

# Healthy Food in Health Care

Clean Med, Chicago, IL

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Jamie Harvie, P.E.

Institute for a Sustainable Future - Health Care Without Harm

[www.isfusa.org](http://www.isfusa.org)    [www.healthyfoodinhealthcare.org](http://www.healthyfoodinhealthcare.org)

[harvie@isfusa.org](mailto:harvie@isfusa.org)



- HCWH has grown from an initial 23 founding organizations to **436 organizations in 42 states and 52 countries.**
- Among the coalition members are: the American Nurses Association, the American Public Health Association, the International Society of Doctors for the Environment, Breast Cancer Action, AFL-CIO, Central Conference of American Rabbis, Kaiser Permanente, Catholic Healthcare West, Catholic Health Association, Swiss Hospital Association, IATP, Prevention Institute, Land Stewardship Project.
- The coalition has attracted the attention of major health care systems, regulatory bodies and industry leaders throughout the United States.

# Overview

- Industrial Agriculture and Ecological Health
- Key Issues in Food Production and Environment
  - Energy Use and Climate Change
  - Intensive Animal Production
  - Pesticides
- Examples and Tools for Change

# Obesity In Context

- Poor nutrition is a risk factor for four of the six leading causes of death in the United States —heart disease, stroke, diabetes and cancer.(1)
- Diet-related medical costs for six health conditions—coronary heart disease, cancer, stroke, diabetes, hypertension, and obesity—exceeded \$70 billion in 1995 (Nestle, 2003)
- The estimated number of hospital discharges with gastric bypass increased from 14,000 in 1998 to 108,000 in 2003 (Shinogle, Owings, and Kozak 2005).
- Clinical interventions are costly and not in keeping with successful public health strategies

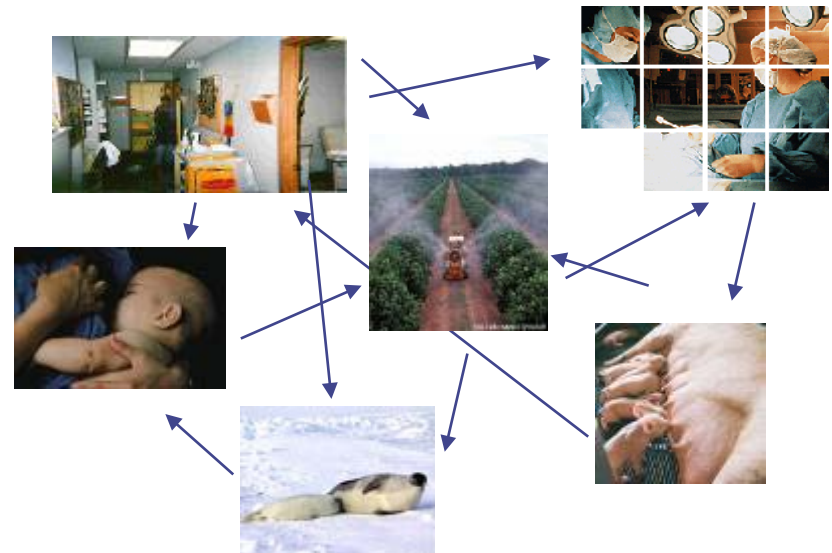
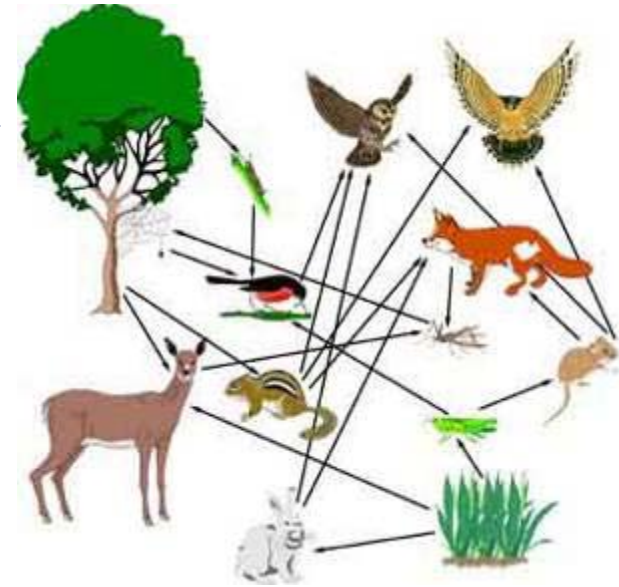




