COMMUNITY-BASED ALTERNATIVE FOOD SOURCE MODELS
(Achieving Food Security)

Description:
A community’s "food security" is an important factor in determining its livability. The U. S. Department of Agriculture (USDA) defines food security as "access by all members [of a community] at all times to enough food for an active, healthy life." Individuals and families experience food insecurity when their diets are of reduced quality or variety—because they cannot afford balanced meals, or lack knowledge of nutritious foods, or when, because of accessibility or cost, they run out of food, cut the size of their meals, miss meals, are hungry but do not eat, or they lose weight because of a lack of sufficient food.¹

Readily available, nutritive food is vital for thriving human habitats. Upon superficial assessment of communities in the United States, it would seem that there is plenty of food to go around. However despite the ubiquity of supermarkets, grocery stores, convenience stores, and restaurants, inadequate food security remains an issue among many of our residents.

In its analysis of the 2009 Current Population Survey, the USDA found that approximately 15 per cent of households in the United States (17.4 M households—over 50 M people, including over 17 M children) were food insecure at some time during 2009—that is, were uncertain of having, or were unable to acquire, enough food to meet the needs of all their family members because of insufficient money or other resources for food.²


http://www.ers.usda.gov/Briefing/FoodSecurity/stats_graphs.htm²
Food insecurity and obesity—
Obesity and overweight are fast becoming characteristics associated with those who do not have enough money for higher quality food or who make poor food choices due to economic hardship.\(^3\) It is estimated that one in three adults over age 20 is overweight or obese, and approximately one in five children ages 2 through 19 is overweight or obese.\(^4,5\)

Some communities are virtual food deserts, where convenience stores and fast food restaurants are relied upon for relatively more expensive, less nutritive food. Both zoning ordinances and food code regulations can, without meaning to, increase access to those foods, promoting overweight and obesity. Often, zoning restrictions governing allowable locations for alternative food sources can inadvertently increase demand for lower quality food by requiring extensive travel by consumers to access more nutritious alternative sources.\(^6\) However, food security is not just an issue of accessibility (location, cost); the types of foods that fill conventional food outlets are also a significant food security problem. Whereas alternative food source models (see below) tend to provide a variety of fresh fruits and vegetables (foods that are associated with both weight control and the prevention of chronic illnesses, such as diabetes), consumption of these nutritive foods tends to be low among people experiencing food insecurity.\(^7\) Instead, those who are food insecure tend to consume foods that are inexpensive, convenient, energy-rich (high in sugar), but nutrient-poor; and this pattern has been linked to the increased prevalence of obesity.\(^8\) Some food code regulations may have also inadvertently increased demand for lower quality, factory-packaged foods, as factory-packaged or heavily processed foods may be seen by consumers as safer because of the stringent public health laws that govern their development.\(^6,9\)
### 2009 State Obesity Rates

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[http://www.cdc.gov/obesity/data/trends.html#State10](http://www.cdc.gov/obesity/data/trends.html#State10)

**Alternative food source models**—
Alternative food sources are methods of achieving food security that can supplant or supplement a community’s conventional methods of accessing food. Alternative food sources can be grouped into four categories:

- Producers as consumers\(^{11}\) (those growing the food consume what they produce, such as in a community garden);
- Producer-to-consumer partnerships\(^{11}\) (growers develop a direct, private relationship with specifically identified consumers of their food products, as in community supported agriculture (CSA) programs);
- Direct-sell initiatives\(^{11}\) (growers sell directly to the general public, such as roadside food stands, mobile grocers, or farmers’ markets); and
- Specialist retailers\(^{12}\) (growers/producers of a specialized product privately sell directly to select consumers, such as online grocers and tourist programs).

**Examples of alternative food source models**—
*Mobile grocers:* Not your typical street vendor, mobile grocers (also called veggie mobiles and mobile farm trucks) are a relatively new way to sell fresh fruit and produce from a converted truck or school bus, which may or may not be refrigerated. They are typically operated by a community organization, and they differ from farm stands because mobile grocers usually target food deserts. The
mobile grocer generally operates on a fixed schedule year round and stops at specific sites that have been disclosed to the public in advance. Most mobile grocer operators are able to sell their produce for lower prices than supermarkets as the nature of their business typically requires them to purchase foods that are in season and locally produced. Mobile grocers tend to be middle men in the food system since the food they sell is usually not produced by the mobile grocer operator. Whatever is sold is first purchased by the mobile grocer from local farmers. Those operating mobile grocers typically must have a special permit to operate.

