee shop, cafeteria and patient floors, as well as is for sale in the gift shop.
- Money generated from the sale of the coffee increases the hospitals support for Hampshire HealthConnect, a program that links uninsured people with health coverage and care.

Purchase from Local Producers

Issues/Benefits

- Avoids long distance travel; overuse of plastic packaging; and chemical preservatives required for transporting food long distances.
- Reduces fuel consumption and air and water pollution associated with long-distance transport.
- Builds relationships between the urban and rural community; supports local economy.



Strategies

- Learn what locally-produced foods your vendor currently provides.
- Express a preference for purchasing fresh, locally grown, and sustainable food from your vendors.
- Investigate the percentage of foods that can be purchased outside your vendor contract.
- When your contract is up for renewal, use this as a time to negotiate the off-contract percentage purchases.

Hospital Gardens: Healthy Foods and Thriving Green Spaces



Issues/ Benefits

- Help to foster a sense of community and pride in hospital staff and offer a place of respite for patients and staff.
- Serve as demonstration gardens to educate the community about organic growing methods, integrated pest management, and the variety of foods that can be cultivated in a small urban space.
- Vegetable gardens can produce healthy food for patient or cafeteria menus. Cut flowers can be sold or used in your facility.



Sisters of Charity Lots to Gardens interns and volunteers

Cost

"What we're discovering is, it's a perception that doing the right thing is more expensive," Gummer says. "It's not a reality. . . . I haven't been a month over budget, on food or anything else."

Even if it were, a hospital comes out ahead, Gummer says. "When you're looking at food costs and health costs, you can't look at, 'How much per pound am I paying?' You have to look at the whole picture. Healthier people use less health-care resources."

Nancy Gummer, Good Shepherd Medical Center, Oregon

Baby Steps

“It started slowly: from salad greens, to organic carrots and other vegetables, and whole fruits to patients as part of the meal. It’s taken a good year, baby steps at a time, to where our cafeteria customers and visitors could select organically grown whole fruit.”

Mark Branovan, St. Luke’s Hospital, Duluth

- **FS Credit 1: Sustainable Food Policy and Plan**
- **FS Credit 2: Sustainable Food Education and Promotion**
- **FS Credit 3: Local, Sustainably Produced Food Purchasing**
- **FS Credit 4: Reusable & Non-Reusable Products**
- **FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages**
- **FS Credit 6.1: Food Donation and Composting**
- **FS Credit 6.2: Food Services Recycling**
- **FS Credit 7: Food Vendors**
- **FS Credit 8: Chemical Management for Food Services**

■ Food Service Credits



■ Food Service ■ Operational Credits



Eco-labels



Reference Table: Third Party Certified Eco-Labels

| Products | Animal Welfare Approved | Bird Friendly | Certified Humane Raised & Handled | Certified USDA Organic | Fair Trade Certified | Food Alliance Cert. | Marine Stewardship Council | Protected Harvest | Rainforest Alliance Certified | Salmon Safe |
|-----------------|-------------------------|---------------|-----------------------------------|------------------------|----------------------|---------------------|----------------------------|-------------------|-------------------------------|-------------|
| Beef/ Bison | X | | X | X | | X | | | | X |
| Lamb | X | | X | X | | X | | | | X |
| Pork | X | | X | X | | X | | | | |
| Poultry | X | | X | X | | X | | | | |
| Coffee | | X | | X | X | | | | X | |
| Tea | | | | X | X | | | | X | |
| Fruit Juices | | | | X | | | | | X | X |
| Wine | | | | X | | | | | | X |
| Milk | | | X | X | | X | | | | X |
| Eggs | | | X | X | | X | | | | X |
| Cheese | | | X | X | | X | | | | |
| Yogurt | | | | X | | | | | | |
| Fruit | | | | X | X | X | | X | X | X |
| Vegetables | | | | X | | X | | X | | X |
| Breads | | | | X | | | | | | |
| Cereals | | | | X | | | | | | |
| Grains | | | | X | X | X | | | | |
| Sugar | | | | X | X | | | | | |
| Processed Foods | | | | X | | X | | | | |
| Cocoa | | | | X | X | | | | X | |
| Chocolate | | | | X | X | | | | X | |
| Nuts | | | | X | | X | | | | |
| Oils | | | | X | | X | | | | |
| Snacks | | | | X | | | | | | |
| Premade soups | | | | X | | | | | | |
| Fish | | | | | | | X | | | |