“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change”

# An Ecological Approach

- The complexity of interests requires a systems, or ecological approach.
- Such an approach is challenging because it is not linear and requires observation of the whole context,





# Today's Industrialized Agriculture



Within 50 years our agricultural system has become almost unrecognizable







# Food Industry Consolidation

- Tyson Food responsible for 25% or all US chicken sales
- 54 percent of U.S. livestock are now concentrated on 5 percent of livestock farms.
- 5 Seed companies control 75% of global seed sales
- Cargill and Archer Daniels Midland control 75% of global market for cereal grains.
- 6 cents of every dollar spent on a loaf of bread goes to the wheat farmer – about as much as is spent on the plastic, petroleum-based wrapper



# Ecological Costs of Biological Manufacturing

- Human Health
  - Nutrition Related
    - Sugars / oils/ commodities
    - Heart disease, stroke, diabetes, etc
- Social Health
  - Community Health – Loss of Family Farms, Food Access
  - Moral Ethical Concerns – Humane Treatment, Child Labour, Working Conditions
- Environmental Health
  - Climate Change
  - Water Pollution
  - Habitat Loss
  - Toxics

# Food and Climate Change – An Evolving Field

- EU level analysis: 31% total green house gas (GHG) emissions
- Food in the UK: over 20% total GHG emissions
- Dutch study: 15% total carbon emissions
- US study: 10% total energy use

\* Full basket of GHGs very important for food: CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>  
(refrigerant gases)

# Climate change and Health

- Health effects of extreme weather events
- Air pollution-related health effects
- Changed patterns of vector borne diseases
- Population Displacement

