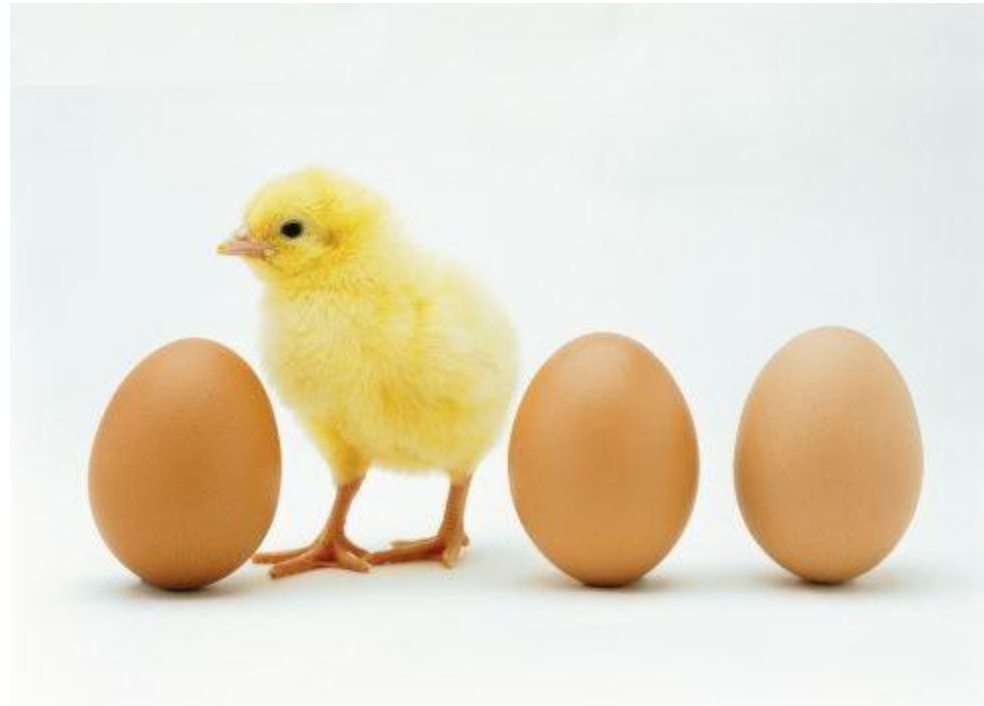
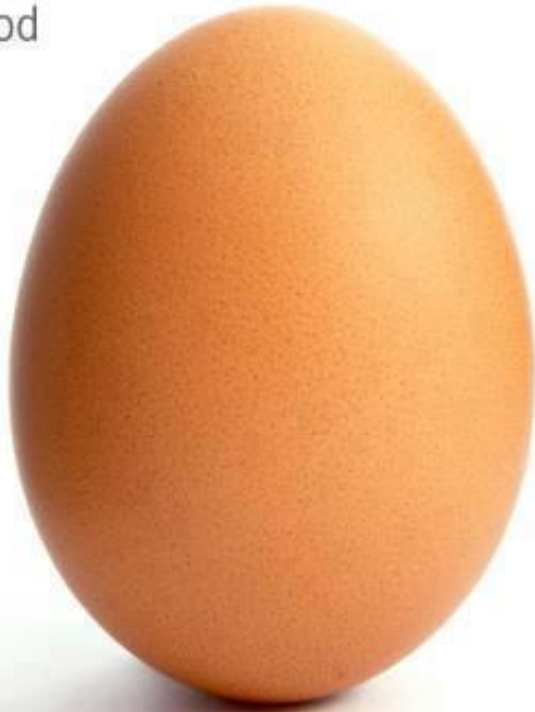


Reverse Diabetes-Egg

Eggs are a good source of protein, unsaturated fats and many vitamins.



ONE LARGE EGG

Nutrition Facts

Serving Size 1 egg (50g)

Amount Per Serving

Calories 70 Calories from Fat 40

% Daily Value*

Total Fat 4.5g **7%**

Sat. Fat 1.5g **8%**

Trans Fat 0g

Cholest. 215mg **71%**

Sodium 65mg **3%**

Total Carb. Less than 1g **0%**

Protein 6g **10%**

Vitamin A 6% • Vitamin C 0%

Calcium 2% • Iron 4%

Not a significant source of Dietary Fiber or Sugars.

