

How to Decode Egg Carton Codes

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STORY AT-A-GLANCE

- › Eggs often remain on store shelves for up to 30 days after packaging, which affects freshness and quality
- › The three-digit Julian date on a carton shows when eggs were packed, which makes it easier to find the freshest options
- › The letter “P” on the carton indicates the plant code to help you track down the exact processing facility in case of recalls
- › Voluntary USDA grading adds another layer of inspection for shell appearance and interior quality
- › Pastured eggs have deeper-colored yolks and better overall nutrition, especially when hens forage outdoors

For centuries, freshly harvested eggs have served as the go-to ingredient for almost everything – from rustic family recipes to gourmet delicacies. Nowadays, most eggs sold contain far more mysteries than their outer shell suggests.

You might be surprised by how complicated it is to figure out whether your carton is genuinely fresh or if those eggs have been sitting on a store shelf for several weeks. The United States Department of Agriculture (USDA) permits eggs to be sold up to 30 days after they’ve been packaged, which means you could easily end up buying older eggs that affect taste and safety.¹ You’ll find the relevant codes printed on the top or side of the egg carton.

Cracking the Egg Carton Code, Plus Useful Storage Tips

According to an article published by The Hearty Soul,² egg cartons are more than just containers protecting eggs during transportation. In fact, they hold a wealth of overlooked information. For example, here's a single detail that many consumers overlook – the day of the year those particular eggs were packaged, sometimes called the “Julian date.” When you find it, don't be bewildered by the numbers. Here's what it means:

“You can find this code on the side of the egg carton, near the sell-by date. It looks like a three-digit serial number but it's actually a date. If you are unfamiliar, Julian dates range from 001 to 365, counting every day of the year, one at a time. For example, 001 is January 1st and 365 is December 31.

This code refers to the day the eggs were washed, graded and loaded into their cartons. Eggs are freshest four to five weeks after being packaged so keep that in mind while shopping. Because the United States Department of Agriculture allows eggs to be sold for up to 30 days after their packaging, you may find cartons that are weeks old on store shelves.”³

But there's more to egg cartons than just the Julian date. Another vital piece of information you need to watch out for is the “plant code” that starts with the letter P. This indicates the location where the eggs were packed. “If there's a recall, this code will inform you if your egg carton is affected,” The Hearty Soul writes.⁴

If you're already storing eggs at home for some time, try the “float test” to determine whether they're safe to use.⁵ To do this, simply fill a glass or bowl with water and place the egg on the surface. If the egg stands upright or floats, it is older. However, this doesn't mean they're automatically inedible. In addition, crack the egg into a separate bowl and look for an odd smell or appearance before deciding to throw it out.

Another helpful tip is storing your eggs in a way that protects them from temperature changes. For instance, leaving eggs by the fridge door exposes them to frequent

temperature shifts as you open and shut it throughout the day. To increase shelf life, keep them in the coldest part of the refrigerator, in their original carton.⁶

The Hearty Soul also outlines the difference between the “sell-by” date and the Julian date. The “sell-by” is not a safety date, but indicates how long the product should be displayed on the shelf.⁷ The Julian number indicates the exact day the eggs were washed, graded and placed into their carton. In short, the two dates aren’t interchangeable, but will give you an indicator of the freshness of the eggs.⁸

Diving Deeper Into Egg Label Rules

A report from the University of Nebraska-Lincoln’s (UNL) Food and Nutrition⁹ provides more information regarding information printed on egg cartons. One notable detail is that some states allow an “expiration” or “sell-by” date on the carton, while others either restrict or forbid these specific labels outright.¹⁰

For instance, if you’re in a state that mandates a pack date (or Julian date), you’ll find the appropriate information on the cartons, but you might not see a “Sell-By” date at all. In contrast, another state might allow the “sell-by” format, which makes it easier for you to grasp a quick timeframe.

When you realize this discrepancy, it explains why certain egg cartons appear cluttered with multiple dates and codes, while others seem to display very few. That difference in labeling laws also means you need to pay more attention to proper storage instructions because the date on the carton may not always give you the full picture. To help minimize the confusion, UNL offers the following advice:¹¹

“Always purchase eggs before the ‘Sell-By’ or ‘EXP’ date on the carton. After the eggs reach home, refrigerate the eggs in their original carton and place them in the coldest part of the refrigerator, not in the door. For best quality, use eggs within three to five weeks of the date you purchase them.

The ‘sell-by’ date will usually expire during that length of time, but the eggs are perfectly safe to use. Use of either a ‘Sell-By’ or ‘Expiration’ (EXP) date is not

federally required, but may be state-required, as defined by the egg laws in the state where the eggs are marketed. Some state egg laws do not allow the use of a 'sell-by' date."

