

## Food, Farms, and Health

### Linking Agriculture to Health

CHE-WA presentation  
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## Local efforts in Public Health

- **King County Overweight Prevention Initiative**  
<http://www.metrokc.gov/health/overweight/index.htm>
- **Farm to School Connections Team**  
<http://king.wsu.edu/foodandfarms/farmtoschool.htm>
- **Seattle/King County Acting Food Policy Council**  
<http://king.wsu.edu/foodandfarms/foodpolicycouncil.htm>
- **W.K. Kellogg Foundation Food and Fitness Initiative for Seattle and King County**  
Grant-making efforts co-convened by Public Health and WSU King County Extension

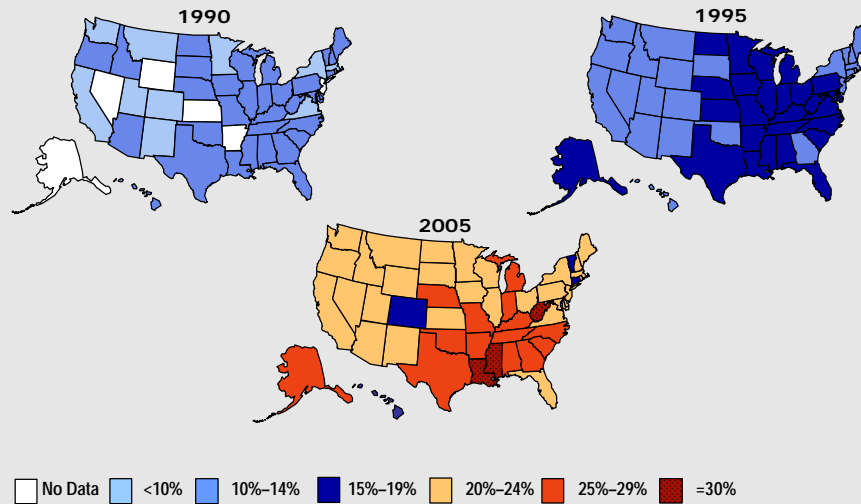
Also:

- Nutrition Education
- Senior Nutrition
- WIC Nutrition
- WIC and Senior Farmers Market Nutrition Programs

# Changing health of the nation

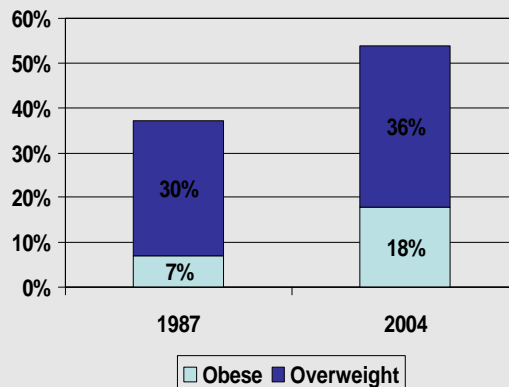
## Obesity Trends\* Among U.S. Adults BRFSS, 1990, 1995, 2005

(\*BMI  $\geq$ 30, or about 30 lbs overweight for 5'4" person)



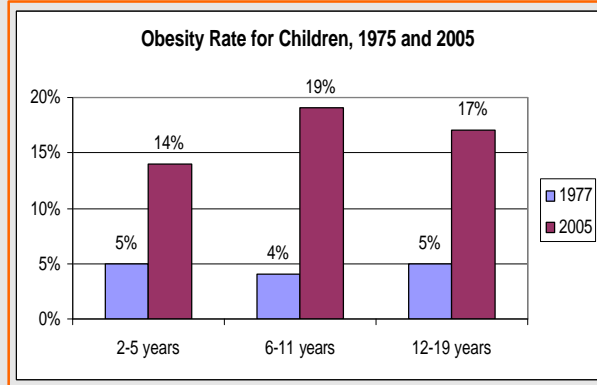
# The health of our community

- Adult overweight and obesity trends rising sharply in KC
- Adult obesity doubled in 17 years in KC



