

Do Food Production Systems Matter to a Healthy Lifestyle?

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Our food may come from different farms, be produced via diverse agricultural practices, and sometimes be transferred to food markets from far away locations. Consumers have come to expect the same varieties of food choices at all seasons in western supermarkets and have not historically questioned the food production systems used to achieve this.

Now, however, there are some movements among consumers to learn more about the sources of their food and the methods of cultivation. This creates opportunities for nutrition professionals to educate consumers about the quality of the foods that are available to them not only from the stand point of their nutritional values, but also from their overall impact on their life style and on the environment. Encouraging the consumption of local farm foods and certified organic produce has become for some a way to enable the development of overall healthy life styles. Food from local farms is fresh, naturally rich in nutrients, and generally provides a wide variety of vegetables and fruits that are important in a healthy diet. Many local farms and orchards also allow their customers to roam the land and pick some of the crops themselves when the crops are ready for harvest. This wonderful outdoor activity further contributes to a healthy life style. There are also many national and state initiatives to promote higher consumption of plant based foods and increased outdoor physical activity. Studies have shown that the majority of Americans support state or local policies that are targeted to increase community access to fresh fruits and vegetables. Furthermore, there are initiatives to increase outdoor activity and reconnect children with the environment and nature. The National Environmental Education Foundation and The Children and Nature Initiative are examples of plans to promote healthy lifestyles among children. Another example is the US Department of Agriculture's Fresh Fruit and Vegetable Program (Foltz, et al., 2012, McCurdy, et al., 2010, Ohri-Vachaspati, et al. 2012) [1-3].

On the other hand, fruits and vegetables produced on large farms using genetically modified organisms (GMO or GM food) whose genetic material has been altered, are becoming more widespread in our supermarkets. This alteration can make the plants more resistant to herbicides and insecticides and thereby produce higher yields. Proponents of GM foods argue that they are essential to be able to cost effectively feed everyone. Some consumers are not aware of where these crops are produced and have no connection to the food production system. Lately, however, the presence of genetically modified food products within our food system has been a topic of discussion around the world.

A source of controversy also has been whether or not the benefits of genetically modified foods outweigh the potential environmental impact of their production. One important environmental impact of genetically modified (GM) foods is the threat to biodiversity resulting from the genetic transfer from GM crops to native plant species. Another concern is that the increased use of herbicides may lead to a new generation of herbicide-resistant weeds that could hamper plant growth. Additionally, since GM crops can be resistant to pests as well, this can lead to pests developing resistance genes at a faster rate than normal (Martin, 2013) [4]. Many nations, such as the European Union, United States, and Australia, have policies in place that have allowed the entrance of various GM foods into our food system. However, researchers state that one of the problems involved in addressing

the environmental issues surrounding GM foods is that there is no universally accepted definition of what constitutes environmental damage or environmental harm (Macmillan Publishers Limited 2013, U.S. Food and Drug Administration, 2014) [5,6].

One way of providing safe food to consumers is by regulating and putting policies in place that educate consumers about the methods of production by labeling foods. In the absence of federal regulation for labeling GM foods in the United States, some state governments are considering laws to require labels on food items containing genetically modified ingredients. About 70-80 percent of processed foods contain at least one ingredient made or derived from GM crops. (Centre for Science in the Public Interest & Grocery Manufacturers Association) [7]. Although it may not be possible to completely avoid GM foods, we can change our food selections by choosing local organic products, especially fruits and vegetables that are certified by the USDA National Organic Standards, which prohibit the use of GMOs [8].

Nutrition professionals can help consumers by encouraging the use of fresh vegetables and fruits from local farms, if possible. Some of these are traditional farms and orchards that have farm stands and perhaps offer "pick your own" times for vegetables and fruits. Other local farms may have switched to the Community Supported Agriculture (CSA) model in which retail customers buy a share of the season's crop. The CSA model is growing in popularity and once a family has switched to the healthy eating life style and outdoor activity associated with going to the local farm for food, the change is often life-long. This kind of a positive life style change is exactly what nutrition professionals hope will help their clients in achieving an overall healthy lifestyle and preventing overweight and obesity. It is therefore pertinent to educate consumers about the sources and variety of food production systems so they can make judicious decisions in selecting their food. Labeling GM food and foods that contain GMO ingredients is also a way to inform end-users about the sources of ingredients in their food supply.

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