

# Can Eggs Actually Lower Risk of Heart Disease?

Chinese researchers examined survey data on 461,213 adults with an average age of 51 years old. None had a history of heart disease when they first joined the study. 83,977 of them developed heart disease or had a heart attack or stroke. Of those, 9,985 died of heart disease or stroke. More than half of the participants were followed for nine years or more. The average egg consumption among participants was half an egg daily. About 9 percent avoided eggs altogether and 13 percent consumed about one egg every day. [The study](#) found that people who typically eat an egg every day were less likely to have a heart attack or a stroke compared to those who didn't eat eggs at all.

## Things to keep in mind:

- This study was an observational study using a questionnaire, so you can't make a definitive cause and effect conclusion
- Chinese who consume more eggs tend to be of a higher social class

Another recent study touting the benefits of egg consumption comes from the American Journal of Clinical Nutrition. [This study](#) concluded that there is no risk from eating up to twelve eggs a week.

**Related: [Stop Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet](#)**

In this study, researchers recruited 128 participants. They were split into two groups. In the first group, they were instructed to consume two eggs per week, while the other half was instructed to eat 12 eggs per week.

Then, for three months, the participants were put on a diet

designed for weight loss. At this time they were told to omit saturated fats and instead to consume monounsaturated and polyunsaturated fats. However, the egg consumption was not changed. Throughout the study participant's blood pressure, blood sugar, and cholesterol were monitored. In the end, volunteers went through multiple tests to see if the cardiovascular system was affected.

The study found that participants' heart health stayed pretty much the same.

### **Things to keep in mind:**

- The "low egg" group ate more meat to make up for eating fewer eggs
- The Australian Egg Corporation funded the study

**Related:** [\*What Causes Chronic Inflammation, and How To Stop It For Good\*](#)

## **Our Take on Eggs**

Eggs are very high in dietary cholesterol, but they are low in saturated fat. High cholesterol in the blood restricts blood flow to our blood vessels. Eating cholesterol-rich foods can raise cholesterol levels in the blood, but not very much. New research is showing that cholesterol-rich foods do not significantly raise cholesterol, and the rise is not sustained. Saturated fats are not the problem either. The truth is, [trans-fats](#) and refined [sugars](#) raise cholesterol levels radically more than dietary cholesterol does, and lead to heart disease and pretty much every other common chronic ailment. No studies have shown that cholesterol consumption increase risk of disease. Also, while eggs raise LDL cholesterol, also stupidly known as "bad cholesterol," but eggs also increase levels of HDL, which is also known as "good cholesterol."

Regardless of where you stand on eggs, if you choose to eat

eggs, make sure you're getting them from a small farm from free-range chickens. The best, most nutritious eggs have yolks should be more orange than yellow.

**Related:**

- [\*A Guide to Finding and Choosing The Healthiest Eggs\*](#)
- [\*Pasture-Raised Eggs Are a Nutritional Powerhouse\*](#)

**Sources:**

- [\*Egg Consumption & LDL Cholesterol Size – NutritionFacts.org\*](#)
  - [\*Unscrambling The Nutrition Science On Eggs – NPR\*](#)
  - [\*Does Dietary Choline Contribute to Heart Disease? – The Weston A. Price Foundation\*](#)
  - [\*Egg lovers rejoice! They don't cause heart disease, says new study – BigThink\*](#)
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## **Wal-Mart Deceived Buyers of Organic Eggs, U.S. Lawsuit Says**

Wal-Mart Stores Inc. and their egg supplier are currently facing a federal lawsuit for misleading consumers by selling organic eggs with packaging that claimed the birds had access to the outdoors. The lawsuit alleges that Cal-Maine Foods Inc., the megastores' supplier and also the largest egg producer in the country, defined outdoor access as an enclosed structure with screens allowing outdoor air. Wal-Mart has not reviewed the allegations, but according to spokesman Randy Hargrove, "We hold our suppliers to high standards and are committed to providing our customers the quality products they

expect.”

## **Animal Welfare Standards and Consumer Demands**

It's difficult to determine if this lawsuit will go anywhere, especially in light of the USDA's recent rejection of more humane animal welfare standards. The Organic Livestock and Poultry Practices, intended to allow natural behaviors and reduce stress, was permanently shuttered half a year before it could go into effect. Wal-Mart and Cal-Maine Foods Inc could argue that it has met organic standards as they currently are in an attempt to justify the higher price. The companies would likely win

Where is the consumer in all of this? Demands for verifiably organic, humane, and high-quality products are skyrocketing, making organic foods the largest growing food market. A business like Wal-mart would be crazy not to take advantage of that, but millennials value integrity and the allegations in this lawsuit make it clear that could be an issue for the retail giant. The lawsuit says “Consumers paying more for these eggs have been deceived...The theoretical ability to view the outdoors is not the same as having access to it.”

## **We Want to Know**

As a consumer, how does this make you feel? Do you stop purchasing eggs from Wal-Mart? From Cal-Maine Foods Inc? Is that even possible? Cal-Maine Foods Inc, a company who markets its brands, Egg-Land's Best, Land O' Lakes, Farmhouse, and 4-Grain, to a quarter of the population through megastores Wal-Mart and Publix?

