Is Organic Beef Really Different from Non-Organic?

Organic cattle are processed in the same way as non-organic cattle and there are chemical additives in organic beef that people should be aware of.

Tag Words: organic beef; non-organic beef; organic chemical additives; meat processing; organic cattle; non-organic cattle; USDA

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Summary:
(SI/RL)
Although organic cattle are raised separately and with different regulations than non-organic cattle, when the beef is processed, there is little to no difference. Furthermore, organic meat cannot be processed at the same exact time as non-organic meat in a given facility, it can be processed using the same machinery in the same exact way. This raises questions as to whether organic and non-organic meat are actually different and if the processing facilities are carrying out the necessary precautions to make sure there is no cross-contamination of the meat being labeled as “organic”. These findings will be brought to the attention of the North Central Regional Association of State Agricultural Experiment Station Directors (NCRA) and United States Department of Agriculture’s (USDA) Committee on Agriculture Bioethics. It is hoped that these groups take action to remove the term “organic” when describing beef processing and packaging.

Video Link:
http://youtu.be/BGlU0-b8EyY

The Organic Dispute

WHAT IS ORGANIC?
(SI/RL)
According to the United States Department of Agriculture (USDA), organic beef with the “USDA Organic” label has been raised and processed according to strict USDA guidelines. The USDA also carries out inspections to guarantee the producers are in fact adhering to the
necessary criteria. Throughout the organic meat system, the cattle are followed from birth to market to ensure the meat is in fact what they claim it is. The USDA also requires organic animals to be raised on land that is free of fertilizers and synthetic pesticides. In addition, all of the feed that the animals are fed must be certified organic and can not contain any animal by-products. The animals also cannot be administered any type of antibiotic even if they are sick - if this is the case, their meat must be sold as conventional beef and is no longer considered organic. Although the “organic” label does not explicitly state that the beef you are buying is safer or healthier than conventional beef, there is an implicit idea that people believe this is so. However, even if the cattle are raised differently up until slaughter, does it make a significant difference if in the end they are processed the same way? 1,2

FEEDLOT/CONVENTIONAL BEEF
(SI)
Feedlot or conventional beef refers to the majority of the meat you find in grocery stores, fast food chains, and other restaurants, unless otherwise mentioned. This type of beef starts out as cattle being raised on pasture, nursing from their mothers. At around sixteen months of age, the cattle are moved to a feedlot where their diet consists of predominantly grain. Because cows are ruminants and are able to digest the plant matter with their compartmentalized digestive system, grain is not the best diet for cows. However, since raising cattle in feedlots is cheaper than on a pasture, this is the preferred approach. Conventional beef has little regulation when it comes to antibiotic or growth hormone use and such things are often used to combat illness and increase efficiency and production. Approximately 97% of beef in the United States falls into this category. The other 3% is grass-fed, which is described below. 3

GRASS-FED BEEF
(SI/RL)
Grass-fed beef starts out in the same way that feedlot/conventional beef does. The cattle are nursed by their mothers and when the conventional cattle move to the feedlot at sixteen months, the grass-fed cattle remain on pasture consuming the more natural grass diet. These cattle tend to be smaller in size at slaughter weight due to their longer time on pasture and they grow much slower. Author and advocate John Robbins notes that it can take up to four times as long to raise one grass-fed cow over a feedlot cow. This beef tends to be more expensive due to the greater time and effort for processing. Grass-fed cattle are also said to produce more methane, a harmful global warming gas. They also cause pastures to become eroded and streams to flow less. According to a nutritional review on organic beef by Denis Lairon, grass-fed beef contains less fat than beef that has been fed on concentrates. Organic cows have more lean meat and they also have muscle with four times the content of linoleic acid, which is a recommended essential fatty acid. 4
COMPARING ORGANIC TO NON-ORGANIC

When viewing the nutrition facts between organic and non-organic ground beef, there are actually few differences. Organic beef is generally leaner, so you would assume it has less fat, calories, and even less sodium. However, it is possible to buy non-organic ground beef that is 90% lean/10% fat. 90% lean, non-organic beef is actually slightly healthier. One ounce of 90% lean, non-organic beef has 49 calories, 3g fat, and 18mg sodium, compared to one ounce of organic beef which has 54 calories, 4g fat, and 19mg sodium. While it is possible to buy non-organic beef with a higher percentage of fat, this proves that it is possible to eat a healthy form of beef without having to pay for the organic option.