## Childhood Obesity

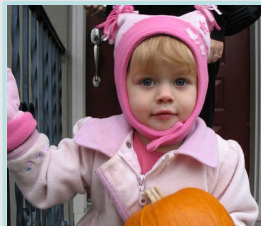
*“Currently one third of American children and youth are either obese or at risk of becoming obese.”*



Source: Institute of Medicine, 2006

## Impact of Obesity on Life Expectancy

*“I think we’re looking at a first generation of children who may live less long than their parents as a result of the consequences of overweight and type 2 diabetes.”*



**Francine Ratner Kaufman, MD**

Head, Division of Endocrinology & Metabolism  
Children’s Hospital Los Angeles

## What is the state of our health?

- Highest obesity rates in history
- Sedentary lifestyle/physical inactivity
- Increased consumption of low nutrition, high calorie foods
- High stress culture



Skyrocketing health care costs

Significant increases in:

- Hypertension
- Atherosclerosis
- Diabetes
- Stroke
- Asthma
- Kidney Disease
- Liver Disease

## Historical impacts on today's situation around agriculture and health

Major National Funding entities have exclusive and overlapping missions around food, health and the environment:

- **National Institutes of Health**  
*NIH is the steward of medical and behavioral research for the Nation. Its mission is science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.*
  - Basic and clinical research on chronic diseases; significantly less spent on prevention
  - Development of pharmaceutical and other disease treatments
- **Centers for Disease Control and Prevention**  
*CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States.*
  - Public Health research and education/program and policy interventions for prevention-based approach
- **United States Department of Agriculture**  
*Food, Nutrition and Consumer Services works to harness the Nation's agricultural abundance to end hunger and improve health in the United States.*

Today, a new conversation is emerging around overweight and obesity to bring together people in health care, public health education and outreach, research, agriculture and nutrition to begin a conversation that has never happened in the history of America to this extent.

## Reasons to link agriculture to health

Two key focal points are:

- Increasing prevalence of obesity
- 2007 Farm Bill

This new conversation is allowing for a broader set of topics that include:

- farmworker rights
- health equity
- environmental justice
- food security
- preservation of family farms
- animal rights

Engaging the environmental movement, the health sector and social justice initiatives can create a powerful force to advocate for a safe, healthy, just, and sustainable food supply.

## Reasons to link agriculture to health

### WHY THE TIME IS RIPE TO LINK AGRICULTURE AND HEALTH

Adapted from the Prevention Institute's Cultivating Common Ground report (2004)

1. Health impacts everyone and we all eat.
2. Obesity along with other food and physical inactivity-related chronic diseases have long term consequences for our nation's health.
3. Health disparities—higher rates of diabetes, stroke, asthma, and other chronic diseases among African Americans, Native Americans, Latinos, and people with low incomes—are a primary public health concern related to the food system.
4. Good eating habits and increased access to healthy food are key ways to prevent chronic disease and reduce demands on the health care system.
5. Awareness is growing within the health sector that the environment is an important influence on individual health.
6. Health sells. There is an opportunity to take back health claims from the processed food industry and attach them to fresh, local (sustainably produced) food.

[http://www.preventioninstitute.org/pdf/Cultivating\\_Common\\_Ground\\_112204.pdf](http://www.preventioninstitute.org/pdf/Cultivating_Common_Ground_112204.pdf)

## Evidence linking environmental toxins to nutrition and health

- **In the effort to feed their babies well through breastfeeding, a group of 40 Northwest-based mothers learned that their breastmilk contained high levels of toxic flame retardants PBDEs (2004 study by the Environmental Working Group and follow up data analyses in 2005)**

[http://www.sightline.org/press/releases/rel\\_pbdes\\_\\_pcbs\\_aug\\_05](http://www.sightline.org/press/releases/rel_pbdes__pcbs_aug_05)

- **A study by the University of Washington and Emory University showed that organic diets lower children's exposure to two common pesticides: malathion and chlorpyrifos. There was a "dramatic and immediate protective effect."**

