## How Much do Food Labels Tell You?

Consumers rely on food labels to make informed purchases. Yet the sheer variety of labels we encounter in the supermarket is overwhelming. Labels like natural, organic and local appear on every type of food product, from fresh meat to processed junk food. What, if anything, do these labels actually tell us?

Very little, it turns out. Weak federal labeling laws and fragmented oversight allow the food industry to stretch the meaning of these labels in order to trick consumers into thinking that a company provides a superior product. This is especially evident in meat, poultry and egg products. Companies use a variety of labels to make it appear that the animals lived happy lives on idyllic farms. However, many "cage-free" eggs come from hens that never once stepped foot outside of their crowded henhouses, and your "natural" beef could very well have come from a feedlot.

How can you be sure that your next meal did not come from a factory farm - a polluting facility that confines animals in crowded conditions? Understanding what the labels do (and don't) tell us is the first step. Below, you can find information on some of the most common labels found on meat, poultry and egg products. We also provide tips to help you better navigate the supermarket aisles and make informed choices that reflect your values.

## Two labels you see a lot <br> Natural



According to a Consumer Reports survey, more than half of U.S. shoppers seek out the "natural" label - many under the false pretense that it indicates a food product is free from things like pesticides, genetically modified organisms (GMOs) or artificial ingredients. ${ }^{1}$
However, federal agencies only regulate the use of "natural" on meat and poultry products, referring to how they are handled after slaughter (i.e., minimally processed, without added colors or artificial ingredients). ${ }^{2}$ Thus a
"natural" chicken could be a modern breed designed to grow so large that she can scarcely stand or walk. She could also have been raised on a crowded, stressful factory farm. ${ }^{3}$

There are no federal standards for the natural label on eggs, dairy and other non-meat items, making the label basically meaningless. ${ }^{4}$ The next time you see the natural label used on any food (including meat and poultry), recognize that it is little more than a marketing ploy.

## Organic



The U.S. Department of Agriculture's (USDA) Organic seal has perhaps the most rigorous standards and government oversight of any food label. For a product to be labeled organic, it must follow a comprehensive set of standards, including:

- Crops cannot be grown using synthetic fertilizers or sewage sludge;
- Crops cannot be genetically engineered or irradiated;
- Animals must be fed 100 percent organic feed (without avian/mammalian byproducts) and cannot be treated with growth hormones or antibiotics;
- Animals must have year-round access to the outdoors, and ruminants (cattle) must be on pasture during the grazing season. ${ }^{5}$

Unfortunately, organic standards are less robust when it comes to certain aspects of animal welfare. In 2018, the Trump administration withdrew a pending animal welfare rule that would have required organic poultry farmers to provide enough space for birds to move and stretch their wings. Organic advocates are now pressuring the Biden administration to reinstate the rule. ${ }^{6}$ Additionally, poor oversight and enforcement of organic standards enables some producers to stretch the rules - such as megadairies that confine their cows indoors on factory farms. ${ }^{7}$ This not only misleads consumers who expect more from the organic label, but also undermines organic producers that are meeting the original intent of the organic standards by raising their animals with high welfare practices.

## Other common labels for meat, poultry and eggs

Most of these labels require some type of authorization by the USDA before they can be used. However, the process usually just involves submitting paperwork without any on-site inspection to ensure that practices are being followed. ${ }^{\text {a }}$ And in some cases, the companies get to define the labels themselves.

## Free range



## Eggs and poultry meat:

Chickens are given access to the outdoors. But "access" is not specifically defined and could just mean opening a small door in a building that is so crowded that most birds cannot reach it. And for broiler (meat) operations, there are no specifications for how much time must be spent outdoors. ${ }^{8}$

## Cage free

CAGE FREE
ORADE A BROWN EGGS
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Eggs: Hens are given "freedom to roam" and unlimited access to water and food. (Approximately 95 percent of all eggs produced in the United States come from caged hens.) However, there are no standards for the "freedom to roam" criteria, so a cage-free hen could spend her entire life confined to a crowded building. ${ }^{9}$
Poultry meat: The label is misleading, as chickens raised for meat (broilers) are not typically confined to cages. Additionally, most factory poultry farms are "cage free," but their birds spend their entire lives in crowded buildings. ${ }^{10}$

## Vegetarian fed / vegetarian diet



The animals are fed a 100 percent vegetarian diet, with no animal byproducts. ${ }^{11}$ The label does not indicate anything else about how the animals are raised.

## Grass fed / 100\% grass fed

Cattle are fed exclusively grass and other forage from the time they are weaned, and are given access to pasture throughout the growing season. ${ }^{12}$ However, the USDA

dropped its official standards for grass fed in 2016, further confusing the use of this label and potentially leading to its abuse. For instance, some "grass-fed" beef may in fact come from cattle finished on corn in feedlots. ${ }^{13}$

## Antibiotic claims



Raised without antibiotics / no antibiotics given: No antibiotics are given to the animals from birth to slaughter. ${ }^{14}$ The label does not indicate anything else about how the animals are raised.