ORGANIC STANDARDS

According to the USDA rules passed on October 22, 2002, certified organic beef must come from a fully verifiable production system that collects information on the history of every animal in the program, including its breed history, veterinary care, and feed. Further, to be certified as organic, all cattle should meet the following criteria:

- Born and raised on certified organic pasture
- Never receive antibiotics
- Never receive growth-promoting hormones
- Are fed only certified organic grains and grasses
- Must have unrestricted outdoor access

These standards are the basics that have been put forth by the USDA, although over the years the standards have declined and deteriorated.

EROSION OF STANDARDS

Provided with a legal framework within which to operate, lobbyists can push for amendments and exceptions favorable to large-scale production, resulting in "legally organic" products produced in ways similar to current conventional food. Combined with the fact that organic products are now sold predominantly through high volume distribution channels such as supermarkets, the concern is that the market is evolving to favor the biggest producers, and this could result in the small organic farmer being squeezed out.

In the United States, large food companies, known informally as Big Food, have "assumed a powerful role in setting the standards for organic foods." Many members of standard-setting boards come from large food corporations. As more corporate members have joined, many non-organic substances have been added to the National List of acceptable...
ingredients. The United States Congress has also played a role in allowing exceptions to organic food standards. In December 2005, the 2006 Agricultural Appropriations bill was passed with a rider allowing 38 synthetic ingredients to be used in organic foods. Among the ingredients are food colorings, starches, sausage and hot-dog casings, hops, fish oil, chipotle chili pepper, and gelatin. One example of large companies taking advantage of the system is the Anheuser-Busch company which was allowed in 2007 to have its Wild Hop Lager certified organic even though it uses hops grown with chemical fertilizers and sprayed with pesticides.

**SLAUGHTER AND PROCESSING**

(RL)

In your average beef cattle slaughterhouse, they slaughter approximately 4,500 cattle per day (depending on the size of the facility of course). First, the cattle are shipped in on large trucks and put in holding pens. They are left here for a few hours and it helps to calm the animals after their travel. The idea is to keep the animals calm and stress-free up until the moment of slaughter. The cattle are then led through a series of corridors to get them to the actual slaughter area. The corridors are somewhat dark and contain no corners, only serpentine-like bends. There cannot be a lot of light because cows tend to be afraid of any shadows on the ground and there cannot be corners because this would also scare them. When cows stop because they are afraid of moving forward, they have to be prodded with something to keep them going. This increases their stress and is less humane. The way slaughterhouses have to be designed, prevents this stressful procedure.

The cows are put one at a time into a small holding area where they cannot move side to side. A worker called a “knocker” uses a captive bolt gun to deliver a bolt into the cow’s head. This is a very quick procedure and renders the animal unconscious and insensitive to pain. The major arteries of the neck are then cut and the cow dies in a matter of minutes from blood loss. From there, the process of slaughter moves fairly quickly, with the skin, hooves, and head being removed from the animal and the body quarters. All along this process the body is washed to ensure that blood is removed and the meat stays clean. The meat is refrigerated and cut in the following days. The entire process between animal and ground beef takes approximately 3 days. When the cuts of beef are separated by quality, the meat that will become ground beef is all put into the same grinder. This means multiple cows contribute to one package of ground beef. This process is the same for both organic and non-organic beef, although the organic cows must be processed at a separate time from the non-organic cows and the machines must be cleaned in between this change. 6,7,8,9

