



# The Irreplaceable Egg

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## Perfect Design

Eggs have gotten quite a bad rap for their cholesterol containing properties and the link between cholesterol and atherosclerosis. However, much of their bad reputation is unfounded. Although a large egg does contain approximately 210g of cholesterol, we now know that **changing the amount of dietary cholesterol consumption has only a minor effect on blood cholesterol concentrations** in most people.

Our bodies synthesize cholesterol to the tune of about 1g/day. About 2/3<sup>rd</sup> of this is cholesterol produced in the liver. The reason why dietary cholesterol does not impact our overall cholesterol levels as much as originally believed is due to our body's ability to form high density lipoproteins (HDL). The HDL acts as a scavenger absorbing excess cholesterol. Several studies have found that eggs actually help to increase the number and size of HDL. It has been shown that when people ate three or more eggs per day their bodies made bigger LDL- and HDL-lipoprotein particles than when they ate no eggs. Initially, one would think this sounded like a negative thing; however, we now know the larger LDLs are less likely than small ones to enter artery walls and contribute their cholesterol load to artery-clogging plaque. Similarly, larger HDLs are more robust than smaller ones at scavenging cholesterol out of the bloodstream and, ultimately, out of the body.

Studies have shown that it is the especially small, dense LDLs that cause the greatest risk for atherosclerosis. Several recent studies have shown that people with diabetes or heart disease tend to package relatively more of their cholesterol in these tiny LDLs than do healthier people.

Furthermore, it has been found that a particular egg component called "lecithin" interferes with the absorption of egg cholesterol and markedly lowers its uptake by the intestine. Even though a good amount of cholesterol is consumed when an egg is eaten, it has been found that much of the cholesterol becomes "unavailable for absorption" in the presence of phospholipids such as lecithin.

*Nutrient density* is the key reason why eggs are irreplaceable in the healthy diet. When a food item provides more nutrients than calories to the diet, it deserves to be called "nutrient dense" and needs to be part of everyone's diet. While eggs provide only 1.3% of the average caloric intake, they are so nutrient dense that they contribute a great deal more nutrition than calories: 6% of the RDA for riboflavin, 5% of the folate, 4% of the vitamin E and vitamin A, and almost 4% of the protein.

Not only are eggs nutrient dense (which is a term we wish more Americans appreciated), but they are probably the most affordable and the highest quality source of protein anywhere. They have a biological value of 93.7%. Biological value is the efficacy with which protein is used for growth. Fish is rated at 76% and beef is rated at 74.3%. Eggs are most nutritious and easier to digest when eaten raw.

Eggs also include a range of B vitamins, calcium, zinc and iron which are needed for optimal muscle recovery and healing. Biotin is a water-soluble B-complex vitamin which is pervasive in many foods and also produced by intestinal bacteria. Biotin plays a key role not only in fat and amino acid metabolism but also serves as a co-enzyme for numerous metabolic reactions. In order to get all of these nutrients from the egg, you must eat the whole egg (the egg white and yolk). Eating only the egg white eliminates the most nutrient dense part of the food (the yolk) and can actually contribute toward a biotin deficiency.

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### *Back to Health approved*

#### Egg Salad

Serves 4

6 Tbl Hain Safflower Mayonnaise  
2 Tbl Yellow Mustard  
½ - 1 tsp sea salt  
pepper, to taste  
8 free range eggs, boiled, peeled

Mix the first 4 ingredients together to make a dressing. Use an egg slicer to slice the boiled eggs length wise and then slice again side ways. [this gives the salad smaller bits of egg and makes it easier to mix]. Add eggs to the dressing. Serve warm or cold.

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## Controversial Raw Egg

In our research on salmonella, we see it as not much more than another opportunistic organism. When we use the term "opportunistic organism", we imply that the organism tends to thrive in an already weakened host. However, we are led to believe that any exposure to salmonella will lead to severe sickness and potential death.

### *Back to Health approved*

#### Turkey – Egg Casserole

1 Large Baking Potato, peeled, cubed  
 ½ Medium Green Pepper, diced  
 ½ Medium Onion, diced  
 1 lb. free range Ground Turkey or Turkey Sausage  
 1 dozen Free-Range Eggs  
 1 tsp. Vegesal Seasoning or other all purpose seasoning  
 1 tsp. Mustard  
 1 tsp. Cumin  
 ½ tsp. Thyme  
 ½ tsp. Garlic Powder  
 Dehydrated Parsley to top  
 Salsa (use your favorite!)