How do we eat healthy food in an ethical way within our current food system?

## Recommended Reading:

- [Detox Cheap and Easy Without Fasting – Recipes Included](#)
- [Start Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet](#)
- [How to Make the Healthiest Smoothies – 4 Recipes](#)
- [Holistic Guide to Healing the Endocrine System and Balancing Our Hormones](#)

## Source:

- [U.S. lawsuit says Wal-Mart deceived buyers of organic eggs – Reuters](#)
  - [Years in the Making, Organic Animal Welfare Rules Killed by Trump's USDA – Civil Eats](#)
  - [Cal-Maine Foods pursuing more acquisitions – wattagnet.com](#)
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# Trump's USDA Ends Animal Welfare Laws for Organic Eggs

The Trump administration announced in late December [plans to reject humane-treatment regulations of cage-free chickens](#) that were proposed during the previous administration. This reversal doesn't come as a huge surprise since the USDA repeatedly delayed the enforcement of those regulations.

In April 2016, the National Organic Program, under Obama's administration, proposed a new rule called the "Organic Livestock and Poultry Practices" (OLPP) rule. The rule would require basic animal welfare for a food producer to receive the organic label. The OLPP rules state that animals need to have the ability to sit, walk, stretch out, and stand up

without having to be in contact with another animal or the walls of the enclosure. The animals require year-round access to the outdoors, which has to include space with nature like plants and soil.

For more on what this means for organic eggs, check out [“Why the hell am I paying more for this?” Major egg operation houses “USDA Organic” hens at three per square foot.](#)

<https://www.youtube.com/watch?v=BZRKBtRy4p8>

The agribusiness industry is generally opposed to OLPP because the proposed rules would have forced chicken factories to make expensive changes. Not surprisingly, animal welfare groups are furious,

*The Obama administration’s rules for animal welfare under the National Organic Program set basic, common sense standards that not only alleviated the most egregious suffering of animals, but also aligned the actual standards in the \$30 billion organics industry with consumer expectations of how cows, pigs, and chickens are treated.” – Vandhana Bala, general counsel for Mercy for Animals*

## **Recommended Reading:**

- [Detox Cheap and Easy Without Fasting – Recipes Included](#)
- [Start Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet](#)
- [How to Make the Healthiest Smoothies – 4 Recipes](#)
- [Holistic Guide to Healing the Endocrine System and Balancing Our Hormones](#)
- [How to Detoxify and Heal the Lymphatic System](#)

## **Sources:**

- [Trump Administration Cuts Law Designed to Ensure Organic Animal Welfare – Modern Farmer](#)
- [Trump Administration Runs Afoul on the Organic Animal](#)

[Welfare Rule – Huffington Post](#)

- [Trump administration moves to kill regulations on animal welfare – NY Times](#)
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# A Guide to Finding and Choosing The Healthiest Eggs

They are fooling you. The words on the egg cartons don't mean what you think they do.

“Vegetarian-fed”, “cage-free”, “omega-3 enriched”, “free-range”, “organic”, “humanely-raised”, and “pasture-raised” all seem like healthy choices, but they don't accurately reflect how healthy the eggs are.

The egg aisle of a grocery store is like a political primary debate. Every egg carton is saying what you want to hear to get your vote. But they are just words.

Words that are used with the intent to make you buy the eggs, but they don't provide you with the answer to the question:

**Which eggs are the healthiest?**

To find the healthiest eggs, you must find the healthiest hens – hens that eat what they are biologically designed to eat.

## Chickens are Not Vegetarians

Among the dozens of different egg cartons, you think you've found the holy grail. Eggs from 100% vegetarian-fed chickens. Vegetables are healthy, so these must be the healthiest, right?

The only problem is that the healthiest chickens eat omnivorous diets. Chickens love to munch on green plants, wild seeds, earthworms, and insects. In fact, many chickens prefer insects over plants.

Every time I see “vegetarian-fed” on a carton of eggs, I am reminded of the time I held a big juicy worm four feet above a group of chickens. They jumped with vigor – flapping their wings, doing anything to get the worm before their hen friends.

Surely, they’d do the same for any kind of food. They are probably just hungry. But when I tried the same with sunflower seeds and fresh organic vegetables, they turned away and continued scraping the ground with their claws to find bugs and worms.

Related: [\*Animal vs. Plant Protein – What’s Better?\*](#)

## **The Truth About Vegetarian-fed Chickens**

“Vegetarian-fed”, however, does not mean the chickens are roaming around an organic vegetable garden oasis. In most cases, the egg companies didn’t change anything, but how they label their eggs.

For example, an egg carton that is labeled 100% vegetarian-fed and cage-free indicates that the chickens were raised indoors in a confined space with hundreds of other chickens.

To give you some perspective, imagine you are in a subway car during rush hour. Packed so many people that you almost kissed the guy next to you. Now imagine living your life in that subway car – no one gets out unless they die. (But at least you are not in cages, and you get free food!)