No sub-therapeutic antibiotics: The animals do not receive antibiotics on a daily basis, such as for disease prevention. Companies must include a statement explaining this term and indicating that antibiotics may be used to treat animal illnesses. ${ }^{15}$

No growth-promoting antibiotics: A somewhat misleading label, because the U.S. Food and Drug Administration (FDA) has prohibited the use of medically important antibiotics as growth promoters. This label can be used on products from farms that administer antibiotics for disease prevention - a practice that still raises the risk of developing antibiotic-resistant bacteria. ${ }^{16}$

## Raised without added hormones



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Beef and pork: No artificial hormones are given to the livestock from birth to slaughter. ${ }^{17}$ The label does not indicate anything else about how the animals are raised.

Poultry, veal and exotic species (i.e., bison, venison): The label is misleading, as federal regulations prohibit the administration of hormones to these animals. Products using the label must also include the statement, "There are no hormones approved for use in [poultry/veal/etc.] by Federal Regulations. ${ }^{118}$
Eggs: The label is similarly misleading, and must also be accompanied by a statement such as "No hormones are used in the production of shell eggs." ${ }^{19}$
a USDA grademarked eggs (the majority of eggs you'll find in the grocery store) follow a different verification process from meat and poultry, with cage-free or free-range claims requiring onsite verification by USDA staff. The following explanations of egg labels refer to USDA grademarked eggs only. See U.S. Department of Agriculture (USDA). Agricultural Marketing Service (AMS). "Shell Egg Graders Handbook." AMS PY Instruction No. 910 (Shell Eggs) - 1. November 2012 at Section 09 at pages 9 to 10.

## Fresh



Raw poultry labeled "fresh" must not have been cooled below 26 degrees Fahrenheit. (Poultry is not required to be labeled as "frozen" until it reaches 0 degrees Fahrenheit.) The fresh label cannot be used on any canned or irradiated products. ${ }^{20}$

## Treated with irradiation



The label is required on foods that are sold in grocery stores and that have been irradiated (treated with ionizing radiation), but it is not required on processed foods that contain irradiated ingredients. Irradiation is done to extend shelf life, eliminate bacteria and delay ripening. ${ }^{21}$ For information on safety and nutritional concerns surrounding this controversial process, visit http://fwwat.ch/irradiation.

## USDA Inspected



The label is found on all meat and poultry that is USDAinspected (the vast majority of meat you will find in the grocery store). USDA inspection screens for signs of pathogens and other contaminants that could lead to foodborne illnesses. ${ }^{22}$ The label does not mean that the animal was raised or processed in the United States.

## Product of USA



The label indicates that the meat was processed in the United States. This can include meat that was raised abroad and imported for further processing in the United States. ${ }^{23}$

## Local / locally raised



Eggs: The label indicates that the eggs originate from flocks located within 400 miles of the processing facility, or within the same state. ${ }^{24}$

Meat and poultry: There are no federal definitions or standards for this label, allowing producers and retailers to interpret "local" for themselves. ${ }^{25}$

## Animal-raising claims

Examples of animal-raising claims include pasture-raised, humanely raised, and sustainably farmed.

Eggs: These labels are not defined for USDA grademarked eggs. ${ }^{26}$

Meat and poultry: There are no federal definitions or standards for these labels. Producers are allowed to create their own definitions and submit documentation to back up their claims, ${ }^{27}$ putting the burden of further validating these claims on consumers.

## Third-party verified labels

With the general confusion surrounding what food labels actually tell you, it's no surprise that companies and organizations are trying to fill the gap. You can now find numerous third-party labels covering a range of issues important to consumers.

## Non-GMO Labels



Producers who wish to label their meat, poultry and egg products as "non-GMO" or "raised on a diet with no genetically engineered ingredients" must seek verification by a third-party certifier, such as the Non-GMO Project. ${ }^{28}$ Food carrying the USDA Organic seal can be labeled "non-GMO" without third-party verification, as GMOs are not permitted under the USDA organic standards. ${ }^{29}$

## Animal welfare labels



Several third-party certifiers address animal welfare, and their standards and oversight vary widely. One, for instance, offers a "humane-certified" label to producers that do not even provide chickens with outdoor access. ${ }^{30}$ It is therefore important to do your research before putting your trust in a third-party label. Visit the label's website, look at its standards and see if independent audits or inspections are conducted to ensure that these standards are being met.
The abundance of third-party labels only adds to the general confusion in the grocery aisle. A better way forward would be for our federal government to establish transparent, rigorous standards for these types of labels - or to put an end to some of the practices these labels try to help consumers avoid.

## Advice to consumers

Here are some tips for navigating food labels:

- Do your homework. Look at company websites and third-party claims (or call their 1-800 numbers). See if you can learn more about the farms from which they source their food and what the various labels require.


## - Cut out the middleman by purchasing locally or

 directly from farms, such as at your local farmers market. This allows you to ask questions of the farmers directly rather than relying on labels.
## Endnotes

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- Tackle one issue at a time. Decide what food or label is most important to you - Grass-fed beef? Raised without antibiotics? - and research different companies and third-party labels to determine which ones have practices that best reflect your values.

Ultimately, fixing our food labeling system is not enough to end the suffering and pollution that results from factory farms. Instead, federal and state regulators need to ban new factory farms and halt the expansion of existing ones. A rapid transition toward smaller, more integrated farming systems will improve animal welfare, reduce pollution, revitalize local communities and provide consumers with more sustainable choices.

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