Nutrient (unit)	Whole Egg	Egg White	Egg Yolk
Calories (kcal)	70.0	15.0	55.0
Protein (g)	6.3	3.6	2.7
Total fat (g)	5.0	0.1	4.9
Saturated fat (g)	1.6	0.0	1.6
Choline (mg)	125.0	0.0	125.0
Lutein & Zeaxanthin (mcg)	166.0	0.0	166.0
Vitamin A (IU)	244.0	0.0	244.0
Vitamin D (IU)	18.0	0.0	18.0
Vitamin E (mg)	0.5	0.0	0.5
Vitamin B12 (mcg)	0.7	0.0	0.6
Folate (mcg)	24.0	1.0	23.0
Calcium (mg)	26.0	2.0	24.0

1 Cooked Egg

1 piece of Cake

Nutrition Facts

Serving Size 1 large (50.0 g)

Amount Per Serving

Calories 78 Calories from Fat 48

% Daily Value*

Total Fat 5.3g **8%**

Saturated Fat 1.6g **8%**

Polyunsaturated Fat 0.7g

Monounsaturated Fat 2.0g

Cholesterol 212mg **71%**

Sodium 62mg **3%**

Total Carbohydrates 0.6g **0%**

Sugars 0.6g

Protein 6.3g

Vitamin A 6%

▪ Vitamin C 0%

Calcium 3%

▪ Iron 3%

* Based on a [2000 calorie diet](#)

Nutrition Facts

Serving Size 1 piece (1/12 of 8" dia) (68.0 g)

Amount Per Serving

Calories 245 Calories from Fat 89

% Daily Value*

Total Fat 9.9g **15%**

Saturated Fat 2.7g **13%**

Polyunsaturated Fat 2.4g

Monounsaturated Fat 4.2g

Cholesterol 37mg **12%**

Sodium 233mg **10%**

Total Carbohydrates 36.0g **12%**

Dietary Fiber 0.5g **2%**

Protein 3.6g

Vitamin A 2%

▪ Vitamin C 0%

Calcium 10%

▪ Iron 6%

* Based on a [2000 calorie diet](#)

Egg is a super wholefood

- Eggs You won't find a more perfect protein source. Eggs are highly respected by dietitians because of their [balance](#) of essential amino acids (protein building blocks used by your body to manufacture everything from muscle fibers to brain chemicals).
- Researchers at the Pennington Biomedical Research Center found that when people ate eggs in the morning, they felt less hungry throughout the day than when breakfast consisted of complex carbohydrates like bagels. "The protein and fat in the egg may be contributing to the feeling of satiety," says lead researcher Nikhil V. Dhurandhar, PhD.

Egg is a low GI food for diabetics

- On their own, eggs are a moderately lean protein source that can help balance a diabetic meal plan. Egg whites are an even leaner option: 2 egg whites or 1/4 cup egg substitute have half the calories of one egg and are extremely low-fat (and the ADA doesn't recommend limiting intake of egg whites since the saturated fat is found in the yolks). Here are some healthy diabetic meal ideas that are less than 500 calories and include eggs:

Egg is a low GI food for diabetics

- Scramble 1 egg and 2 egg whites. Serve with 2 slices of whole wheat toast topped with reduced-fat butter spread. Add a serving of seasonal fresh fruit.
- [Diabetic Breakfast Omelet](#)
- Mix two hard-boiled eggs with fat-free mayonnaise and serve with a slice of lettuce and tomato on whole-wheat toast. Add a serving of seasonal fresh fruit.

Why egg should be in Diabetic meal plan

- In addition to being low in saturated fat and full of good-quality protein, eggs are also packed with 13 essential vitamins and minerals -- two of which, choline and lutein, are important for brain and eye function.
- Eating eggs at breakfast can help to control hunger and blood sugar levels. In one study comparing an egg breakfast to a bagel breakfast, those who had eggs for breakfast reported feeling less hungry throughout the day and lost 65% more weight. Protein slows digestion as well as glucose absorption. That's why a good, lean protein should be included in all diabetic meals.
- One egg only has about 75 calories and no carbs. Hard-boiled eggs make an excellent diabetic snack, allowing you to fill up on the protein without spiking your blood sugar.