The chickens are, however, provided with food that is



scientifically designed to cover their needs. Here's an example of a typical "vegetarian" diet reported by Mother Earth News:

*Here's the ingredients list from "16 percent Layer Crumbles," a feed designed for hens raised in confinement: "Grain Products, Plant Protein Products, Processed Grain Byproducts, Roughage Products, Forage Products, Vitamin A Supplement, Vitamin D3 Supplement, Vitamin E Supplement, Vitamin B12 Supplement, Riboflavin Supplement, Niacin Supplement, Calcium Pantothenate, Choline Chloride, Folic Acid, Manadione Sodium Bisulfite Complex, Methionine Supplement, Calcium Carbonate, Salt, Manganous Oxide, Ferrous Sulfate, Copper Chloride, Zinc Oxide, Ethylenediamine Dihydriodide, Sodium Selenite."*

This feed may seem like it is covering all of the nutritional needs of the chicken, but studies show that vegetarian-fed chickens that live in confinement lay eggs that have:

- 1/3 more cholesterol
- 1/4 more saturated fat
- 2/3 less vitamin A
- 2 times less omega-3 fatty acids
- 3 times less vitamin E
- 7 times less beta carotene
- 50 percent less folic acid
- 70 percent less vitamin B12
- 50-112% less Vitamin D

But what are they comparing these eggs too? Eggs from chickens that are free to roam the outdoors and eat all types of plants and insects – the healthiest eggs. Words like "pastured", "pasture-raised", and "free-range" on egg cartons seem to reflect this healthy lifestyle, but they do not guarantee that the chickens were raised in this way. In fact, "pastured", "pasture-raised", and "free-range" eggs just mean that the chickens had some access to the outdoors – regardless if it is

a lifeless mud pit or a luscious green pasture.

But does it really matter if the chickens are outdoors? If we feed them a wide variety of seeds, plants, and insects, then they'll be healthy, right?

Not so fast. Like humans, chickens don't solely rely on diet for health. Sun exposure matters as much to chickens as it does to us.

## Chickens Sun Bathe Too

If we don't get any sun, our vitamin D levels drop, followed by less energy and depression. When we are chronically vitamin D deficient, our bones can become brittle and break easily. The same happens to chickens who have little access to the outdoors. (That's right, they synthesize vitamin D from the sun just like us.)

Vitamin D deficient chickens will also lay brittle eggs that provide us with less nutrition. But the vegetarian feed has vitamin D in it – shouldn't that cover their vitamin D needs?

Two animal researchers, Heuser and Norris, showed that 11 to 45 minutes of sunshine daily were sufficient to prevent rickets in growing chickens, but no improvements were obtained with vitamin D supplementation. This suggests that chickens are much better at using sunlight to synthesize vitamin D than using supplemental vitamin D.

**Related:** [\*Vitamin D – The #1 Vitamin You Need: From Treating Depression to Preventing Cancer\*](#)

## What About “Omega-3 Enriched” Eggs?

Don't fall for the hype. Although they do have higher omega-3s, these eggs are just as bad as conventional eggs.

Omega-3 enriched eggs usually come from chickens that are fed

omega-3 supplements like krill oil, flaxseed oil, and algae oil on top of their unhealthy vegetarian diet. These oils are most likely rancid and unhealthy for the chickens.

The healthiest way to enrich eggs with omega-3s is by letting the chickens eat what they are designed to eat. Chickens that naturally feed on pasture have significantly increased amounts of omega-3s in their eggs compared to conventional eggs.

Related: [\*Everything You Should Know About Fat\*](#)

## **The Healthiest Egg**

Now, we are beginning to put it all together. Chickens are omnivores that need access to the outdoors whenever they choose. Eggs that come from chickens who live the way that they are supposed to live are the healthiest.

This contention is even backed up by research that Mother Earth News conducted. They tested the nutrient content of eggs from chickens who lived under natural conditions. The editor-in-chief of Mother Earth News, Cheryl Long, commented that:

“Our test results reveal that the unnatural and inhumane conditions of factory farms are giving us substandard food. Consumers will get more nutritious eggs if they pay a premium for true free-range eggs from birds raised on pasture.”

## **How to Know if You Have The Healthiest Eggs**



It doesn't matter how many catchy words an egg carton throws at you. It could say "pasture-raised", "non-GMO", "humanely raised", "organic", or "I swear to God these are healthy – please trust me," but that doesn't mean they are the best eggs you can get.

This is because claims like "pastured" "pasture-raise" "cage-free" and "free-range" don't mean what you think they do. Labeling laws allow egg products to display these terms even if the egg-laying chickens spend little or no time outdoors in a pasture setting.

Non-GMO and organic eggs are also promising, but organic and non-GMO eggs may still be fed a vegetarian diet with little access to the outdoors. Bummer. So what can you do?