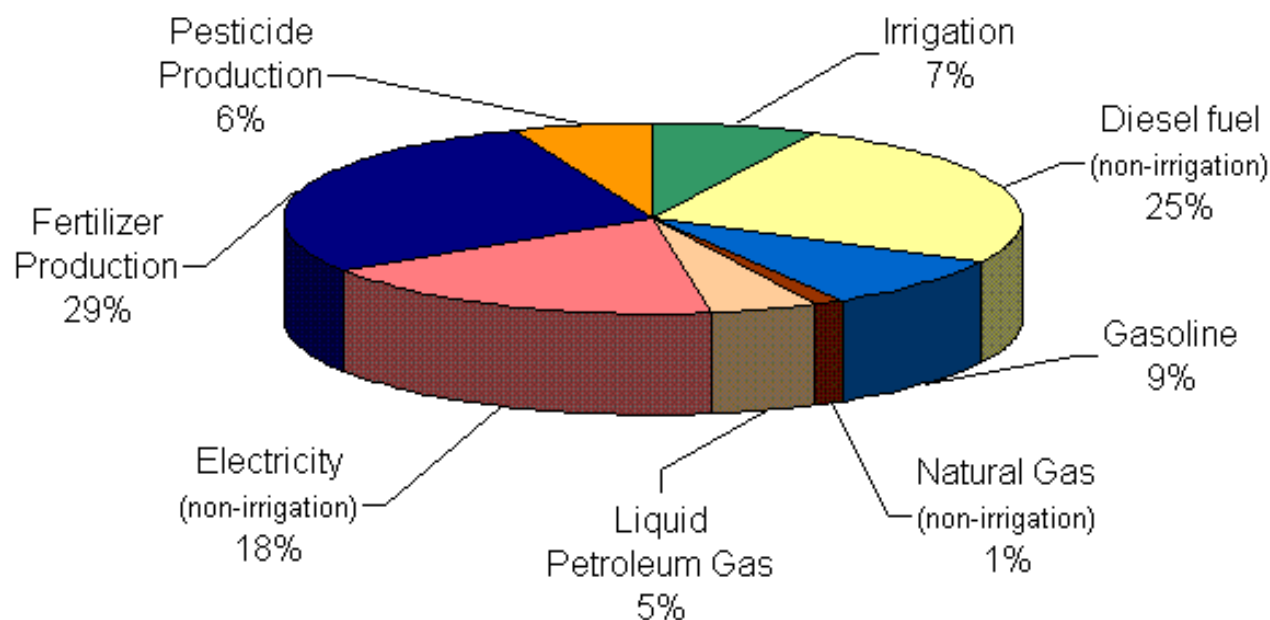


Health Canada



WHO

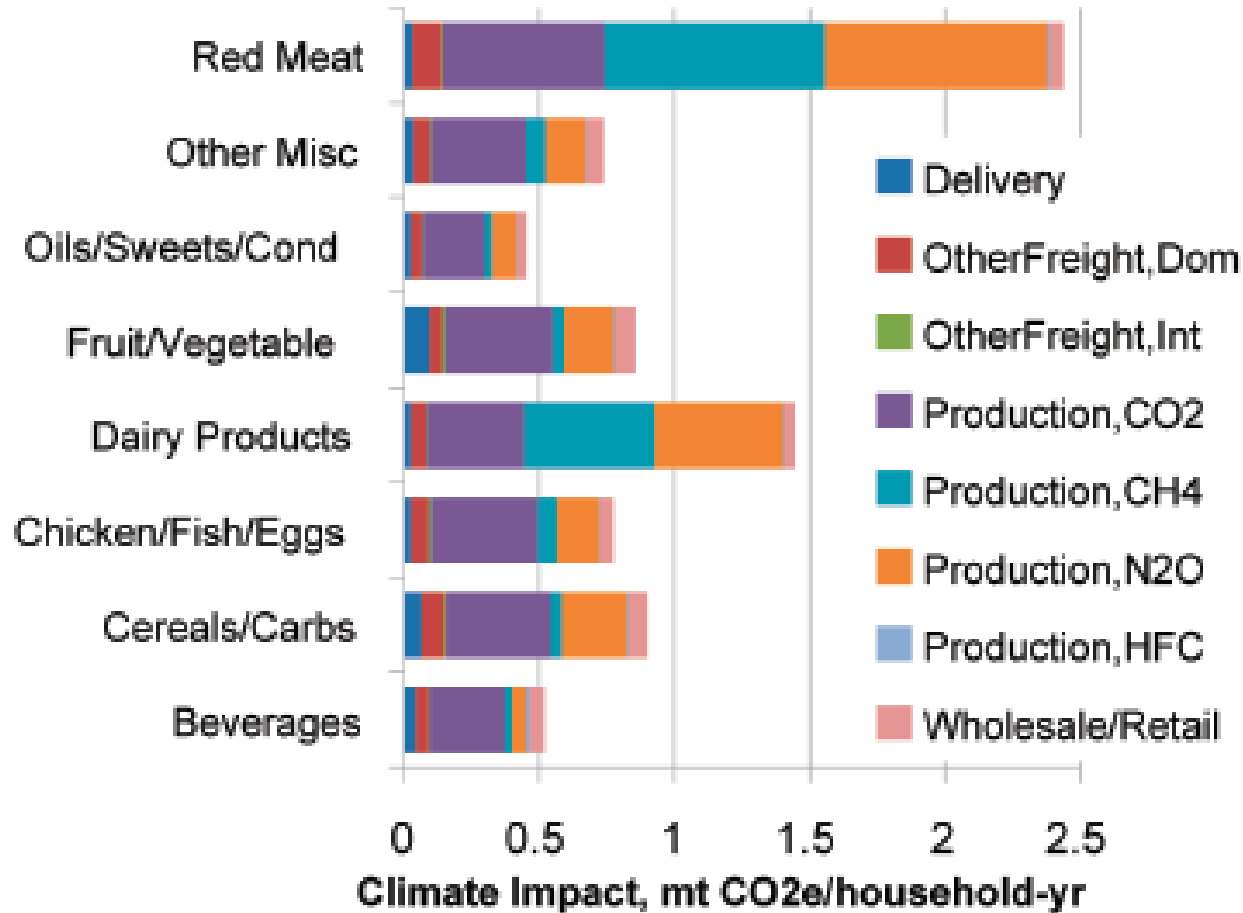
## U.S. Farm Energy Use, 2002



Notes: Total energy use for agricultural production in 2002 was 1,691 trillion Btu. This includes direct farm energy use of 1,113 trillion Btu and 578 trillion Btu for pesticide and fertilizer production. Diesel and gasoline are used in farm vehicles for mechanized planting, tilling, chemical applications, disking, and harvesting. Liquid petroleum gas and natural gas are used in large part for drying grains. Electricity is used primarily for stationary activities, such as facility operations and dairies. Energy for irrigation comes from electricity, diesel, and natural gas.

Source: Compiled by Earth Policy Institute from USDA; USDOE; Duffield; Miranowski

# Red Meat – The Climate Change’ Bad Actor



# Climate Change: Food Miles or Food Types ?

- Different food groups exhibit a large range in green house gas (GHG) intensity
  - On average red meat is around 150% more GHG intensive than chicken or fish.
- All food groups have comparable transportation GHG intensity.
- Thus, a dietary shift can be a more effective means of lowering an average household's food-related climate footprint than minimizing transportation i.e. “buying local”.
- **Shifting less than one day per week's worth of calories from red meat and dairy products to chicken, fish, eggs, or a vegetable-based diet may achieves more GHG reduction than buying all locally sourced food.**

# U.K. Hospitals Pull Meat from Menus

"This is not just about doing things more efficiently, it's about doing things differently, because efficiency is not going to get us to big cuts... What will healthcare look like in 2030-2040 in a very low carbon society? It will not look anything like it looks now."

