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What are the differences between cage-free, free-range, and pasture-raised eggs?

“Cage-free,” “pasture-raised,” and “free-range” describe different methods of egg production. Essentially, these terms refer to the differing levels of animal welfare standards farmers use on their farms.

There are no solid definitions of what constitutes cage, cage-free, free-range, or pasture-raised eggs. Often, certification programs offer the best indication of how farmers keep their hens, but there are several certification programs that they can apply to.

Read on to learn more about the various egg production methods and the certifications that define them, as well as the benefits of and differences between each type.

Cage eggs

Farmers who produce eggs that fall into this category will keep their birds in battery cages. Conventional cages tend to have a sloped floor and house between three and eight birds. These cages can protect hens from predators and the parasites that live in manure. They also allow farmers to keep an eye on hen welfare and air quality.

On the other hand, they stop hens from participating in natural behavior, such as dust bathing, walking, and foraging. They cannot nest or roost, and they tend not to display signs of comfort such as flapping their wings, stretching, shaking, or wagging their tails.

Hens that farmers keep in cages can be at risk of becoming trapped between wires or experiencing foot damage due to overgrown claws.

Enriched cages

Enriched, or furnished, cages have additional features, such as perches, nesting boxes, or scratching areas. These cages vary in size but can sometimes hold up to 60 birds.

Having access to these additional features means that birds will be more able to engage in natural behavior than those that farmers house in conventional cages.

Cage hens do not usually have any access to outside space, however.

Cage-free eggs

Cage-free hens can move freely both horizontally and vertically, but they may not have access to outdoor areas.

Farmers feed them a natural diet, and they are able to exhibit the natural behaviors that caged hens cannot, such as nesting, roosting, and foraging.

Cage-free systems vary greatly. Sometimes, farmers will opt for multitier aviaries, but there are no clear definitions as to what exactly a cage-free system should look like.

The main feature is that cage-free birds have a larger area at their disposal, in which they can move freely and exhibit some of their natural behaviors, which caged hens cannot.

The United Egg Producers (UEP) Certified cage-free mark is one program to define cage-free.

For the UEP, “cage-free” means that hens are able to roam vertically and horizontally in indoor

barns and have at least [1 square foot](#) of floor space each. They may not have access to outside space.

The American Humane Certified program states that cage-free hens must have a minimum of [1.25 square feet](#) of floor space each, plus access to perches and nesting boxes.

Free-range eggs

Many egg cartons carry the “free-range” label. The main difference between cage-free and free-range eggs is that the latter come from hens that, in addition to the extra space that cage-free birds have, can also access some form of outside area.

However, there are no uniform standards regarding how long they are outside for or what the outside space is like.

[Food Alliance Certified](#) define free-range eggs as those that come from birds that do not live in cages and have access to natural daylight or a vegetation-covered outdoor area for at least 8 hours per day. Each bird must have at least 1.23 square feet of floor space and be able to nest, perch, and dust bathe.

The American Humane Certified program states that in order to be considered free-range, each bird needs to have at least [21.8 square feet](#) of outdoor space.

The [Certified Humane Program](#), meanwhile, states that free-range hens must have at least 2 square feet of outdoor space that they can access for at least 6 hours per day.

Pasture-raised

Hens that produce pasture-raised eggs have regular access to a large outdoor space that is covered in grass or other vegetation. This is the pasture.

There are various definitions of constitutes pasture-raised eggs.

[Animal Welfare Approved](#) offer the highest level of animal welfare. Their logo means that egg-producing hens are pasture-raised and have:

- at least 1.8 square feet of indoor floor space each
- continuous access to a vegetation-covered outdoor area in which to roam and forage
- at least 4 square feet of outdoor space each
- access to perching and nesting boxes

To bear the mark of “pasture-raised,” the American Humane Certified program states that each hen must have a minimum of [108 square feet](#) of outdoor pasture that has a “substantial cover” of living vegetation.

The Certified Humane Program states that in order to be considered pasture-raised, each bird must have access to a living vegetation-covered pasture for at least 6 hours per day. Each hen must have at least [108 square feet](#) of pasture.

Price

The cheapest way to produce eggs is by using the conventional caged method. This is because it is less labor-intensive. Also, hens living in such controlled conditions do not eat as much as those that are free to roam around.

The limited cost of raising hens in this way reflects in the cost of their eggs, as caged hens’ eggs tend to be the cheapest eggs available.

Generally speaking, the more space it takes to keep hens, the more expensive it is to produce eggs. This means that pasture-raised eggs, which are by far the best conditions for hens, tend to be the most expensive.

Which is best?

The sections below discuss the best egg production methods for people, hens, and the environment.

For people

There is little difference in the nutritional values of cage, cage-free, free-range, and pasture-raised eggs, according to the [Egg Nutrition Center](#).

However, there may be slight differences in the mineral content of eggs depending on the rearing environment, according to [one study](#).

For example, the researchers found a higher [magnesium](#) content in free-range eggs, though they also found that organic eggs had a lower phosphorus and zinc content.

[Beta-carotene](#) levels are also higher in free-range eggs, according to another [study](#). Beta-carotene is not an essential nutrient in itself, but the body converts it into [vitamin A](#), which has many health benefits.

For hens

Animal rights organizations say that pasture-raised and free-range eggs are the best choice for hen welfare. Hens that farmers raise in such environments can go outside and have the opportunity to engage in natural behavior.

Farmers cannot engage in practices such as beak clipping, which can negatively impact hen well-being, in those that produce certified free-range or pasture-raised eggs.

Birds kept in cages tend to show fewer signs of being comfortable. Behavior such as wing flapping, stretching, body shaking, and tail wagging are all signs of a happy hen.

Observers tend to see these behaviors more in pasture-raised and free-range flocks.

For the environment

Although free-range and pasture-raised eggs are much better for the hen, they are not necessarily better for the environment.

Hens that roam around and go outside need to eat more food in order to keep warm and maintain their activity levels. Because it takes more resources to produce these eggs, they have a higher carbon footprint than caged eggs.

Summary

Cage, cage-free, free-range, and pasture-raised are four different egg production methods.

Hens that produce cage eggs are kept in cages, while cage-free hens have much more space but no access to outside areas.

Hens that produce free-range eggs have some form of access to outside spaces, though the specifics depend on the certification program.

Hens that lay pasture-raised eggs have regular access to vegetation-covered outside space, but again, the specifics will depend on the certification program.

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