The only way to find the healthiest possible eggs is to connect with the farmer of the chickens that made them. Visit or reach out to the farm/company that produces the eggs that you normally buy and find out how they raise their hens. I've personally done this for Handsome Brook Farm's pasture-raised eggs and found out that they were making false claims on their packaging. Their eggs are no better than cheaper "cage-free" eggs.

To find the healthiest eggs, it is best to stay local and get to know the farmer. Do a quick search on [localharvest.org](http://localharvest.org) and

[eatwild.com](http://eatwild.com) to find a farmer that has quality eggs.

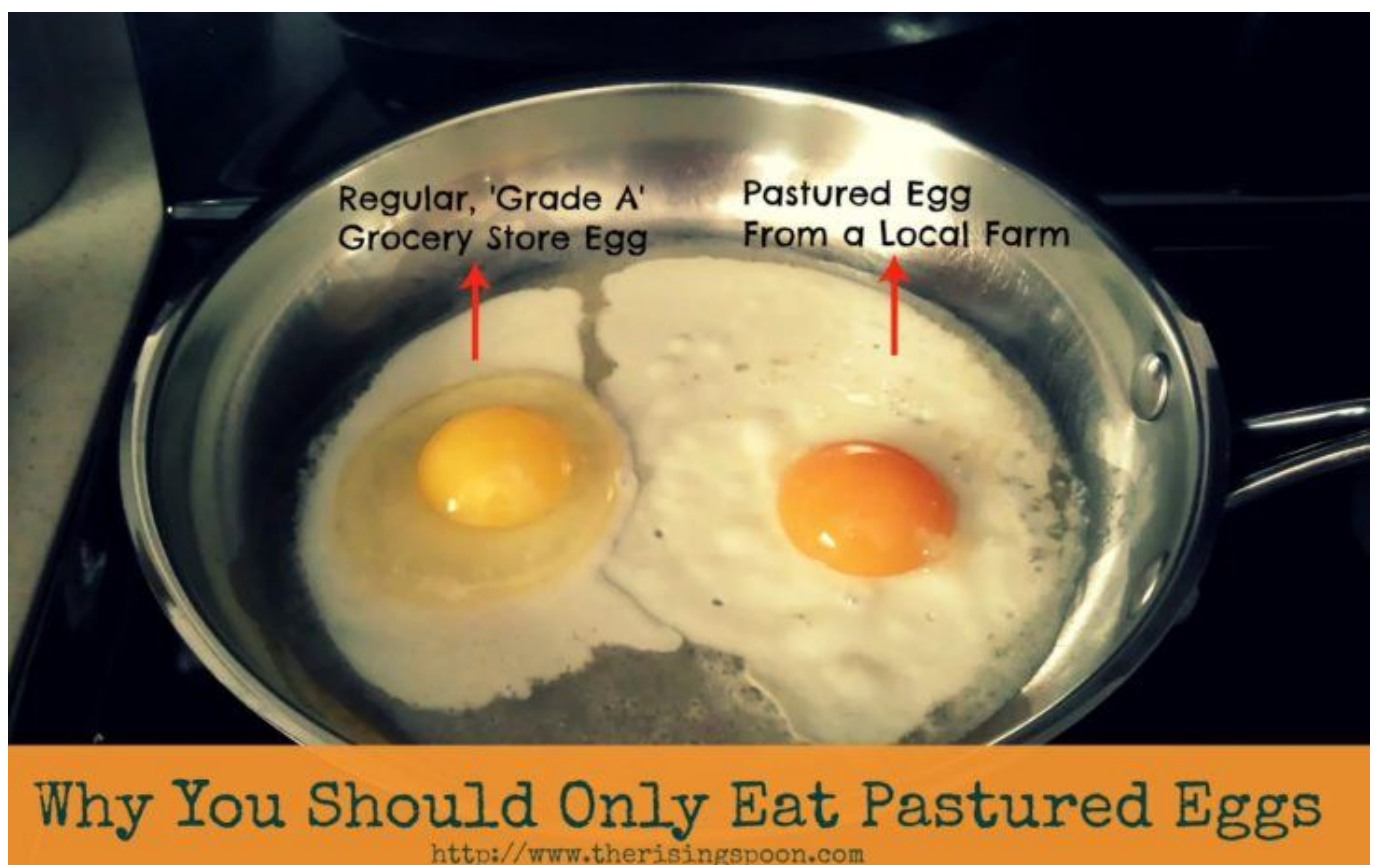
## The Quickest Way to Know if You Have High-Quality Eggs

If you are not sure that you can trust the eggs you are having now, you can test them in two ways.

### The Egg Shell Crack Test:

If the egg shell is very brittle and has little to no membrane on the inside, then it came from a chicken that is vitamin D deficient (and probably deficient in other vitamins and minerals as well). This indicates that the chickens didn't have much access to the sun.

### The Egg Yolk Color Test:



Egg yolks with a deep orange color are higher in vitamin A and beta-carotene. This deep color indicates that the chicken has

access to a diverse array of different plants. A pale, yellow yolk tells you that the chicken ate a diet consisting of mostly white corn and other nutrient-depleted grains that aren't as healthy for the chicken.