**ADDITIVES**

(SI)
Despite what many people believe, many synthetic substances can in fact be used in the production of beef cattle. According to the U.S. Government Code of Federal Regulations, the following synthetic substances are allowed to be used in organic livestock production:

1. Alcohols.
2. Aspirin-approved for health care use to reduce inflammation.
4. Chlorhexidine—Allowed for surgical procedures conducted by a veterinarian. Allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness.
5. Oxytocin—use in postparturition therapeutic applications.
6. Moxidectin (CAS # 113507-06-5)—for control of internal parasites only.
7. Poloxalene (CAS # -9003-11-6)—for use under 7 CFR part 205, the NOP requires that poloxalene only be used for the emergency treatment of bloat.
8. Lidocaine—as a local anesthetic. Use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.
9. Procaine—as a local anesthetic, use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.

The list is fairly endless and doesn’t seem to make sense with the above definition that we found for organic. With the inclusion of things such as disinfectants, oxytocin, procaine and lidocaine (anesthetics), it seems that the general population’s understanding of what is “organic” is skewed. To make matters worse, there are non-organically produced products that are allowed as ingredients in our foods that are labeled “organic”. Some of those ingredients are as follows:

(a) Casings, from processed intestines.
(b) Chia (Salvia hispanica L.).
(c) Purple potato juice (pigment CAS #’s: 528-58-5, 528-53-0, 643-84-5, 134-01-0, 1429-30-7, and 134-04-3).
(e) Dillweed oil (CAS # 8006-75-5).
(f) Fish oil (Fatty acid CAS #’s: 10417-94-4, and 25167-62-8)—stabilized with organic ingredients or only with ingredients on the National List, §§ 205.605 and 205.606.
(j) Gelatin (CAS # 9000-70-8).

Again, such ingredients make us wonder if our meat is really 100% beef. If people were more informed about what was in their meat, they may change their minds on what to buy in grocery stores. They may even seek out better, more healthy options as an alternative. 10,11,12
Contrary to popular belief, USDA labeling laws do not contain “narrow definitions or strict standards that might enable the average consumer to know exactly what they are eating”. For example, a product labeled “all natural” could in fact contain meat from cattle that were given Growth hormones and antibiotics. It is very misleading to the consumer and these tactics are used time and time again for this exact purpose. “All natural” meat, according to the USDA, means that chemicals can not be added during or after processing. This basically applies to all beef so the label is insignificant. Think to when you purchase ground beef at the grocery store. The labels looks similar to these:

Nowhere on these labels does it mention ingredients. That isn’t to say that lean ground beef is the only ingredient even though it states 100% beef on the top right corner. Based on
USDA regulations that we looked at above, it is obvious that the meat included in this package does not come by itself. There are obvious additives that can be included that packagers do not need to include. Labels like this should make consumers wary about the products they consume on a day to day basis and determine whether choosing organic really makes a difference.

Taken from a blog titled “My Green Misadventure”, the following blogger addresses the photo above:

It does not mention the possibility of any adjuncts being included, but it does not exclude them either. I particularly love where the asterisk after “all natural” leads. The qualifier reads “Contains no artificial ingredients, only minimally processed.” Hmmm…

Does this sound like something that is minimally processed: The “pink slime” is made by gathering waste trimmings, simmering them at low heat so the fat separates easily from the muscle, and spinning the trimmings using a centrifuge to complete the separation. Next, the mixture is sent through pipes where it is sprayed with ammonia gas to kill bacteria. The process is completed by packaging the meat into bricks. Then, it is frozen and shipped to grocery stores and meat packers, where it is added to most ground beef.

Again, people are not upset about the safety of pink slime. We are upset that it is a bizarre product being added to something that we thought was 100% meat and truly minimally processed. We did not expect Dr. Frankenstein’s meat derived filler.

