

# Biological farming omnivores dilemma



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It is a shame that industrial farming has taken over the world and that small farmers no longer stand a chance of being truly profitable or significant. It is impossible for a small farmer to be competitive in today's market. Industrial farms with their monoculture can pack thousands of animals onto a relatively small piece of land, but at what cost. The animals are injected with antibiotics to prevent infection, and hormones to help them grow bigger. They never once get to see a pasture or graze freely.

Pharmaceuticals and pesticides are needed to maintain a single species animal farm on an industrial scale. (Pollan, 2006) That is why these chemicals were invented in the first place, to keep these shaky monocultures from collapsing. A biological farm does not need to rely on all these agrochemicals. When the animals are able to behave and eat in the way they were meant to, the farmer will find he does not have any of the sanitation problems or diseases that result from raising animals in a crowded monoculture.

When biological farming is done correctly the result is health, for the land, the animals, and the people who eat the yield of these crops. Industrial farming is destroying our land and poisoning the people who eat the food produced by this method, biological farming is a safer and healthier alternative that is environmentally friendly. First, industrial farming is destroying our land by over processing the soil and robbing it of vital nutrients. Monocropping causes a number of negative environmental impacts.

Soil deterioration results from the common practice of not rotating crops in monoculture farming. Crop rotation, the practice of changing what is planted

in a particular location on a farm from year to year, improves soil health and quality, and generally increases yields. Monocropping has been implicated in declines in crop yield and loss of nutrients from the soil. Unfortunately, industrial agriculture practices continue to damage and deplete this valuable natural resource.

While intensive plowing and monocrop agriculture systems have caused nutrient depletion and wide-scale soil erosion, over-application of fertilizers and pesticides has contaminated our soils and polluted our waterways. (Grace Communications Foundations, 2012) Carozza et al. (2008) discusses how children born in agricultural rich areas have a much higher risk for developing cancers, such as non-Hodgkin's lymphoma, neuroblastomas, and leukemia, than kids that live in other areas of the country.

Agricultural pesticides routinely spread beyond the intended agricultural target area, with drift possible for miles depending on wind conditions and particle size. The data collected by the Center for disease Control CDC, and the North American Association of Central Cancer Registries (NAACCR), showed a relationship between the crops grown and the type of prevalent cancers for that area. The finding that patterns of risk for individual cancers varied by crop type suggests that the development of different childhood cancers is likely to be related to specific pesticides. (Carozza et al. 008) Secondly, industrial farming is poisoning the people who eat the food produced by this method due to the abuse of hormones, antibiotics, and pesticides used. According to Grace Communications Foundation, hormone residues in the meat of growth enhanced animals can disrupt human hormone balance, causing developmental problems, interfering with the

reproductive system, and even leading to the development of breast, prostate and colon cancers. Children, pregnant women, and developing embryos are thought to be most susceptible to negative health effects from added hormones.

For example, hormone residues in beef have been examined as a cause of lower sperm counts in boys. The use of recombinant bovine growth hormone (rBGH) in dairy cows was linked in one study to increases in human twin and triplet births. The use of rBGH was approved by the Food and Drug Administration (FDA) based solely on one study performed over 90 days on 30 rats. Even though the FDA stated the results showed no significant problems, the study was never published.

Today, the European Union, Japan, Australia, New Zealand and Canada do not allow the use of rBGH due to animal and human health concerns. (Grace Communication Foundation, 2012) One solution to help prevent the damage to soil as well as the effects of pesticides and hormones on people is to change to biological farming which is a more environmentally friendly method. " Biological farms produce crops and raise animals without relying on toxic chemical pesticides, synthetic fertilizers, genetically modified seeds, or practices that degrade soil, water, or other natural resources. (Grace Communications Foundation, 2012) By growing a variety of plants and using techniques such as crop rotation, conservation tillage, and pasture-based livestock husbandry, biological farms protect biodiversity and foster the development and maintenance of healthy ecosystems. Biological crops are grown in a different manner from industrial crops. Biological crop farmers focus on ensuring that their farming practices can be sustained over time

and do not cause undue damage to the environment. A number of different principles are involved in biological crop production, including crop rotation, multicropping, and intercropping.

Multicropping is in direct contrast to monocropping, in which large tracts of land are planted with a single crop. Multicropping is an agricultural method of planting multiple species on one piece of land, either during the same growing season or in successive growing seasons. Multicropping has a number of environmental benefits, for instance they increase yields, decrease pest susceptibility, and increase biodiversity. (Grace Communications Foundation, 2012) Also, the food produced by biological farming is a safer and healthier alternative for people to consume.

Eating biologically provides numerous personal health benefits, including decreased exposure to harmful substances such as pesticides, antibiotic-resistant bacteria, and unhealthy food additives. The potential to increase consumption of certain nutrients and antioxidants greatly improves health. Eating biologically grown unprocessed food, such as whole grains, legumes, and fresh fruits and vegetables, has a number of health benefits, including decreased total cholesterol levels, decreased risk of certain cancers, increased colon function, and increased intake of important nutrients and minerals. Pesticides are substances that destroy various agricultural pests, including weeds, insects, bacteria, and fungi. Industrial crop production relies heavily upon pesticides, in part because the practice of monocropping increases vulnerability to pests. Pesticides can cause health problems in farm workers who apply the chemicals and who harvest the crops, and in

consumers who eat foods with pesticide residues. Pesticides also cause environmental damage such as water pollution and soil contamination.

Sustainable crop production greatly reduces pesticide use; in fact, many sustainable farmers do not use commercial pesticides at all. Pesticides are generally used sparingly and only when other methods fail. Today the world is consumed with the quickest and simplest ways to get things done no matter the cost to the animals or environment. The treatment to the animals is cruel and inhumane, and sanitation is hard to maintain. Diseases like mad cow disease has come about due to these unsanitary conditions and contaminated feed. In a biological system the cows graze as they were designed to.

In turn the meat produced is safer and healthier for the consumer. Biological farms also keep cost down from not having to import the food for the animals and agrochemicals needed on the industrial farm. With the animals doing the work to keep pest down and generate the fertilizer themselves, there is no need for these chemicals. Complex farming that involves rotating the stock of animals on the land is too complicated and time consuming for most farmers. In an industrial system the farmer may only need to work and handle the land 50 to 60 days a year instead of everyday. Pollan, 2006, p. 228) If Americans do not change their current farming methods there will not be any land left to farm. Also the impact of hormones and pesticides cannot be ignored as a potential cause of our kids developing physically and reaching puberty at such an early age and for the increased amount of cancer cases over the last 30 years. Like much of the industrialized world, the US is in the midst of an alarming obesity epidemic: the prevalence of

obesity in US adults in 2009-2010 was 35%, while 60% of Americans are now classified as overweight.

With the obesity epidemic comes chronic diseases, such as Type II diabetes, heart disease, and stroke, all of which have been linked to the so-called “Western” diet: a diet full of high fat and processed meats, carbohydrate- and salt-laden junk food, and sodas sweetened with high fructose corn syrup. (Grace Communication Foundation, 2012) The connection between the food we eat and our health is undeniable. Although the relationship is complicated you can be sure of one thing, choosing biological food is a no brainer when it comes to achieving optimal health.