## **Does Your Egg Pass The Test?**

If the egg shell is resilient, and the yolk is a dense orange color then you have some healthy eggs. Conversely, if the shell shatters easily and has a pale yolk then it most likely came from an unhealthy chicken.

## **The Best Way to Prepare Eggs**

If you have high-quality eggs, it is best to eat the yolk raw and cook the egg whites.

Egg yolks should be eaten raw because cooking them will oxidize their cholesterol (rendering it unhealthy), and denature many of the vitamins (rendering them useless). If you don't like the taste of raw eggs, then put a couple yolks into your morning smoothies with some lemon juice. This way you won't taste the raw egg, and the lemon juice will prevent some of the nutrients from denaturing.

But before you eat the yolk, make sure you separate it from the egg white. The egg white has proteins in it that bind to the b-vitamins, making them useless. If you want to get the extra protein that the whites provide, then you can cook them until they turn white (but not brown). Cooking the egg white will deactivate the proteins binding to the b-vitamins, so you can get all of the vitamins out of the raw yolk and all of the protein from the whites at the same time.

## **The Takeaway**

The healthiest eggs come from the healthiest hens.

Don't blindly trust the words on the egg carton. The only way to know if you have healthy eggs is by finding out how the chickens are raised. Do your research, and get to know your egg farmer.

If you are looking to get the most nutrition out of your high-quality eggs, it is best to have the egg yolks raw and the egg whites cooked.

### **Recommended Reading:**

- [\*Homemade Calcium and Magnesium\*](#)
- [\*Detox Cheap and Easy Without Fasting – Recipes Included\*](#)
- [\*The Benefits of Backyard Chickens\*](#)
- [\*Pasture-Raised Eggs Are a Nutritional Powerhouse\*](#)

### **Sources:**

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  - [\*Raising Backyard Chickens Part 3 – Pastured Eggs vs. Store Bought – The Dabblist \(Image credit\)\*](#)
  - [\*Meet Real Free-Range Eggs – Mother Earth News\*](#)
  - [\*Eggs, pasture-raised – The World's Healthiest Foods\*](#)
  - [\*Beware of Misleading Omega-3 Claims – Mercola\*](#)
  - [\*Vitamin D – DSM\*](#)
  - [\*Important Update on Eating Raw Eggs – Mercola\*](#)
  - [\*Vitamin B12 bioavailability from egg yolk and egg white: relationship to binding proteins. – NCBI\*](#)
  - [\*Free-Range Eggs Contain More Vitamin D According to Mother Earth News Study – Organic Consumers Association\*](#)
  - [\*False Egg Labeling Case Against Handsome Brook Farm Can Proceed, Court Rules – Animal Legal Defense Fund\*](#)
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# Five Awesome Organic Foods that Pack More Punch than Supplements

Without a doubt, supplements are needed in today's society. We're on the go. It's difficult to get everything our bodies require in a day. Sometimes, no matter how hard we work at it, we're still deficient in something, and not all of us can afford a personal trainer. Supplements can help provide total wellness though getting these essential nutrients from the food we're already eating is usually best. Here's a look at five awesome organics that are loaded with what your body craves, so you can receive the benefits as nature intended.

## Kale

Along with spinach, kale often tops the list of healthy greens, though kale is lower in oxalates, so nutrients are absorbed better. For each 100-gram/ 50-calorie portion of kale consumed, you'll receive:

- Vitamin C (200% of the RDA)
- Vitamin A (300% of the RDA)
- Vitamin K1 (1000% of the RDA)
- Calcium
- Copper
- Magnesium
- Manganese
- Potassium
- Vitamin B6
- Fiber (2 grams)
- Protein (3 grams)

*Try Kale:* People often have an easier time incorporating kale into their diet when it's in a smoothie. Try mixing it up in a



blender with juice and berries.

## Garlic

There are more than 200 varieties of garlic, and the cloves are known for containing allicin. Interestingly, it seems to work like a natural defense system for the plant, fighting off fungi. Allicin is a favorite among those who seek natural cures because it's believed to have antimicrobial and antibiotic properties. It's been touted as a cure for infections, an aid for acne, and some studies have suggested that it lowers blood pressure and cholesterol. On top of this, garlic contains:

- Calcium
- Copper
- Manganese
- Potassium
- Selenium
- Vitamin B1
- Vitamin B6
- Vitamin C

*Try Garlic:* While garlic comes in nearly everything these days, it's almost always cooked. Freshly chopped garlic can be added to cool pasta or spread on bread with butter, but it tends to flow better when added to fresh-made salsa or guacamole.

## Blueberries

Antioxidants are high on the list as to what makes blueberries an awesome organic food. They've been linked to everything from cancer prevention to memory enhancement, and they're 100% tasty. On top of this, blueberries contain all sorts of other things that lead to a healthier body, including:

- Calcium

- Folate
- Iron
- Magnesium
- Manganese
- Phosphorous
- Potassium
- Vitamin B6
- Vitamin C
- Vitamin K1
- Zinc
- Fiber (3.6 grams per cup)

*Try Blueberries:* A recipe isn't needed for blueberries because they're fantastic on their own. However, they can also be tossed on top of cereal or mixed into a smoothie.