■ <http://www.greenerchoices.org/eco-labels/>

Choosing Environmentally Preferable Food Service Ware

Reusable and Sustainable Biobased Products



Disposable food service ware—plates, bowls, cups, cutlery, clamshells and other products—is widely used in hospitals. Disposable products provide some benefits to hospitals—ease of use, minimal maintenance and reduced dishwashing needs. Yet, most of these single-use items end up in landfills, incinerators, or the world's oceans where they can cause significant harm to humans and the environment. Other potential negative impacts include:

- Depletion of nonrenewable resources—fossil fuels;
- Contribution to global warming;
- Generation of air and water pollutants from manufacturing, shipping and disposal;
- Introduction of toxic chemicals into the environment during production, use and disposal; and
- Contamination of food from leaching chemicals.

In recent years, biobased disposables have emerged as an alternative to traditional products. These products are made in whole, or in part, from renewable materials, such as corn, potatoes, sugar cane waste and perennial grasses. Though not new to the market, products made from renewable forestry materials including paper are also categorized as biobased in this document. The renewability of agricultural and forestry resources is a significant environmental attribute. Also, these products have an environmental advantage if they are composted. However, the production, use and disposal of biobased disposables may also negatively impact human and environmental health depending on a variety of factors, such as methods used to produce and harvest the renewable materials and toxicity and persistence of chemical additives used. For these reasons, it is important to choose biobased food service ware carefully.

Food Service Ware Materials: Environmentally Preferable Purchasing (EPP) Hierarchy

The raw materials used to make a product can have a significant impact on its overall environmental performance. To assist health care purchasers in choosing environmentally preferable food service ware, Health Care Without Harm (HCWH) has created the following

purchasing preference hierarchy for food service ware materials based on the environmental performance of these products across their life cycle:

| | |
|------------------------|--|
| <i>Most Preferred</i> | Reusable Food Service Ware |
| <i>More Preferred</i> | Biobased Products—Beyond Baseline Sustainability Criteria |
| <i>Preferred</i> | Biobased Products—Baseline Sustainability Criteria |
| <i>Less Preferred</i> | Biobased Products—Do not meet Baseline Sustainability Criteria |
| <i>Least Preferred</i> | Fossil Fuel-based Disposable Products |

Most Preferred: Reusable Food Service Ware

Reusable food service ware requires far fewer material resources, uses much less energy, and generates much lower levels of air and water pollutants and less solid waste in its production, use and disposal than similar disposable products.^{1,2} Switching to reusable products can also result in significant cost savings.³ To maximize the environmental benefits of reusable food service ware, hospitals need to use energy and water efficient appliances. Additionally, when purchasing reusable products it is important to avoid items made from materials whose production, use and disposal can have detrimental human and environmental health impacts, including plastics made from polystyrene, polyvinyl chloride (PVC), polyethylene terephthalate (PET) or polycarbonate. Instead choose lead-free ceramic ware or products made from glass, stainless steel, biobased materials, polyethylene or polypropylene. See the Resources section for informational aides including an on-line calculator to determine cost savings of switching to reusable cups and bowls.



FoodMed 2007

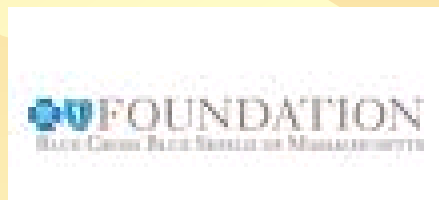
*A National Health Care Conference on Healthy Food
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Breakout Tracks:

- Obesity and the Food System
- Antibiotics, Arsenic and Poultry
- Sustainable Meat Production
- Food Waste Management
- Farmers Markets and Onsite Gardens
- Understanding Food Certification
- Food Miles and local procurement
- Healthy Vending and Catering
- Case Studies



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RESOURCES

- Health Care Without Harm Food Workgroup
www.healthyfoodinhealthcare.org
-list serve, pdfs, papers, newsletter, conference updates
- FoodMed Conference www.foodmed.org
- Healthy Food Pledge
www.noharm.org/us/food/pledge
- Green Guide for Healthcare www.gghc.org