Farm stands (roadside/street-side): This is a temporary, small retail space where a commercial or part-time farmer sells his produce and other wares at a stand on the street or roadside. This is done on a much smaller scale (e.g., one or two farmers) than a farmers’ market (multiple vendors). Those operating roadside or street-side farm stands usually have special permits to operate and may be required to move after so many hours of operation.

Farmers’ markets: This alternative food source model allows many farmers to gather in one location, set up individual stations, and sell their produce and other wares to the public for an extended period of time. Farmers’ markets are similar to open air markets and bazaars in other countries. Farmers’ markets are usually held outdoors but can be held indoors during winter months or inclement weather. The markets operate weekly, monthly, quarterly, or seasonally; and vendors must have permits to operate.

Collective kitchens: Collective kitchens are also known as community kitchens and are unlike any other alternative food source model. Collective kitchens allow a group of people to come together at designated times (e.g., weekly, fortnight, monthly) to prepare meals. Usually conducted in the kitchens of schools and churches, collective kitchens allow participants to share the costs of food and food preparation, as well as provide a means for socializing with other community members. In addition, participants learn about meal planning and how to become better food-purchasers and cooks. Meals are relatively inexpensive per participant when compared to the cost of independent meal preparation, and participants also enjoy more variety in their diets. Participants report feelings of increased social support, decreased social isolation, and increased feelings of group and individual empowerment, with participants often indicating that the social interaction and support are what compel them to continue to participate. In addition to this model’s attributes as a sustainable food system and an anti-poverty method of “pooling resources and labor to produce large quantities of food,” it is also less stigmatizing for community members with food security issues than going to a food bank.

The collective kitchen model appears to have originated in Peru in the 1960s and 1970s, where comedores populares (people's kitchens) arose as a survival strategy among many residents as urban settlements grew around major cities in that country. In 1985, two women in Montreal started cooking together to share
food costs, and today networks of collective kitchens are found in all provinces in Canada.\textsuperscript{13, 14, 15} While the social, health, economic, and community-building benefits of collective kitchens stress their value as an element of community livability, a scan of the literature produced no evidence of them in the United States.

Community gardens: These are plots of land cultivated by a specific cohort of community residents. Community gardens are usually grassroots efforts, made up of volunteer community residents; gardens vary in size and in their location within a community; the garden's available plot of land originates from diverse private or public sources; the number of participating member gardeners can vary significantly; and members are responsible for developing, maintaining, and harvesting the garden's produce. Produce can be edible foods, non-edible flora, or a blend of both; and the gardeners consume/use what they grow and are encouraged to share what is produced with others. A primary benefit and goal of community gardens is the social support and interaction among the participating members. See "Community Gardens" in the Resource Manual to learn about the various types of community gardens and the diverse livability benefits derived from this alternative food source mode.

Community supported agriculture (CSA) programs: A CSA program comprises "a community of individuals who pledge their support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing both the risks and benefits of food production."\textsuperscript{19} Participating community members contract financially (or via physical labor or other assistance) with a local farmer to receive, on a weekly basis, shares of what is produced throughout the growing season. Consumers pick up their shares at designated times and places in the community. Consumers either pay for the entire season in advance or via a payment plan, assuming the risk/benefit of a poor or very productive season. CSA programs can vary—for example, some operate in combination with mobile farm trucks; some farmers will allow members to come to the farm to observe operations or to pick their own produce (a U-Pick or Pick-Your-Own program); and some farmers will supplement their CSA program by opening their U-Pick operations to the general public.