Unfortunately, many people assume that the terms “organic” and “natural” are interchangeable, failing to understand the strict regulations required to raise certified organic beef. In the United States, federal legislation defines three levels of organic foods. Products made entirely with certified organic ingredients and methods can be labeled "100% organic," while only products with at least 95% organic ingredients may be labeled "organic." Both of these categories may also display the USDA Organic seal. A third category, containing a minimum of 70% organic ingredients, can be labeled "made with organic ingredients," but may not display the USDA Organic seal. (Products made with less than 70% organic ingredients can not be advertised as "organic," but can list individual ingredients that are organic as such in the product's ingredient statement.) In addition, products may also display the logo of the certification body that approved them. However, many people do not seem to distinguish between somewhat organic food items and immediately view them as “natural” when they see the term “organic”. They may not understand the different levels of classification and this causes people to misinterpret the product they are getting. Without the term “organic”, this would not be a problem. 13,14,15,16
COMMUNITY ACTION: EDUCATING THE PUBLIC AND MAKING A CHANGE

We are contacting the North Central Regional Association of State Agricultural Experiment Station Directors and USDA’s Committee on Agricultural Bioethics in order to spread awareness for and elicit action to remove the term “organic” from food labels. Doing so would remove all qualms and assumptions people have about what “organic” actually means and there would no longer be any debate over the issue.

November 2012

Dear NCRA Board,

As members of a Rutgers University course titled “Animals and Agriculture”, our group, under the supervision of Dr. Julie Fagan, is seeking to make a major change in the realm of meat processing and the rules and regulations that govern it. Our mission is to remove the term “organic” completely from the meat processing vocabulary.

As a whole, American society is seemingly uneducated as to what the term “organic” actually means. They generally associate it with healthier animals with their meat that is cleaner and safer for consumption. While in some cases this could be true, for the most part this is not the case. After reviewing the literature on the topic, we have come to the conclusion that there is little to no difference between organic and non-organic meat products. The machinery used is exactly the same in both cases as well as the methods employed throughout the slaughter process. The main difference is between the way in which the animals are raised, and among other criteria, the feed products they are fed. In addition, regulations regarding the additives allowed in organic meat processing have become more relaxed, allowing for more and more unnatural substances in the meat itself. Many people are unaware that such additives are even allowed in organic meat products and they choose to purchase products labeled as “organic” without even knowing what the meat contains.

We are writing to you in hopes that you will be able to further our goal in removing the term “organic” from food labeling and regulations, specifically those dealing with beef. We have attached a possible draft of a bill that could be passed in this scenario.

Regards,

Brett Hodshon, Shruti Iyer, and Renée Levesque
Amendment Proposal:

STATE OF NEW JERSEY

November 2012 Session

Introduced by Brett Hodshon, Shruti Iyer, and Renée Levesque - referred to the United States Department of Agriculture (USDA) Committee of Agricultural Bioethics.

An ACT to amend the food labeling procedures and regulations regarding the processing and packaging of beef cattle products present in the Electronic Code of Federal Regulations (e-CFR).

THE PEOPLE OF THE STATE OF NEW JERSEY, REPRESENTED BY THE NORTH CENTRAL REGIONAL ASSOCIATION OF STATE AGRICULTURAL EXPERIMENT STATION DIRECTORS, DO ENACT AS FOLLOWS:

Section 1. Food labeling and governmental regulations are amended by revising the already written sections of the Electronic Code of Federal Regulations (e-CFR):

ALL TITLES DEALING WITH FOOD LABELLING AND MEAT PROCESSING WILL BE EDITED SO THAT THE TERM “ORGANIC” IS NO LONGER A DESCRIPTIVE TERM.

THE TITLES TO BE INCLUDED IN THIS ARE: TITLE 1, 7, 9, 21 AND ANY UNMENTIONED THAT INCLUDE THE TERM “ORGANIC” TO DESCRIBE BEEF PROCESSING AND PACKAGING.

Section 2. Due to the removal of the term “organic”, there will no longer be any confusion about product contents. The consumer will not be misled and will be completely aware of any synthetic additives to their products.