## Eggs

A single egg can contain more than five grams of protein, making it a staple on tables around the world. Though it was once believed that the cholesterol found in eggs led to high cholesterol in the blood, experts now say that trans fats and saturated fats, which are commonly consumed with eggs, pose a far bigger risk. Considering the whole host of beneficial vitamins and minerals that are found in eggs, they're worth including in ones' diet.

- Biotin
- Calcium
- Cephalin
- Folate
- Iodine
- Iron
- Lecithin
- Phosphorous
- Selenium
- Thiamine

- Vitamin A
- Vitamin B12
- Vitamin B5
- Vitamin D
- Vitamin E
- Zinc

## Chocolate

Cocoa and dark chocolate rank high on the list of antioxidant-rich foods. One of the problems is that it's often diluted and loaded with sugar. Milk chocolate, which is commonly consumed, isn't as healthful as dark chocolate with 70-85% cocoa content. In addition to the antioxidants, cocoa has:

- Copper
- Fiber
- Iron
- Magnesium
- Manganese

*Try Cocoa:* Organic cocoa powder can be added to a smoothie to make it feel even more like a dessert. Dark chocolate squares can be eaten as-is, or melted over blueberries for a truly decadent treat.

## Conclusion

Each of the foods listed here can be incorporated into a diet with ease, as there are versatile and organic varieties found in most modern markets. While their non-organic cousins contain the same nutrients, organic options don't contain the pesticides, antibiotics, and growth hormones that a person doesn't need. Moreover, several of the items detailed here landed on the Environmental Working Group's list of foods that contain high amounts of pesticides when grown conventionally.

If you don't have easy access to organic produce, you might

consider purchasing yours online through a delivery services such as [Organics Live](#). If they don't deliver in your area, chances are, someone else does.

Our featured image comes from this [Beet Pickled Eggs + Kale Salad](#) recipe.

### **Recommended Reading:**

- [Total Nutrition – Make your own Homemade Multivitamin and Mineral Formula](#)
- [Garlic – The Most Amazing Herb On The Planet](#)

### **Sources:**

- [Are Chicken Eggs Good or Bad for My Cholesterol? – Mayo Clinic](#)

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# **Pasture-Raised Eggs Are a Nutritional Powerhouse**

Eggs are among the most nutritious foods on the planet. A whole egg contains all the nutrients required to turn a single cell into a baby chicken. Pasture-raised eggs are one of the richest sources of bioactive nutrients that enhance hormone function, reduce inflammation, improve fat-burning, and enhance brain function.

Chickens are designed to naturally graze on grass, weeds, worms, and insects. When they are able to do this, they bioaccumulate omega-3 fatty acids, carotenoid antioxidants and major minerals like magnesium.

It is a great idea to consume pasture-raised, organic eggs.

Unless you have an immune sensitivity to them (lab test) or feel tired, have to clear your throat, feel inflamed, etc. than you want to have these as a staple item in your diet.

## **Eggs Are a Dense Source of Bioactive Compounds**

Eggs provide nutrients that help to prevent human health degeneration. One study released in 2005 provided that eggs contain 18 vitamins and minerals, some of which are commonly deficient in the western diet. Carrots seem to get all the credit for its carotenoid content, but this pigment also gives yolk its yellow/orange color.

Carotenoids have antioxidant and anti-inflammatory properties that play a role in the central nervous system and are responsible for eye and vision wellness. Carotenoids are required for vitamin A production, assist in neural retina function, and provide protective macular pigment (responsible for field of vision in the center of the eye). Lack of this key nutrient is linked to macular degeneration and cataract formation. A study published by the Journal of Alzheimers Disease released in 2014 states that a link exists in carotenoid intake and cognitive function observed by Alzheimer's patients.<sup>1-4</sup>

## **Lutein and Zeaxanthin**

Lutein and zeaxanthin are two types of carotenoids and are an essential dietary component because the body's tissue does not synthesize these compounds on its own. Specifically, aside from being found in the yolk of eggs, lutein and zeaxanthin are naturally occurring in dark leafy greens.

Providing more reason to not limit egg consumption to egg whites, egg yolk is a source of lecithin, choline, and

phosvitin. Lecithin provides cellular support and aids in the secretion of bile, which inhibits the buildup of stones in the bladder. Among metabolism promoting factors, choline is essential for brain development. The choline content alone in egg yolks is one reason why pregnant women supplement their diet with eggs. Phosvitin is a protein that chelates iron ions, or in other words behaves as an antioxidant in the removal of metals, and assists in detoxifying the body. Specifically, phosvitin aids in inhibiting excessive melanin synthesis in skin.<sup>3, 5</sup>

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## **Eggs Are a Nutritive Powerhouse**

Eggs provide a valuable source of protein, especially for individuals with gout because it does not contain purine (3). One entire large egg contains 6 grams of high-quality protein and is a good source of protein for vegetarians.<sup>6</sup>

Mostly found in the yolk, biotin is a B-complex vitamin that contributes to metabolic pathways by serving as a transport mechanism for vitamins and minerals into eggs during development and makes eggs an excellent source of this nutrient. Also responsible for the vitamin and mineral transportation, riboflavin and iron are two other nutrients found in trace amounts in both egg whites and egg yolks.<sup>7</sup>

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## Americans – Why Do You Keep Refrigerating Your Eggs?