Dr. David Pencheon, UK NHS

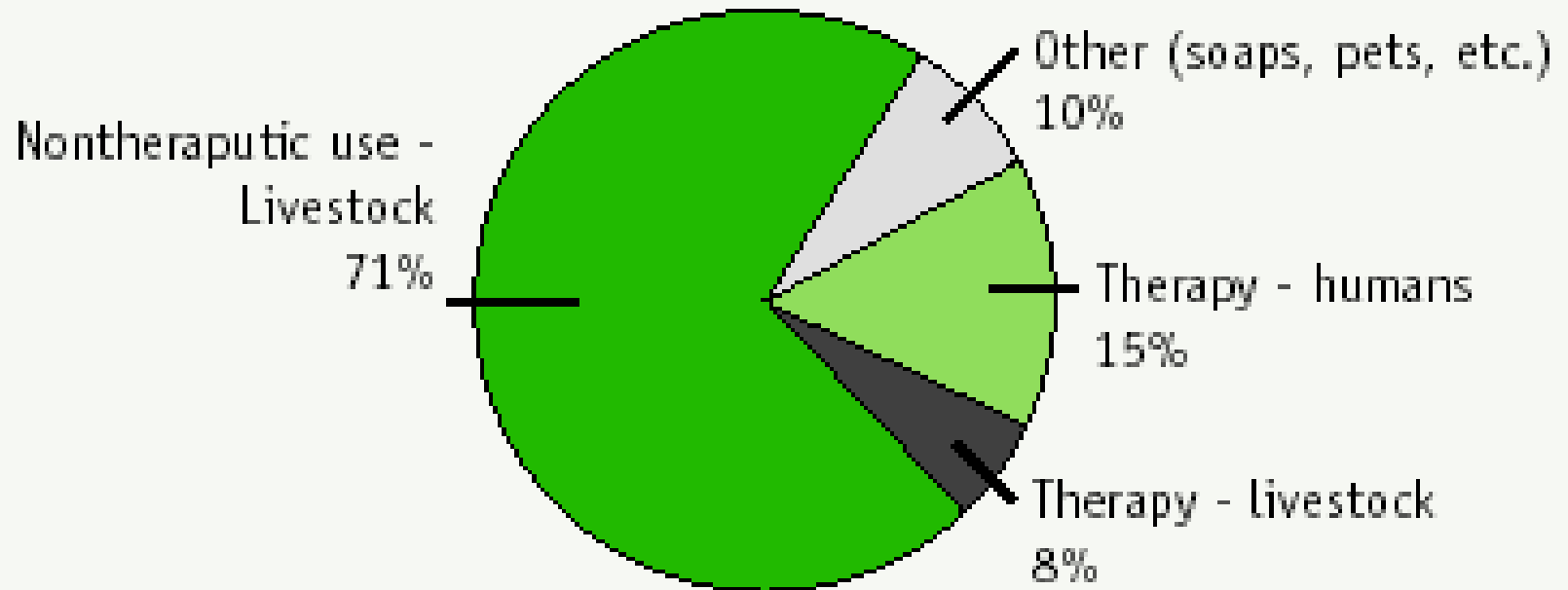


# Intensive Animal Production

- From Animal husbandry To Meat Production
  - Gestation crates, Early weaning, debeaking, Growth promoting synthetic hormones & feed additives
- From Geographically dispersed to highly concentrated
- From Pasture-based to Confinement based



# U.S. Antibiotics Consumption



# Antibiotic Resistance

“Clearly, a decrease in antimicrobial use in human medicine alone will have little effect on the current [antibiotic-resistant] situation. Substantial efforts must be made to decrease inappropriate overuse in animals and agriculture as well.”

U.S. Institute of Medicine  
National Academy of Science



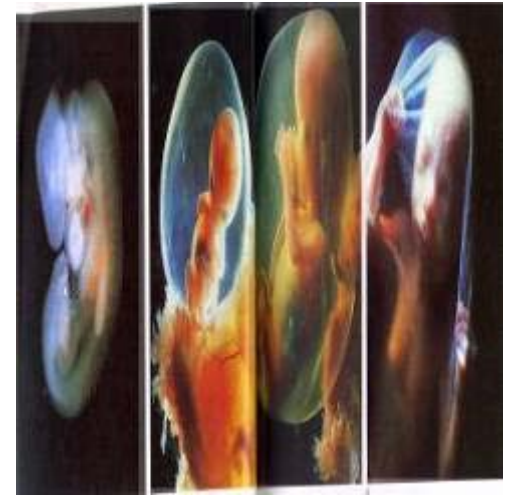
“Overuse and misuse of antimicrobials in food animals contribute to the emergence of resistant forms of disease-causing bacteria. Such resistant bacteria can be transmitted from food animals to humans, *primarily via the food.*”

World Health Organization Global Guidelines,  
2000

# Body Burden:

Pesticides exposure begins in the womb (Whyatt et al. 2001)

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





Maggie Halahan

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

- One hundred percent of people tested for pesticides in both their blood and urine have at least three of the 23 pesticides in their bodies.
- The average person in this subgroup of the study carries 13 of the 23 pesticides measured.

**National Health and Nutrition Examination Survey**  
Second National Report on Exposure to Environmental Chemicals  
CDC 2003

“Exposure to all commonly used pesticides ... has shown positive associations with adverse health effects.”