Preheat Oven to 350 degrees.

Boil the potatoes until done but still firm. If you get them too done they will be too soft handle when putting the casserole together. While the potatoes are boiling, sauté the peppers and onions until soft. Add ground turkey and brown.

Whip together the eggs and the spices, saving the parsley as a topping. Coat a shallow casserole dish or a 9 x 13" baking dish with sunflower or safflower oil. Evenly spread in layers starting with the turkey mixture, then potatoes, then cover with the egg mixture. Take a fork and move the turkey and potatoes around so that the contents are evenly coated with the eggs. Sprinkle with dehydrated parsley.

Cover the casserole dish with the lid or if using the 9x13" baking dish, take another 9x13" baking dish and turn upside down to top the dish. Bake for 25 - 30 minutes or until egg is done and no longer "runs" when pricked with a fork. Serve hot and top with salsa.

Some humans have a "gastroenteritis" syndrome characterized by nausea and vomiting within 8-48 hours of ingesting Salmonella. This usually subsides quickly. Shortly thereafter it can progress to where the individual may experience abdominal cramps and diarrhea. The individual may have moderate fevers (<39C) and occasional chills, too. These symptoms are a natural response of the human body trying to eliminate an aggressive invader...this is what it should do. It's a protective mechanism. But why is the reaction different from person to person? Why do some only have nausea and vomiting and others may be hospitalized? The key difference is in the health of the body that is invaded. More severe symptoms occur in higher risk groups of people. **Those at higher risk of infection include:**

1. The **young** (up to 3 years of age) because their immune systems may be immature as is their bacterial flora in their gastrointestinal tract, both of which are protective. In addition, many young children today have been on multiple rounds of antibiotics for ear infections and the like which can be a reason for decreased good bacteria in the gut. Also, those of **elderly** status are more susceptible to infection because their immune systems are waning or declining. AKA: a weakened host

2. Persons with **decreased gastric acidity**. Stomach acid is a first line of defense against ingested Salmonella. Those who have decreased gastric acidity may include those taking antacids, acid suppression drugs (e.g., H2 blockers), or those without stomachs due to cancer or ulcer surgery. AKA: a weakened host

This is why it is good to drink up to ½ cup of apple cider vinegar at the first sign of infection. Drink as much as you can. This little remedy has been shown to provide immediate relief. The reason it works is the vinegar increases the acidity of the GI tract which can kill some of the salmonella.

3. Persons with **altered gastrointestinal bacteria**. Good intestinal bacteria is a protective mechanism to compete against Salmonella bacteria. This would include any age range taking broad spectrum antibiotics, purgatives, or those who have had bowel surgery. Again: a weakened host

4. Persons who are **immunosuppressed or immunocompromised** (HIV patients, those taking cytotoxic drugs such as cancer patients, those with rheumatoid arthritis, those with inflammatory bowel disease, those who have had transplants, those with bleeding disorders such as Sickle Cell patients, those with bone or joint disease, especially prostheses, those with anatomic cardiovascular disease).

5. Persons taking **drugs which cause constipation** (having normal bowel movements is another protective mechanism to prevent the establishment of pathogenic bacteria such as Salmonella in the host's bowel).

<http://www.news.cornell.edu/releases/Jan98/DT104facts.html>

We strongly feel if one strives to attain optimal health, eliminates foods and environmental exposures that tear the body down and cause nutrient deficiencies, and practices good hygiene, that salmonella would not be the danger it poses to most unhealthy Americans.

Health Department officials want you to think it's the raw eggs fault or it's salmonella's fault when really it's the individuals responsibility to do what it takes to keep a strong, healthy body...this is what prevents disease...not avoiding raw eggs. If you take a close look at these people and children who may react violently to salmonella exposure, you will see they already had an underlying health condition...AKA: a weakened host.

Know where your eggs come from...never eat an already cracked egg...and wash the egg before you crack it. Most importantly, smell it. If it smells, you shouldn't eat it. Isn't it nice to know you do have control over your health?

Federal Law requires that we warn you of the following:

1. The information provided in this article is for educational purposes only.
2. Your individual health status and any required health care treatments can only be properly addressed by a professional healthcare provider of your choice. Remember: There is no adequate substitution for a personal consultation with your chosen health care provider. Therefore, we encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.