Trend—increasing support of alternative food source models—
At earlier times in history, what we now consider alternative food sources (street-side markets, farmers’ markets, and other methods of obtaining locally produced and fresh food) were the norm. Street-side markets were the "cornerstones of food security in rural areas and in rapidly urbanizing areas";\textsuperscript{6} and many of these alternative models served as places of social congregation for community members. However, over time, evolving zoning ordinances stressed the separation of residential, commercial, and other community functions, restricting or completely prohibiting easy access to various alternative food source models by a community's population core and forcing these alternatives to be located in areas of suburban sprawl and beyond the reach of population centers.\textsuperscript{6, 7, 20} Simultaneously, evolving
public health and food regulations focused on regulating food safety and consistency on a grander scale. Both these trends helped promote what is now the conventional food system.

However, the tide is turning; in response to greater concerns about health, obesity, and the impact of pollutants, as well as a growing focus on walkable communities, sprawl containment, organic farming, and the economic savings of "buying locally," growing support is evident among local, state, and national organizations and governing authorities for utilizing alternative food sources. For example, both the U. S. Department of Agriculture (USDA) and the New York State Department of Agriculture and Markets provide resources on their web sites that allow viewers to locate farmers' markets in defined geographical areas of interest. Today, increasing numbers of communities have at least one community garden organization, and the American Community Garden Association maintains a list of community gardens in the United States and Canada. Collective kitchen initiatives have expanded across all provinces in Canada. New York City has long been a model of street-side groceries, with fresh fruits, vegetables, baked goods, and other foods available to residents and visitors alike. The Supa' Fresh Veggie Mobile operates on the streets of St. Louis, Missouri, and the Capital District Community Gardens in Albany, New York, operates a Veggie Mobile that travels to areas of the community to provide fresh, healthy food options that may otherwise be unavailable to people in those communities. The New York State Office of General Services hosts a farmers' market at both the Empire State Plaza and at the Harriman State Office complex in Albany, New York, throughout the calendar year; and a farmers' market operates in the middle of downtown Schenectady, NY—outside the Mayor's office in the summer and inside a main street theatre mall during the winter. The USDA offers grants to make farmers' markets, food stands, and other direct-sell initiatives more accommodating for people who utilize those programs. Local Harvest's web site lists 315 Community Supported Agriculture Programs in New York State. And, many public and private schools, universities, and even healthcare facilities have begun to participate in or utilize alternative food sources.

Various tactics can help ensure that alternative food source models are affordable for greater numbers of households. Although alternative food networks may help support the vitality of our food systems, it is important to ensure that they remain options for everyone. Operators of alternative food source models can participate in benefit programs such as WIC (Women, Infants, and Children Food and Nutrition Program), Farmers Market Nutrition Program, SNAP (Supplemental Nutrition Assistance Program), and SFMNP (Senior Farmers Market Nutrition Program). A number of discounted memberships per season can be offered for some alternative food source models, and tax-deductible charitable donations of produce can be made to members of the community who are food insecure or to organizations that provide free food and meals. A variety of other strategies, including incentive zoning, mixed-use zoning, special use permits, and more flexible public health regulations that consider the overall community-livability contexts of alternative food operations, can help improve food security, as well as overall community well-
being. (See Section II.2, Zoning, in the Resource Manual for more detailed information on zoning regulations.)

"Food security" is driven by many local conditions and many global variables such as world food markets and government policies. Amid those conditions and variables, alternative food sources are a vital tool in helping achieve food security. The economic, ecological, and social benefits of alternative food networks\(^2\) can make communities more livable for all residents.

References (and resources):


7 A. Hosler, D. Rajulu, B. Fredrick, and A. E. Ronsani (2008), "Assessing Retail Fruit and Vegetable Availability in Urban and Rural Underserved Communities," Preventing


20 (Fall, 2008), Access to Healthy Foods In Low-Income Neighborhoods: Opportunities for Public Policy, Rudd Report. New Haven, CT: Yale University, Rudd Center for Food Policy and Obesity.


**Benefits:**

- **For Residents:**
  - Alternative food source models utilize food from local sources, resulting in benefits associated with a shorter food-supply chain (relatively shorter time from harvest to table):
    - Energy conservation—commodities travel fewer food miles to reach consumers.
    - Fresher, more nutritive food—a shorter food-supply chain lessens the loss of freshness and nutrients that can occur in longer time travel periods between harvest and consumer.
    - Cost-savings—locally grown commodities do not have to be flown, shipped, or driven long distances in refrigerated trucks; in addition, there is less or no need to use costly means of altering locally grown foods as a means of preserving or restoring the look of freshness.
  - Alternative food sources allow consumers to have increased knowledge of the origin, source, and seasonality of food.
  - The availability of a combination of conventional and alternative food sources in a community has been associated with improved health—a decrease in the prevalence of obesity and food insecurity among community residents.