Ontario College of Family Physicians  
2004

# Pesticides in Produce (EWG)

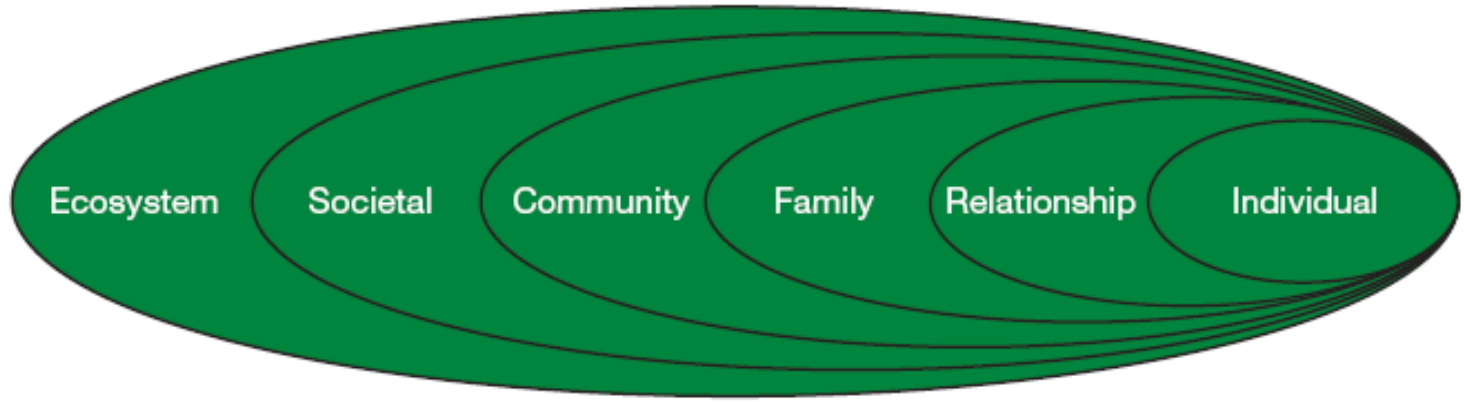
## 12 Most Contaminated

Peaches  
Apples  
Sweet Bell Peppers  
Celery  
Nectarines  
Strawberries  
Cherries  
Pears  
Grapes (Imported)  
Spinach  
Lettuce  
Potatoes



## 12 Least Contaminated

Onions  
Avocados  
Sweet Corn (Frozen)  
Pineapples  
Mango  
Asparagus  
Sweet Peas (Frozen)  
Kiwi Fruit  
Bananas  
Cabbage  
Broccoli  
Papaya



## Ecological Model of Health / Disease

- Progressive nesting of individuals within families within communities and finally within ecosystems.
- Variables at any level can directly or indirectly influence measures of health at any level.
- Influences may be identifiable as individual markers or as community level markers

# Healthy Food in Healthcare

- **Proximate** - originating from the closest practicable source or the minimization of energy use
  - **Healthy** as part of a balanced diet and not containing harmful biological or chemical contaminants
  - **Fairly** or cooperatively traded between producers, processors, retailers, and consumers
  - **Non Exploiting** of employees in the food sector in terms of rights, pay, and conditions
  - **Environmentally Beneficial** or benign in its production (reduced inputs such as pesticides, fertilizers, energy use, etc.)
  - **Accessible** both in terms of geographic access and affordability
  - **High** animal-welfare standards in both production and transport
  - **Socially inclusive** of all people in society
  - **Encouraging knowledge** and understanding of food and food culture
- (Sustain)

# Professional Engagement

- American Public Health Association (2007)
  - *Policy Statement “Toward a Healthy, Sustainable Food System”*
- American Dietetics Association (2007)
  - *Primer -Healthy Land, Healthy People: Building a Better Understanding of Sustainable Food Systems for Food and Nutrition Professionals*
- California Medical Association (2007)
  - *Resolution - “Improving Health Through Sustainable Food Purchasing”*
- American Nurses Association (2008)
  - *Resolution “Healthy Food in Healthcare”*
- Minnesota Academy of Family Physicians (2008)
  - *Resolution ” Improving Health Through Sustainable Food Purchasing”*



# 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.

## 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







LOOK  
INSIDE -  
MORE  
POCKETS



# 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



## 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's boring mush that passes for a meal. The white bread, the processed meat, the tall 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. A 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 be, "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 ordered.