(Dr. Mercola) If you're an American, you probably store eggs in the refrigerator – and wouldn't think of doing it any other way.

Yet, the US is one of the *only* countries where chicken eggs are kept refrigerated. In much of Europe, for instance, eggs are often stored right on the counter, at room temperature.

But then, US eggs would be *illegal* in Europe due to an egg-washing process that may actually make them *more* susceptible to contamination with bacteria like Salmonella.

## **In the US, Eggs Are Refrigerated to Help Reduce Salmonella Risks**

If an egg is infected with salmonella, the bacteria will multiply more quickly if the egg is stored at room temperature instead of in the refrigerator, particularly if they're stored for longer than 21 days.<sup>1</sup> This is why, in the US, public health agencies advise keeping your eggs in the fridge.

And the truth is, the way most eggs are raised in the US – in industrial concentrated animal feeding operations or CAFOs – the risk of salmonella contamination rises.

In CAFOs, egg-laying hens are often crammed into tiny quarters with less space to stand upon than the computer screen you are looking at. Disease is rampant, and the birds ARE filthy – not because of their nature, but because we have removed them from their natural habitat and compromised their innate resistance to disease.

Eggs from such large flocks (30,000 birds or more... and some actually house *millions* of hens) and eggs from caged hens [have many times more salmonella bacteria](#) than eggs from smaller flocks, organically fed and free-ranging flocks.

They're also more likely to be antibiotic-resistant strains, due to the flock's routine exposure to such drugs. It is because of these disease-promoting practices that the US also employs egg washing – a technique that's actually banned in Europe.



# Why Are American Eggs Washed, When Egg Washing Is Banned in Much of Europe?

When you have eggs from tens of thousands of chickens – or more – all under one roof, there’s a good chance they’re going to get feces and other contaminants on them. The US solution, rather than *reducing* the size of the flocks and ensuring better sanitation and access to the outdoors, is to wash the eggs. But this isn’t as innocuous as it sounds.

As the eggs are scrubbed, rinsed, dried, and spritzed with a chlorine mist, its protective cuticle may be compromised. This is a natural barrier that comes from the mother hen that lays the egg, and it acts as a shield against bacteria.

It even contains antimicrobial properties. US egg-washing strips this natural protectant from the egg, which may actually make it more likely to become contaminated. According to European Union (EU) guidelines:

*“Such damage may favor trans-shell contamination with bacteria and moisture loss and thereby increase the risk to consumers, particularly if subsequent drying and storage conditions are not optimal.”*

Industrial egg washing, by the way, is banned in much of Europe, not only because of potential damage to the eggs’ cuticles but also because it might allow for more “sloppy” egg-producing practices. The chief executive of Britain’s Egg Industry Council told *Forbes*:[2](#)

*“In Europe, the understanding is that [prohibiting the washing and cleaning of eggs] actually encourages good husbandry on farms. It’s in the farmers’ best interests then to produce the cleanest eggs possible, as no one is going to buy their eggs if they’re dirty.”*

In the US, of course, you'd have no way of knowing whether your bright-white grocery-store eggs were covered in filth before they arrived in your kitchen. Plus, about 10 percent of US eggs are treated with mineral or vegetable oil, basically as a way to "replace" the protective cuticle that's just been washed off.

Unfortunately, *since an eggshell contains approximately 7,500 pores or openings*, once the natural cuticle has been removed what's put ON your egg goes INTO your egg. Meaning, whatever the eggshell comes into contact with can cross over this semi-permeable membrane and end up in your scrambled eggs, from chlorine to mineral oil to dish soap – to salmonella.

## **The Other Reason Why the EU Recommends Constant Room Temperature Egg Storage**

European egg marketing regulations state that storing eggs in cold storage and then leaving them out at room temperature could lead to condensation, which could promote the growth of bacteria on the shell that could probably get into the egg as well. As *io9* reported, the EU therefore advises storing eggs at a constant non-refrigerated temperature:[3](#)

*"EU guidelines therefore stipulate that eggs should be transported and stored at as constant a temperature as possible – a temperature between 66.2 °F and 69.8°F in the winter and between 69.8°F and 73.4°F in the summer."*

So, despite what you may have heard, eggs that are fresh and have an intact cuticle do not need to be refrigerated, as long as you are going to consume them within a relatively short period of time.

In the US, refrigeration of eggs became the cultural norm when mass production caused eggs to travel long distances and sit

in storage for weeks to months before arriving at your superstore. The general lack of cleanliness of CAFOs has increased the likelihood that your eggs have come into contact with pathogens, amplifying the need for disinfection and refrigeration.