Environ Health Perspect. 2006 Feb;114(2):260-3

## Nutrient loss occurring in our food supply

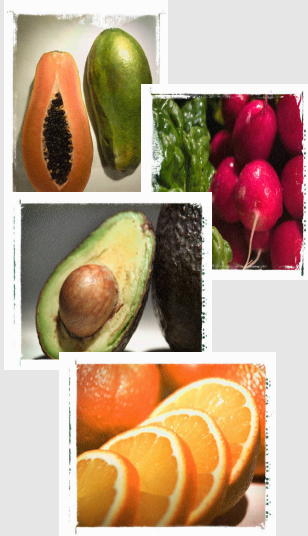
**Organically grown fruits and vegetables are proving to have higher levels of antioxidants, vitamins and minerals than their conventionally grown counterparts.**

- U Texas study: Six out of 13 nutrients had declined in these crops over the 50-year period from 1950-1999
  - Three minerals, phosphorous, iron and calcium, declined between 9 percent and 16 percent.
  - Protein declined 6 percent.
  - Riboflavin declined 38 percent.
  - Ascorbic acid declined 15 percent.
- British study showed similar decreases in nutrient density between 1930 and 1980
  - Significantly lower levels of calcium, magnesium, copper and sodium in vegetables, and of magnesium, iron, copper and potassium in fruit.

**An increase in chemical fertilizers, pesticides and monoculture farming has led to a decrease in the nutritional value of our produce.**

*Sources: Donald R. Davis: "Trade-Offs in Agriculture and Nutrition," Food Technology, March 2005, Vol. 59, No. 3; Virginia Worthington: "Nutritional Quality of Organic Versus Conventional Fruits, Vegetables and Grains." The Journal of Alternative and Complementary Medicine, Vol. 7, No 2, 2001; Anne-Marie Mayer: "Historical Changes in the Mineral Content of Fruits and Vegetables," British Food Journal, 99/6, 1997.*

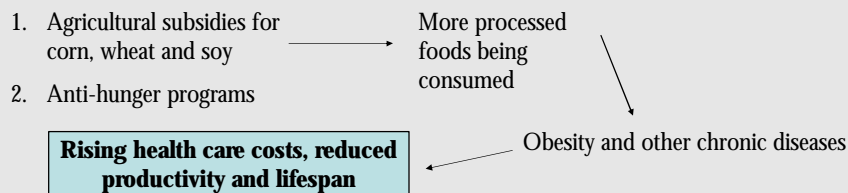
## Organic Certification of Food



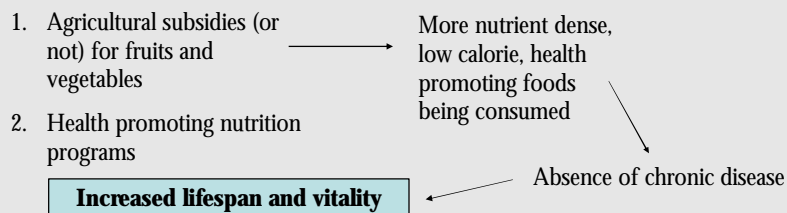
- **“Organic” label means:**
  - Produced under certain conditions,
  - Without synthetic pesticides, hormones or antibiotics, and
  - Certified by the USDA or an independent third party.
- **Purchasing certified organic may:**
  - Improve human health;
  - Help protect agricultural workers;
  - Protect our air and water;
  - Reduce fossil fuel inputs; and
  - Create a market that supports healthy, environmentally-friendly growing practices.

## Shifting to new priorities

### Our current funding priorities linking agriculture and health:



### What is our vision for the future?



**For more information:**

**Community Food Security Coalition**  
[www.foodsecurity.org](http://www.foodsecurity.org)

**Environmental Working Group**  
<http://www.ewg.org/>

**Institute for Agricultural and Trade Policy**  
<http://www.iatp.org/>

**United States Department of Agriculture**  
[www.usda.gov](http://www.usda.gov)

**Thank you!**