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

- Organic food
- Local Bison Burgers
- Compost food waste
- rBGH-free milk
- Fair trade coffee
- Holiday tea
- White Bean Cookies
- Local Granola
- Lake Superior fish
- Next steps

# Bartels Lutheran Home-Iowa

- ~25% local
- Beef without hormones or nontherapeutic antibiotic use
- Signed Pledge
- Healthcare Caterer 9/06
- Next steps



# Fletcher Allen Medical Center- VT

- Compost food waste
- Organic
- rBGH-free milk and cheese
- Fair trade coffee
- Patient menu focus on fresh and local
- Farm stand
- Signed Pledge
- Biobased disposables
- Local beef
- Sustainable Café
- Honey Bees



# Europe

- Austria – Vienna Hospital Association 32% organic meal / 80% food Austrian
- Denmark -West Zealand 50% organic food
- United Kingdom –
  - Royal Cornwall Hospitals Trust 41% local produce, cut food miles by 67%
  - London's Royal Brompton Hospital menu 18% local or organic



# Royal Brompton Hospital Patient Food

- All soups made from ‘scratch’
- Organic Bread rolls
- Two organic meat dishes / week
- Only beef and lamb are imported
- Seasonal menus, most produce fresh
- Fresh fruit at every meal
  - local/organic/fair trade
- All custard/milk puddings made fresh from organic milk.



# The Healthy Food in Health Care Pledge

More than 240 hospitals...

“recognize that ... healthy food must be defined not only by nutritional quality, but equally by a food system that is economically viable, environmentally sustainable, and supportive of human dignity and justice “



The poster features the title "Healthy Food in Health Care" in large green font, with a "Health-Care Without Harm" logo in the top right. Below the title is the subtitle "A Pledge for Fresh, Local, Sustainable Food". The main text is divided into three columns: "Antibiotic Resistance", "Worker Health and Safety", and a column starting with "Nutrition-related chronic diseases".

**Healthy Food  
in Health Care**  
A Pledge for Fresh, Local,  
Sustainable Food

**N**utrition-related chronic diseases are placing new demands on an already overwhelmed health care system, and taking their toll on human productivity and quality of life. Our current large-scale, industrial food system favors animal products and highly refined, preservative-laden, ultra-processed 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 740 times the total antibiotics used in human medicine. Industrialized food systems that produce poultry, pork, beef, and farmed fish routinely use antibiotics to growth-promote rather than to prevent 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 facilities contribute to water pollution when untreated animal waste releases biologically active hormones, viruses and other toxic breakdown products into waterways.

**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 "industry" 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 quarter

- 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



# FoodMed 2009

The Third International Conference on Healthy Food in Healthcare

**SAVE THE DATE**

**Detroit June 30<sup>th</sup> – July 1<sup>st</sup>**

## 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



**[www.foodmed.org](http://www.foodmed.org)**

Premier ▪ MHA ▪ Sodexo ▪ HCWH ▪ Morrison ▪ Kellogg Foundation

# RESOURCES

- Health Care Without Harm Food Workgroup  
[www.healthyfoodinhealthcare.org](http://www.healthyfoodinhealthcare.org)
- American Dietetic Association Hunger and Environmental Nutrition Dietary Practice Group  
[www.hendpg.com/](http://www.hendpg.com/)
- FoodMed Conference [www.foodmed.org](http://www.foodmed.org)
- Healthy Food Pledge  
[www.noharm.org/us/food/pledge](http://www.noharm.org/us/food/pledge)
- Green Guide for Healthcare [www.gghc.org](http://www.gghc.org)
- GGHC Food Service Credits  
[www.noharm.org/us/food/resources#GGHC](http://www.noharm.org/us/food/resources#GGHC)
- Pesticides in Produce [www.foodnews.org](http://www.foodnews.org)