So, IF your eggs are very fresh, and IF their cuticle is intact, you do not have to refrigerate them. According to Hilary Thesmar, director of the American Egg Board's Egg Safety Center:[4](#)

*"The bottom line is shelf life. The shelf life for an unrefrigerated egg is 7 to 10 days and for refrigerated, it's 30 to 45 days. A good rule of thumb is one day at room temperature is equal to one week under refrigeration."*

Eggs purchased from grocery stores are typically already three weeks old, or older. USDA-certified eggs must have a pack date on the carton, and a sell-by date. Realize that the eggs were often laid many days prior to the pack date.

Most grocery-store eggs in the US should not be left unrefrigerated because they've had their cuticles essentially washed off. If your eggs are fresh from the organic farm, with intact cuticles, and will be consumed within a few days, you can simply leave them on the counter or in a cool cupboard.

## **Are US Organic Eggs Washed?**

Organic flocks are typically much smaller than the massive commercial flocks (typically by an order or two of magnitude) where bacteria flourish, which is part of the reason why eggs from truly organic free-range chickens are FAR less likely to contain dangerous bacteria such as salmonella. Their nutrient content is also much higher than commercially raised eggs, which is most likely the result of the differences in diet between organic free ranging, pastured hens and commercially farmed hens.

As far as washing, detergents and other chemicals used for “wet cleaning” organic eggs must either be non-synthetic or among the allowed synthetics on the National List of allowed non-agricultural substances, which can include chlorine, ozone, hydrogen peroxide, vinegar, and others. Some farmers report rinsing eggs very quickly in water, just to dislodge any debris, and believe this is adequate. Others use a dry brushing process – no liquids at all – just a brush, sandpaper, or a loofah sponge.

Since most organic egg producers are typically interested in producing high-quality eggs, many of them—especially small, local farming operations—have implemented gentle washing methods that don’t compromise the cuticle. However, you certainly can’t tell by looking at them what type of washing process they may have gone through. *The only way to know if your eggs have been washed or oiled (and using what agents) is to ask the producer – and the only way to do that is to buy from small local farmers you have direct contact with.*

## **Locally Raised Eggs Are Usually Best**

The key here is to buy your eggs locally; this is typically even preferable to organic eggs from the grocery store. About the only time I purchase eggs from the store is when I am travelling or for some reason I miss my local egg pickup. Finding high-quality organic eggs locally is getting easier, as virtually every rural area has individuals with chickens. If you live in an urban area, visiting the local health food stores is typically the quickest route to finding the high-quality local egg sources.

[Farmers markets](#) and food coops are another great way to meet the people who produce your food. With face-to-face contact, you can get your questions answered and know exactly what you’re buying. Better yet, visit the farm – ask for a tour. If

they have nothing to hide, they should be eager to show you their operation.

## Eggs ARE a Highly Nutritious Food

The issue of whether or not to refrigerate your eggs becomes a moot point if you've been scared into believing that eggs are bad for your health. I want to address this briefly, as there is a major misconception that you must avoid foods like eggs and saturated fat to protect your heart. Eggs are an incredible source of high-quality protein and fat—nutrients that many are deficient in. And I believe eggs are a nearly ideal fuel source for most of us. The evidence clearly shows that eggs are one of the most healthful foods you can eat, and can actually help prevent disease, including heart disease. For example, previous studies have found that:

- Consumption of more than six eggs per week does not increase the risk of stroke and ischemic stroke<sup>5</sup>
- Eating two eggs a day does not adversely affect endothelial function (an aggregate measure of cardiac risk) in healthy adults, supporting the view that dietary [cholesterol](#) may be less detrimental to cardiovascular health than previously thought<sup>6</sup>
- Proteins in cooked eggs are converted by gastrointestinal enzymes, producing peptides that act as ACE inhibitors (common prescription medications for lowering blood pressure)<sup>7</sup>
- A survey of South Carolina adults found no correlation of blood cholesterol levels with “bad” [dietary](#) habits, such as use of red meat, animal fats, fried foods, butter, eggs, whole milk, bacon, sausage, and cheese<sup>8</sup>

As for how to eat your eggs for optimal health, ideally the yolks should be consumed raw, as the heat will damage many of the highly perishable nutrients in the yolk. Additionally, the cholesterol in the yolk can be oxidized with high

temperatures, especially when it is in contact with the iron present in the whites and cooked, as in scrambled eggs, and such oxidation contributes to chronic inflammation in your body.

However, if you're eating [raw eggs](#), they MUST be organic pastured eggs. You do not want to consume conventionally raised eggs raw, as they're much more likely to be contaminated with pathogens. The next best option to raw is to eat them soft-boiled or gently cooked "sunny side up" with very runny yolks. One final caveat: I would strongly encourage you to avoid all omega-3 eggs, as they typically come from chickens that are fed poor-quality sources of omega-3 fats that are already oxidized. Omega-3 eggs are also more likely to perish faster than non-omega-3 eggs.