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Section B

Food Systems and Alternatives to the Status Quo
A watershed includes all the land drained by a particular river or stream.

Analysis of watersheds is a systems approach to water issues.

Definition of a Foodshed

■ Foodshed
  - By analogy, analysis of foodsheds is a systems approach to food supply—tracking the flow of food or farm inputs from one geographic area to markets in another and, ultimately, to the consumer.

Source: University of Wisconsin Center for Integrated Agricultural Systems.
A food system encompasses everything from farmland and farm inputs to the table

- Land, farm inputs (water, fertilizer, seeds, energy, pesticides, animal feed)
- Outputs (crops, food, manure, water and air pollutants, environmental degradation)
- Transportation, processing, packaging, marketing
- Purchasing by consumers for home use
- Purchasing by institutions, restaurants, etc.
- Eating

Global Food System

- Provides food for the world
- Provides food to agriculture-poor regions of the world
- Brings consumers produce that cannot be grown in their area, e.g., coffee and bananas to Europe
- Brings out-of-season produce to consumers
- Transports some produce and crops long distances to areas where demand could have been met by local farmers
Community Food Systems

- Organizing locally with a systems approach
  - Addressing food security of a particular local region or foodshed
  - Emphasizing eating locally produced, seasonal food produced using sustainable methods
  - Working to address local justice, hunger, and poverty issues
  - A key concept of community food security is that the health of the community is tied to the health of the land, i.e., methods of agricultural production are important

Source: Community Food Security Coalition.
Think Globally: Act Locally?

- In food issues, we must think and act both globally and locally
- No single bullet will fix the current complex, global food system
- Most of all, we must learn to think about food again—
  - How our food is produced and by whom
  - Where our food is produced
  - What food is produced and whether it is nutritious
  - What food system we are willing to support with our own food purchases
“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.”

— Margaret Mead
Alternatives to the Current Food System

- How our food is produced and by whom
- Where our food is produced
- What food is produced
- What sort of food system are we willing to support individually and as a society?
Ecologically sustainable food production is essential

A key concept of the community food security movement is that the health of the community is tied to the health of the land

Sustainable agriculture is agriculture that does not deplete or pollute the soil or water so that future generations will also have means to produce food
- Limits pesticide and fertilizer use
- Uses less energy for production
- Preserves agrobiodiversity
- Preserves or enhances soil depth and fertility
- AND, is economically viable for farmers and communities

Contour plowing and alternate rows

Image source: USDA.
Food labeling is an attempt to help consumers through the maze of concerns about production method and their social and ecological impacts.

- Examples include:
  - Organic food
  - Free-range, grass-fed beef
  - Fair-trade, shade-grown coffee
  - Sustainable ocean fisheries

- Resources (also in the Web Supplement) to investigate this issue further:
  - Consumers Union guide
  - *Peeling Back the Label*
Locally produced food in a regional system ...
- Decreases “food miles” (average vegetable travels 1,500 miles) and saves on transportation and production of greenhouse gases
- Is critical to preserve farmland and viability of local farms
- Encourages sustainable methods of agriculture
- Increases agrobiodiversity (SEEDS) by using locally adapted crops and local knowledge
- Creates economic opportunities for local residents
- Improves access to affordable, nutritional food for vulnerable populations

There are limits and challenges to a local food system because of growing seasons and climate suitability for certain crops, e.g., coffee, bananas, etc.

Local organic sources: LocalHarvest

The 100 mile diet: The 100-Mile Diet
Increasing Access with Direct Farmer-Consumer Links

Minneapolis Farmer’s Market. Photo source: Mary Arenson via flickr.com. Creative Commons BY-NC-SA.
CSAs (Community Supported Agriculture)

One Straw Farm CSA pickup site at the Episcopal Church of the Messiah in Baltimore.
Farm to School and Farm to Institution

Farm To School Connection by Marilyn M via flickr.com. Creative Commons BY-NC-ND.
Residents of public housing in the South Side of Chicago, Illinois

Photo source: USDA.
Gleaning

- Gathering crop remnants after harvesting
- Gleaning networks harvest excess crops and donate them to food kitchens
“For children to love the Earth, they need to know the Earth. To know the Earth, they need to experience the Earth.”

- School programs
- California Department of Education—Garden in Every School
What Food Is Produced

- Many determinants, for example:
  - Geography and climate
  - Soil, land type
  - Climate, rainfall, water availability
  - Policies
  - U.S. Farm Bill subsidies
  - World trade agreements
  - Consumer demand
  - Taste
  - Cost
  - Preferences—cultural, etc.

- Growth of retail organic food sales has been nearly 20 percent per year whereas the growth of conventional food sales has been only 2 to 3 percent per year over the past 10 years
What Kind of Food System Are We Willing to Support?

- Food that is produced in an ecologically sustainable way
- Locally produced food
- Fair trade products (i.e., farm workers get an adequate wage and are not harmed by the work—pesticide exposure)
- Access for all to:
  - Supermarkets, groceries
  - Fresh produce—urban gardens, farmers’ markets in inner city areas, school gardens
  - Adequate transportation to reach these outlets
What Kind of Food Should We Eat?

- Which is better to eat?
  - Organic grapes transported thousands of miles from Chile,
  - Conventional grapes from California that have been grown using pesticides, or
  - In-season apples grown in the next town

- The food system is very complex and there is no simple, single answer

- We cannot get there all at once, but must go step by step
What Kind of Food Should We Eat?

- A good starting point is the principle of “harm reduction”

- The most important action is to begin to make informed choices about what we eat—and to think about the connections and consequences of what we do and weigh the necessities and tradeoffs

- Good nutrition and a variety of fruits and vegetables are important, but does that mean we need to eat asparagus all year long?
Changing Our Current Food System

- What can public health professionals do individually and collectively?
  - Make conscious food choice decisions—see the Consumer’s Guide in the notes section*
  - Support sustainable agriculture
  - Support local food security efforts
  - Link food production and food security to public health through research and scholarship

“There is no connection between food and health. People are fed by a food industry which pays no attention to health and are healed by a health industry that pays no attention to food.”

— Wendell Berry