- **For the Community:**
  - Improved Communities:
    - Diverse alternative food sources provide communities with greater opportunities to improve food security among populations in the community's various neighborhoods, including low-income neighborhoods.
    - Alternative food source models can be established more quickly than conventional food sources and can, therefore, have a positive impact on the various aspects of community food security more quickly.
  - Strengthened Community-Building:
    - The physical, as well as philosophical, environment of alternative food sources promotes greater engagement among community members; some models serve to restore public meeting/gathering places.
    - Alternatives can also help restore a sense of community cohesiveness and a sense of place among its members; these food source models are often
more interactive than conventional food sources, allowing participants to get to know each other and the producers of their food.

- Alternative food sources often put money directly back into the local economy.

References (and resources):

Impediments or barriers to development or implementation:
- For Residents:
  - Community members may not be aware that alternative food sources exist.
  - Unlike many conventional supermarkets, alternative food sources are not one-stop shopping centers, thus requiring more conscious effort and planning by consumers.
  - Hours of operation may be more limited compared to conventional supermarkets.
  - Participation in some alternative food sources (such as Community Supported Agriculture (CSA) programs) can be expensive.
  - Many alternative food sources are unable to accept public benefits from programs such as WIC, SNAP, and SFMNP.

- For the Community:
  - Zoning and public health laws may restrict operation of alternative food sources in some areas.
  - If there are no alternative food source models in a community, residents may have to travel farther to access these sources.
  - Members of the community may oppose operation of alternative food sources for fear of attracting people from outside the community or large crowds.

Resource—examples:

- Community Supported Agriculture (CSA) Farms: Local Harvest, Santa Cruz, CA, web site:

• **Mobile Market/Mobile Grocer:** The Veggie Mobile, a program of the Capital District Community Gardens, Albany, NY. Operates a produce-market-on-wheels that sells wholesale fruits and vegetables to low-income communities and independent senior living communities in New York's Capital Region: [http://theveggiemobile.blogspot.com/](http://theveggiemobile.blogspot.com/).

• **Community Garden:** Capital District Community Gardens, Albany, NY. Helping residents of Albany, Rensselaer, and Schenectady Counties in New York State to improve their neighborhoods through community gardening, healthy food access and urban greening programs: [http://www.cdcg.org/](http://www.cdcg.org/).

**Resource—written and web:**


• H. Blanck, O. Thompson, L. Nebeling, and A. Yaroch (2011), "Improving Fruit and Vegetable Consumption: Use of Farm-To-Consumer Venues Among U.S. Adults," *Preventing Chronic Disease: Public Health Research, Practice, and Policy*, Vol. 8, No. 2, pp. 1-5. Research on methods of improving consumption of fruits and vegetables; asserts that alternative food sources tend to be more quickly established than conventional food sources and can, therefore, have a positive impact on community food security more quickly. [www.cdc.gov/pcd/issues/2011/mar/10_0039.htm](http://www.cdc.gov/pcd/issues/2011/mar/10_0039.htm).

• J. Jilcott, T. Keyserling, T. Crawford, J. Mcguirt, and A. Ammerman (2011), "Examining Associations Among Obesity and Per Capita Farmers' Markets, Grocery Stores/Supermarkets, and Supercenters In U. S. Counties," *The Journal of the American Dietetic Association*, Vol. 111, No. 4, pp. 567-572. Discussion of obesity and access to various food models. Also explains how the U.S. definition of "alternative" may differ from that held in other areas of the world: outside of the U.S., alternative food sources are seen more as supplements to the current food system, and in the U.S., alternatives are often understood as replacements of the current food system entirely. Explains how access to a combination of conventional and alternative food sources has been associated with a decrease in the prevalence of obesity and food insecurity.


- Economic Research Service, U. S. Department of Agriculture, Washington, DC: