Fighting Factory Farms with Jersey Raised Meats

Working independently to promote locally raised livestock and discourage the mass production of meat.

Tag Words: Meats; Raising Animals; Conditions; Local Meat; Health-Conscious; Livestock; Production Farms

Authors: Kari Schoenlank, Zachary Passione, Jocelyn M. Nelligan, Sam Valente with Julie M. Fagan, Ph.D.

Summary

Factory farming, or industrial agriculture, is the practice of raising animals in confinement or under extremely strict conditions. Essentially, the farm employs factory practices in order to produce the highest output at the lowest cost to the consumer. The animals are kept in crowded and often unsanitary conditions, injected with hormones, and fed an unnatural diet in order to accelerate growth. The operation of factory farms raises many controversial issues including animal welfare, environmental impact, and human health risks. By utilizing the already established Jersey Fresh program, we hope to slow the proliferation of commercially produced livestock and transition to more locally grown, environmentally friendly and health-conscious meats.
The Issue: Livestock on Large Production Farms

Diet
The types of livestock found on large production farms range from cattle, hogs, chickens, even sheep and turkeys. These animals are our main sources of meat. Farm animals, like humans, are healthiest when they eat certain foods. Cows, have stomachs that are designed to digest grass. Pigs can digest grass, corn, grains, soy and other plants. Chickens and turkeys can eat plants as well as bugs and worms found on the pasture. When animals are fed conventional (or industrial) feed, which can include animal products, antibiotics, and other unnatural substances such as chewing gum and chicken manure, their health is put in jeopardy. When an animal is unhealthy, the meat and other products made from it will also be less healthy. Factory farms use the cheapest feed available that will get their animals to market weight as fast as possible, so that profits are maximized. In doing so, animal health is not really of great concern. This, in turn, passes on to the humans that eat the meat from these animals. Some of the unwholesome products that can be found in farm animal feed are meat from animals of other or the same species, meat from diseased animals, bits of feathers, hair, skin, hooves, blood, manure and other animal waste, plastics, antibiotics and unhealthy amounts of grain. Today’s factory farms in the U.S. are heavily reliant on cheap feed grains, such as corn and soybeans. These grains are the feed of choice because they are cheap, and provide high protein levels so animals will gain weight quickly. Although these cheap feed grains mean that meat and dairy prices are lower for consumers, they also result in lower nutritional content. In general, grain-fed meat, eggs and dairy are lower in omega-3 fatty acids (the “good” fat), and Conjugated linoleic acid, or CLA (CLA’s help to fight against cancer and cardiovascular disease), with higher levels of fat than products from animals raised on grass. One suggested method that is said to be healthier for animals, as well as humans is pasture raised farming.

Pasture-raised animals roam freely in their natural environment where they're able to eat nutritious grasses and plants that their bodies are adapted to digest. In addition to dramatically improving the welfare of animals, pasturing also reduces environmental damage, and yields meat, and dairy products that are tastier and more nutritious than foods produced on factory farms. Pasture raised farming is said to be an overall more healthy way to go about meat production. Grazing on pasture is especially beneficial for cattle and other ruminants, whose bodies are developed to eat grass. Pasture raised animals are also not fed the unnatural feed...
additives, growth hormones, or antibiotics that are often fed on factory farms. Research has shown that pasture raised meat, eggs, and dairy are healthier for consumers than grain fed foods.

**Author: Kari Schoenlank**

**Supplements**

Industrial farms have been mixing antibiotics into livestock feed since 1946, when it was found that the drugs cause faster growth, increasing the producers’ profits. Today antibiotics are regularly fed to livestock, poultry, and fish on industrial farms not only to promote growth, but to compensate for unsanitary living conditions. Hormones and antibiotics are also used on factory farms in order to facilitate and milk and egg production, which lead to higher profits. Because the animals are living in such close and unsanitary conditions, they are extremely susceptible to disease. The animals also fight and are subject to cuts and abrasions from each other and their cages. The use of antibiotics allows the farmers to ‘heal’ their livestock and prevent losses due to injury or disease. In addition, small daily doses of antibiotics stimulate weight gain. The animals are therefore over-medicated; causing bacteria to become resistant to antibiotics and can eventually reach the consumer.

There are six hormones that can potentially threaten human health. Three are naturally occurring – oestradiol, progesterone, and testosterone, and three are synthetic – zeranol, trenbolone, and melengestrol. Despite international concern, the United States and Canada continue to allow the use of hormones in the production of livestock. This practice is one that is not allowed in Europe, which has prohibited all U.S. imported beef. It is in question whether hormone residues in the meat of animals can cause a hormone imbalance within humans, causing developmental problems, interfering with the reproductive system, and leading to the development of cancer.

**Author: Zach Passione**

**Environmental Impacts**

Environmental impacts caused by factory farms vary from stream pollution in the form of nutrient overloading to global warming due to the emission of large quantities of methane. The pollution from these farms
has been growing with the increasing demand for meat in more parts of the world, but in the US farms are still exempt from EPA and state regulations, such as the Clean Water Act and the Clean Air Act (Braunig, 2005). These problems are caused by excrement from farm animals, improperly applied fertilizer, the overuse of water, and the wide use of pesticides or herbicides on the animals’ feed. Although these impacts are of concern to any farm, factory style or not, they are magnified by the scale of production witnessed in factory farms.

Animals and their waste, especially cattle, account for two thirds of the world’s production of methane, with estimates placing just the amount of methane gas produced just from enteric fermentation at 85 billion kilograms per year. This number would be much higher if all the methane released from animal wastes was more easily quantifiable. Methane, being able to absorb about 20 times as much heat as carbon dioxide, is a potent greenhouse gas because once methane is oxidized, it is broken down into water and carbon dioxide, another greenhouse gas whose warming ability lies in the quantity produced rather than its ability to absorb heat. This much methane contributes greatly to global warming and due to the large-scale production of cattle, this concentrates the problem by concentrating the number of cattle in such a small space. This many cattle in such a small space requires an enormous amount of water to raise them before they go to market. (McGinn, 2006)

Nitrogen and phosphorous additions to streams, land, and groundwater make their way into these resources through the use of nitrogen and phosphorous-enriched fertilizer widely used on farms and through the animals’ wastes themselves, especially poultry waste which is high in ammonia. Once these nitrogen-containing compounds are converted into nitrates by specific bacteria, they can leach into streams causing eutrophication. Eutrophication is a process where by the smaller organisms use these nitrates and organic phosphorous to grow at a much faster rate, causing them to reproduce much faster, and ultimately using most if not all of the available oxygen for respiration. Once the system has become hypoxic or even anoxic, all organisms that depend on oxygen die, resulting in a loss of biodiversity. Not only does factory farm animal waste lead to eutrophication, it also plays a role in global warming. (Dozier, et al., 2004)

The pesticides and insecticides pose a threat to the environment, but the way factory farms employ them, the pesticides pose a concentrated threat to the immediate wildlife downstream or even down wind of where the insecticides are applied. These pesticides could contain organophosphate residues or organochloro residues. The organophosphate residues would also contribute to eutrophication, but the organochloro compounds could pose a threat as a bioaccumulative, carcinogenic, mutagenic, or reproduction disrupting substance. Depending on what the structure of the compound is, it could cause significant environmental damage. (Stan, et al., 2005)

The amount of water to produce one pound of beef ranges from 2500 gallons up to 6000 gallons in areas that don’t receive as much rain. This number includes the amount of water to keep the cows hydrated as well as grow the exorbitant amount of feed it takes to fatten up the animals. This would be less of a problem if farms did not raise their animals using a factory system because in this factory system, the goal of the farmer is to produce as much meat as possible in the shortest amount of time. To do this they have to keep the animals eating high protein or high energy feed as often as possible, which usually requires excessive irrigation to
grow the feed that wouldn’t normally exist under the natural annual rainfall. Not only is an abundance of water required to raise large concentrations of animals, but many pesticides and herbicides are required as well. (Robbins, 2009)

Factory farming also causes deforestation. Where small-scale farmers once cleared brush so animals could feed, factory farms require acres and acres to be deforested in order to feed the thousands of animals that factory farming raises. Deforestation influences global warming because the carbon dioxide sequestered by trees and plants becomes part of the carbon skeleton of the tree, which would in turn allow the tree to grow, fixing more carbon dioxide. It also leads to soil erosion, where the topsoil is able to blow away because there are no plant roots extending into the first 10cm of the soil, where it would contribute to the formation of soil aggregates, further anchoring the soil. Soil erosion also leads to increased runoff due to the fact that there is physically less plant material standing in the way of the water as well as to take up the water from the poor quality soil. Deforestation also leads to a loss in biodiversity of the ecosystem that’s cut down due to the loss of habitat.

**Author: Sam Valente**

**Human Health Risks**

Factory farming reduces the quality of life in rural areas and poses a serious health threat to human beings. The waste generated by these facilities can find its way into the water and expose humans to potentially deadly bacteria. Industrial farms also generate air pollution, which is detrimental to farm workers and the surrounding community. Manure from the farms emits hazardous gases such as hydrogen sulfide, methane, ammonia, and carbon dioxide, all of which are potentially fatal in high levels.

Factory farms are infested with virulent disease which can spread to humans via food, water, air, farmers, and their families. Studies are showing that ‘industrial farm animal production’ is on the rise as well as the rates of new infectious diseases. Dr. Michael Greger, director of public health and animal agriculture for The Humane Society of the United States writes, “Factory farms represent the most significant change in the lives of animals in 10,000 years…This is not how animals were supposed to live.” Much like poorly run hospitals, concentrated animal feeding operations are terrific incubators for disease. The stress put upon the animals weakens their immune system and makes them more susceptible to infection. The lack of sunlight and fresh air and the genetic uniformity of the farm populations facilitate the spread of pathogens.

More importantly, though, are the health risks that factory farms and their output pose to the American diet. In addition to recalls involving contaminated food, products of factory farms continue to fuel America’s addiction to meat and the accompanying obesity epidemic. While U.S. citizens benefit in terms of grocery costs, they end up paying with their health. According to the USDA, Americans spend less than ten percent of their income on food. The savings begin and end with corn, which infiltrates most of the processed food produced in America today. The federal government subsidizes the corn, and passes the savings on to consumers. However, that corn is being used to produce fast food that may seem satisfying to one’s wallet and bank account, but not to one’s physical well-being. Those fast food meals often pack more than half a day’s worth of calories and endless amounts of fat, saturated fat, cholesterol, sodium, and
preservatives, among other things. While corn is federally funded, fruits and vegetables are not, leading farmers to produce many more unhealthy calories than healthy ones. Corn is not only a problem in terms of human consumption, but corn is used to get cattle fatter in a shorter period of time. It also changes the quality of the beef, producing a marbled taste and a piece of meat that is higher in fat.

Author: Jocelyn Nelligan

The Service Project

After researching Jersey Fresh using their (website www.state.nj.us/jerseyfresh/), a section subordinate to the Department of Agriculture in New Jersey, we emailed Nancy Wood inquiring about the possibility of including our idea of an addition to the Jersey Fresh program to include animals raised on local farms. We were directed to Ronald Good who told us there were no plans to incorporate any plan adding locally raised meats to the Jersey Fresh program. We then decided to commit to executing our business plan as an independent organization, promoting the animals of local farmers as a viable, healthy, economical, and environmentally friendly alternative to factory farms’ mass-produced animals. Funding this nonprofit organization would require the help of a organization, possibly an organization that supports the organic, natural, or locally grown food movements, or even a group that is abhorrently opposed to factory farming.

References

http://animalrights.about.com/od/animalsusedforfood/tp/FactoryFarmingFAQ.htm
http://www.factoryfarm.org/human-health-impact/
http://www.sustainabletable.org/issues/feed/
http://www.sustainabletable.org/issues/pasture/
http://www.sustainabletable.org


Stan, H.J., Wadhwa, B.K., Sharma, V. “Multiresidue Analysis of Pesticides in Animal Feed Concentrate.” Bulletin of Environmental Contamination and Toxicology. 74


**Appendices**

**BUSINESS PLAN**

Name: Jersey Raised Meats

Description: Promotion of Jersey Fresh Labeling and certification for Jersey raised meats through a stronger advertising and networking campaign.

Different: We will directly promote the buying of locally grown meats certified by Jersey Fresh since Jersey Fresh produce already has a strong marketing campaign.

Customers: Meat eaters, restaurant owners, farmers, and grocery stores will want our advertising.

Benefits: By eating locally raised meats, people will benefit from improved health and a better state of mind while farmers benefit from having a wider market. People and animals will also benefit from a reduction in factory farm profits if they begin to become less common. They will benefit in that they will be exposed to less antibiotics as well as fewer deleterious environmental effects that would impact human and animal health if factory farms were to continue their mass production of meat as they are now.

Service: We will go into farmers’ markets, restaurants, and grocery stores to advertise locally grown meat and its benefits. These advertisements will directly promote the organic nature and/or locally grown status of these meats. This will support the local farmers as well as draw customers from factory farm produced meats. Advertisements will range from showing the positives of locally raised meats to using expository posters to display the harms caused by factory farming. We will also promote networking between these groups to get more locally raised meats onto people’s plates.

Target Market: The target market will include meat eaters, restaurant owners, farmers, and grocery stores. People will be drawn away from eating meat raised by factory farms.
Management: We will be the employees. Background experiences among our group include working in restaurants, grocery stores, animal feed stores, farmers’ markets, and working with food animals.

Marketing: We will use the internet, print pamphlets, and run ads in newspapers. There will be written ads in menus in restaurants and on labels in supermarkets. We will also provide monetary incentive when necessary to initially promote the meat in stores and restaurants.

Financials:

<table>
<thead>
<tr>
<th>Item</th>
<th>Notes</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Nonprofit</td>
<td>$0.00</td>
</tr>
<tr>
<td>Cost of Good Sold</td>
<td>Nonprofit</td>
<td>$0.00</td>
</tr>
<tr>
<td>Monetary Incentive</td>
<td></td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Gross Profit</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Consulting Fees</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Cost of Advertising</td>
<td></td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Salaries</td>
<td>5 employees @ $50,000/yr</td>
<td>$250,000.00</td>
</tr>
<tr>
<td>EBIT</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Taxes</td>
<td>Tax exempt, nonprofit organization</td>
<td>$0.00</td>
</tr>
<tr>
<td>Net Profit</td>
<td>advocate of organic, natural, or locally grown movement group</td>
<td>-$361,000.00</td>
</tr>
</tbody>
</table>

Issues: PETA may be an issue, as well as factory farm owners and their lobbyists. The factory farm owners and their lobbyists may see our ads as libelous.

---------------------------- Original Message ----------------------------
Subject: RE: Jersey Fresh Meat?
From: "Good, Ronald" <ronald.good@ag.state.nj.us>
Date: Monday, November 2, 2009 12:11 pm
To: sammyv@eden.rutgers.edu

Mr. Valente: Your e-mail has been directed to my attention.
The Jersey Fresh program promotes fresh fruits, vegetables and herbs. We do not plan to include meat in the program.
Thank you for your inquiry.

-----Original Message-----
From: sammyv@eden.rutgers.edu [mailto:sammyv@eden.rutgers.edu]
Sent: Monday, November 2, 2009 11:50 AM
To: Wood, Nancy
Subject: Jersey Fresh Meat?

Hi Ms. Wood,

I was wondering if there was any kind of program for New Jersey meat products that mirrors either Jersey Fresh or Jersey Seafood. I looked over the website (http://www.jerseyfresh.nj.gov/) and didn't see anything that might answer my question. Are beef or pork products registered under one of these two existing programs or is there a plan to create a meat subdivision of Jersey Fresh? If not, why? Thank you for your time.

Sam Valente
When you walk into a grocery store and you go into the meat section do you know what farm that meat came from? Or whether that animal was given hormones or antibiotics? How about whether the animal was grazing in a field eating grass or packed like sardines eating corn? I mean you can find out anything you would want to know about any fruit or vegetable in the produce section, so why is transparency so hard to provide with America’s meat? In the American meat industry it is all about profit and the company that can get the most farms under contract that have the biggest comparative advantage wins. In large scale production involving living creatures, farmers have taken nature out of the picture and put profit and efficiency in its place. It is way past due that American consumers demand of the people in control of the meat we eat that unhealthy and unethically raised meat is a thing of the past. For improvements in our current style of meat production we should consider looking at Europe for guidance. Europe's consumer’s demand that their meat production be transparent otherwise those farmers would not be allowed to sell it in grocery stores. In France, for example, cattle farmers focus on quality instead of quantity, using artisanal practices. They ensure transparency by giving the cattle a passport which shows you where they were born, who their parents were, and what vaccines they’ve had. Sure, you may say that industrial production of meat in a country of over three hundred million is inevitable, but I disagree. For one thing, more organic farms that use natural practices to raising animals would employ more Americans. It’s just common sense, if we had more small farms that raised animals ethically, it would take more workers and would help out the almost double digit unemployment rate we now have. Second, if you factor in what we pay in health care costs because of the fatty, unhealthy meat that we eat organic farming saves us more in the long run and is a truly sustainable approach to our meat industry. If the demand for naturally raised and fed animals is not heard across America, the meat industry will never change. Heart disease and obesity are both dramatically affected by our diet and in modern America much of that is meat. Perhaps it will take not market demand, but rather government intervention, that changes how the meat that we eat is assured to be safe and healthy across America. Demanding a meat industry that raises and treats animals ethically and assures our health is an idea that will not hinder this country but make it healthier and stronger.
Bryan Walsh’s article shed a very bright light on the many facets of one of America’s greatest health concerns: factory farming. With the conditions the animals are forced to live in, the antibiotics and hormones injected into them, the corn-based diet they are fed, and the negative impact these industrial-style practices have on the surrounding environment, consumers are paying for the products of these facilities with much more than just the all-mighty dollar. It is no wonder that instances of food-borne illness run rampant as the obesity rate and healthcare costs continue to skyrocket. America insists on operating on a food system that generates cheap, corn and calorie-laden food at the expense of consumer health.

Walsh’s article not only highlights the problem, but also the ways in which some are attempting to correct it. From Michelle Obama’s White House garden and Michael Pollan’s investigative genius to Joe the Farmer deciding to go green, many Americans are beginning to make the switch while lighting a fire beneath the general public. Bill Niman’s California ranch is a sterling example of someone that is doing it right. With a grass-only diet, plenty of room to roam, and no chemicals or drugs, Niman’s livestock is what Americans should be eating. How do we make this kind of sustainable farming the basis for a new food system? By changing the system of mass production to small-scale, local production. This transition would take many more farmers than we currently have, but with the unemployment rate as high as it is, new jobs in agriculture are a welcomed addition. While price is, and will continue to be, the biggest obstacle, the choices are either pay for organic, non-processed, locally grown food now, or fork over even more later to cover healthcare costs. It all boils down to consciousness. How will farmers continue to produce their food and, more importantly, will consumers continue to take the bait?
Where does our food come from?

In the past several decades Concentrated Animal Feeding Operations (CAFO’s), or more commonly known as factory farms, have replaced the small farms that once predominated in New Jersey. These factory farms produce large quantities of chickens, cows, turkeys and pigs in very small areas in order to maximize profit and production. While factory farms do maximize these two aspects, they also maximize environmental contamination from large quantities of animal waste, human health concerns from the use of antibiotics and pesticides, odors from large waste lagoons and ethical issues from raising animals in spaces where they can barely turn around. Some of these problems occur on small farms as well, but they are magnified when the density of animals increases enormously as they do on factory farms.

Although there are fewer than ten factory farms in New Jersey, the number or animals on the farms are currently unreported to the public. With a publicly unknown density of animals in these CAFO’s, how are we to assess any of these concerns regarding these farms when we purchase our chicken, beef, milk, or pork? Are we supporting environmental destruction, animal cruelty, and the degradation of our well-being? We won’t know if we are until we know exactly what’s going on inside these CAFO’s.

New Jersey’s Department of Agriculture has a program called Jersey Fresh that gives registered farmers the right to use the Jersey Fresh logo on their products. This logo is a symbol of high quality, locally grown crops and animals that the department has inspected and certified at packing houses and processing facilities. By buying from local farms, this helps to keep the 9,900 small farms in New Jersey in business, and in doing so, eases the strain on animals living in confined quarters as well as reduces impacts on human and environmental health.

Sam Valente

To: hntletters@MyCentralJersey.com (Home News Tribune, Paul Grzella, Managing Editor)
New Jersey is one of the most agriculturally diverse states. New Jersey’s top agricultural commodities include nursery, landscape, and greenhouse products, cranberries, blueberries, dairy, corn, soybeans, among many other products. As a marketing tool for its wide variety of agricultural products, the state uses “Jersey Fresh”. New Jersey also markets their large equine industry with “Jersey Equine” and “Jersey Bred”. The nursery industry uses “Jersey Grown”. “Jersey Seafood” is another marketing program for the state’s seafood industry. The point of these marketing programs is to encourage the consumers, New Jersey citizens, to purchase fresh, local, home grown food. Purchasing local food is not only healthier, but it supports local economies, and the local farmer. The Jersey marketing programs cover many of the food groups, and agricultural products, though there is not a program for the meat production industry. The meat industry is not one of the state’s largest, however, the state would benefit from such a program as “Jersey Meats”, if one existed. A New Jersey meat program would help consumers understand where their meat comes from, as well as help local farmers that raise beef, chickens, lambs, and hogs. The issue with buying meat from large grocery stores is the consumer has no way of knowing where their food came from, what it was fed, or the conditions the livestock were raised in. This raises the question “is my meat healthy to eat, or not?” Organically grown products have become very popular in the last couple of years. Many people when they think of “organically grown” may first think of fruits and vegetables. Organically grown or raised meats have become very popular, as well.

People have learned that they are able to purchase home grown meats from local farmers. Many of these local farmers pride themselves in selling their hormone and antibiotic free meats to local consumers. Meat from local farms is far more healthy and often better tasting than grocery meats that come from large commercial production farms in the west.

Kari Schoenlank