That being said, how long do fresh eggs actually last? According to Egg Safety Center, eggs are safe to eat four to five weeks after purchase, as long as it's refrigerated at 45 degrees Fahrenheit or lower.¹²

Interestingly, companies are able to pay the USDA to grade the quality of their eggs, evaluating everything from the yolk's shape to the egg white's overall firmness. Once they've passed inspection, companies are granted the right to use a special USDA logo on their cartons, meaning any carton displaying that mark has met the agency's standards. This is usually done to give consumers confidence that they're buying top-tier quality eggs.¹³

Additional Information About the Eggs You Buy

Another important piece of information Egg Safety Center noted is the assorted special designations beyond the USDA's grading, such as UEP (United Egg Producers) Certified, cage-free and certified organic.¹⁴ These labels consider farming practices and animal welfare standards or environmental concerns, which you'll find below.¹⁵

Certification

Definition

UEP Certified and UEP Certified Cage-Free

Egg cartons printed with these logos follow the UEPs standards that ensure optimal hen welfare, which were created by the Scientific Advisory Council. All UEP producers are audited annually.

American Humane Certified

Egg cartons with this logo meets the standards set by the American Humane Society. This means that the hens laying

Certification

Definition

the eggs were grown in a cage-free environment while following science-based welfare standards.

Certified Humane

The Human Farm Animal Care hands out these certifications to farmers that provide hens with a free-range or pastured environments. Third-party auditors ensure that these standards are constantly met.

Grade

The USDA Grade shield on a carton indicates that the eggs were audited for quality and weight under the supervision of a USDA grader.

Antibiotic-Free

Eggs sold with this USDA certification mean that the hens were never treated with antibiotics.

USDA Organic

This is the USDA's certification showing that eggs were grown following the agency's standards.

Practical Tips for Choosing and Using Quality Eggs

I believe that the root cause of confusion around knowing what eggs to buy is the lack of clear knowledge about how they're produced, handled and labeled. You'll be tempted to buy a carton simply because it's on sale, but then realize those eggs came from CAFOs (concentrated animal feeding operations) and have been in transit or storage far longer than you suspected.

In my case, I am now raising six hens at home and finding satisfaction in knowing exactly what they're eating. If you're not able to raise your own backyard flock, here are five strategies to help you pick the best eggs possible:

1. Pick pastured eggs when possible — Look first for organically raised, free-range pastured eggs. This means the chickens have a large space to roam and forage naturally rather than being fed pesticide-laced feed. Buy from trusted producers to ensure the chickens are less likely given grains high in omega-6 linoleic acid. This results in eggs with lower polyunsaturated fat (PUFA) content and improved nutritional quality.

You'll know eggs are pastured right away because they have better taste and texture compared to CAFO eggs. To find pastured eggs, visit your local farmers markets or health food stores. Even if you live in an urban area, you'll find small distributors bringing in cartons from farms outside city limits.

2. Check yolk color and quality — If you crack open an egg and see a bright orange yolk, that's a strong indicator of a hen eating a natural diet. You gain more lutein and zeaxanthin from these deeper-colored yolks, which support eye health.

I like to enhance my nutrient absorption by adding some raw, grass fed butter or a little bit of coconut oil to my vegetables, since these fats help my body take in more of the fat-soluble nutrients in eggs. It's a small tweak that gives you a better nutritional payoff.

3. Leverage quality ratings — I suggest visiting the [Cornucopia Institute's egg scorecard](#), which grades egg producers based on how they actually treat and feed their hens. This is helpful in avoiding genetically modified ingredients and other questionable antibiotics in the hens' feed. When putting your health first, you deserve to know how your eggs were produced before you spend your money.

4. Inspect packaging and use proper storage — I encourage you to look for clear labeling on the egg carton, making sure it hasn't been stored beyond recommended dates. Avoid cracked shells or dirty exteriors if you see them in the store. Once you

get your eggs home, place them in the coldest part of your fridge – never the door. High-traffic spots in your refrigerator experience temperature fluctuations that degrade the quality of the eggs.

As for myself, I typically eat about five eggs a day, with raw yolks blended into smoothies and whites lightly cooked with my meat. That approach gives me a balance of taste, texture and nutritional benefits.

5. Explore local options – Many big supermarkets focus on volume over quality, so you'll have better luck at a neighborhood co-op or small specialty store. I recommend asking farmers how their hens are fed and whether they're actually allowed to roam freely.

If you are a busy parent or juggling a hectic schedule, make it a point to go on a weekly trip to the farmers market to stock up on pastured eggs for the rest of the week. This supports your local economy while giving you a fresh product that's doesn't come from a facility that relies on feed laced with corn or soy.

Sources and References

- ¹ MDAR, [Safe Egg Handling for Backyard Egg Producers \(PDF\)](#)
- ^{2, 3, 4, 5, 6, 8} [The Hearty Soul, December 24, 2024](#)
- ⁷ [USDA, Food Product Dating](#)
- ^{9, 10, 11} [University of Nebraska-Lincoln, Cracking the Date Code on Egg Cartons](#)
- ^{12, 13, 14} [Egg Safety Center, Crack the Code! Learn How to Read an Egg Carton](#)
- ¹⁵ [UEP, Store Labels](#)