Section 3. This act shall take effect as soon as the board approves it on the first of the following month and will then become a law. 17

References:
2 http://greenliving.about.com/od/healthyliving/a/USDA-Certified-Organic-Beef.htm
3 http://animalrights.about.com/od/animalsusedforfood/a/GrassFedBeef.htm
4 http://vegetariandispatch.wordpress.com/2011/10/12/grass-fed-beef-is-no-solution/
5 http://nutritiondata.self.com
6 http://www.oprah.com/oprahshow/Inside-a-Slaughterhouse-Video
Letters to the Editor:

11/12 RL

Dear editor,

Recently, organic meat has become more and more popular among the general public. It is viewed as a safer and healthier option, even though many people don’t know the details about what it means for meat to be organic. Organic beef cattle have feed without antibiotics and without any animal by-products. However, once the cows are slaughtered and processed, there are a number of things that are allowed to be added to the beef before it gets sold to consumers. Additives such as intestine casings, gelatin, and fish oil are considered “organic” by USDA standards. Furthermore, the nutritional value of organic beef is roughly the same as lean, non-organic beef. It is misleading for the organic label to be put on beef that is essentially no different than its non-organic counterpart. We believe that with all of the additives allowed in organic beef, the organic label should not exist. Rather, there should be labels stating if there are any additives in the beef, or if the cows were raised on pasture. The labels should be clear and easy to understand by the average consumer. The organic label only means what the consumer thinks it means, while it would be hard to misconstrue a label saying “no additives”.

You can go to [www.ecfr.gov](http://www.ecfr.gov) to view a list of what is allowed in organic food.
From,

Renée Levesque

11/12 BH

To whom it may concern,

We are part of a group concerned about the false projections concerning organic food and labeling. After researching some of the laws projected on the USDA website, which is the nation wide standards required to be labeled organic meat, we have noticed that there have been changes to the laws surrounding organic meats and the process of raising organic meats over the past few years, many of which are in our opinion questionable. The truth about the organic growing of meat has been covered up due to that fact that the label has not changed in years, while the policies it represents have.

Back when the standard for organic food was first coming out, the general rule for organic was that there was to be no inorganic products either in the organic food or fed to the meat that is to be organic. As seen on the site ecfr.gov in section 205.603 there is a list of now synthetic products that are allowed in the used of organic meat growing. The original law had no such products in it, and on December 2005, Congress passed and approved the 2006 agricultural appropriations bill, which allowed 38 synthetic ingredients to be used in organic foods. These products, under the new law, are either allowed to be fed to the product or used in processing the product while still being labeled organic.

With these new laws it is easy for the distributors of organic meat to freely use the labels of organic meat as they please. Most of the laws and boards responsible for setting the standards are members of Congress and large factory farm representatives. With the shift of organic meat farming from small family farm to big factory industries, it is clear how the standards will continue to be eroded and exploited. The fact that the large corporations and government can get away with blind siding Americans who are concerned with what is in their food is very disturbing. If you agree with our cause please support us in our efforts to stop the misconception involved in organic meat labeling.

Sincerely,

Brett Hodshon
To whom it may concern,

We suggest removing the term “organic” from food altogether because it seems to be the simplest and most efficient solution. In order to keep the term “organic”, both the processing and the allowed additives would need to be cleaned up. Processing would have to be done separately for organic and non-organic beef. This would not be very cost effective because either the current processing facilities would have to be split between the two or new processing facilities would have to be built for organic beef. To prevent non-organic additives from being used in organic beef, we would have to backtrack and remove legislation that has only recently been passed. It would be unlikely that we would get sufficient support to do this.

However if we remove the term organic then the processing facilities will not have to change and additives will still be allowed. Instead of organic, the labels can become more specific and realistic. Companies can say if cows were treated humanely, if it is grass-fed beef, or there can be labels stating the kinds of additives that are packaged with the beef. Mainly, we want to work towards having the public be more accurately informed of what they are consuming.

Our purpose is to inform the public and finally remove this term “organic” from all beef processing and packaging and we hope you will support us in our mission.

Regards,

Shruti Iyer