Controversies of egg yolk

One whole egg contains about 180 mg of cholesterol, nearly two-thirds of your daily recommended intake.



Controversies of egg yolk

- A recent study by researchers at Western University in [Canada](#) found one egg per day increase carotid plaque buildup;

Read more:

<http://healthland.time.com/2012/08/16/is-eating-eggs-really-as-bad-for-your-heart-as-smoking/#ixzz2cEkEWxMz>

- “In diabetics, an egg a day increases coronary risk by two- to five-fold.

Eggs are not bad for heart, say experts

- According to the US egg expert, Dr Don McNamara, the bad reputation of eggs is no more there. The Heart Foundation also has increased its recommended intake to 4 eggs a week.
- "Seniors have been afraid to eat eggs because for 40 years they have been worried about the dietary cholesterol," the Herald Sun quoted nutritional biochemist McNamara as saying.
-
- "But, over the years, the research has clearly shown that cholesterol in our food doesn't impact our risk for heart disease - (what causes) that is saturated fat and trans fat," he added.
-
- Eggs are low in saturated fat and contain vital compounds like choline which are considered good for metabolism and for foetal brain development during pregnancy It also contains lutein, which is known to lower the risk for cataracts and macular degeneration.

Eggs are not bad for heart, say experts

- The Heart Foundation had conducted a survey earlier this year and reissued its guideline to recommend people eat up to six eggs a week.

"Cholesterol in food doesn't equal cholesterol in the blood," said the foundation's healthy weight spokeswoman Monique Blunden.

"It's the **saturated fat** and **trans fat** we consume that is directly related to the rise in cholesterol in the blood," she added.

Read more: <http://www.unp.me/f150/eggs-are-good-for-the-heart-52982/#ixzz2cEmSJt8E>

The American Heart Association:

- Studies have shown that contrary to popular belief, dietary cholesterol from foods such as eggs has little effect on the body's blood cholesterol levels. The impact that consuming cholesterol-rich foods has on your cholesterol levels is also in part genetic.

One study estimated that only 30% of people respond to cholesterol in food. The remaining 70% have either no response to dietary cholesterol at all, or are only slightly affected by it. The American Heart Association and diabetes experts recommend eating no more than **four eggs a week** for optimal health.

Most cholesterol is formed in the liver

- Eating food with cholesterol in it does not in and of itself cause chronically high cholesterol levels. In humans, 80 to 85 percent of our cholesterol is synthesized in the liver from sugars, and only 15 to 20 percent is synthesized from dietary fats. For the majority of humans, any excess that comes through the diet is excreted.

Common Misconceptions about Cholesterol

- **Diet and physical activity** contribute to overall blood cholesterol levels as well as the cholesterol that is made naturally by the body. The amount of LDL (bad) cholesterol in the blood is controlled in two important places — the **liver and the intestines**. The liver produces cholesterol (using it to make digestive — or bile — acids) and also removes cholesterol from the blood. The intestines absorb cholesterol, which comes from food and from bile. For some people, the liver produces more cholesterol than the intestines absorb. If this is the case for you, your physician may prescribe medicine to manage your cholesterol. However, **a heart-healthy diet and regular physical activity** are important to everyone for maintaining cardiovascular health. Have your cholesterol tested and work with your healthcare professionals on the plan that's best for you.

Egg and cholesterol

- One egg contains about 185 milligrams of dietary cholesterol. The daily recommended cholesterol limit is less than 300 milligrams for people with normal LDL (bad) cholesterol levels. An egg can fit within heart-healthy guidelines for those people only if cholesterol from other sources — such as meats, poultry and dairy products — is limited. For example, eating one egg for breakfast, drinking two cups of coffee with one tablespoon of half-and-half each, lunching on four ounces of lean turkey breast without skin and one tablespoon of mayonnaise, and having a 6-ounce serving of broiled, short loin porterhouse steak for dinner would account for about 510 mg of dietary cholesterol that day — nearly twice the recommended limit. If you're going to eat an egg every morning, substitute vegetables for some of the meat, or drink your coffee without half-and-half in the example above. And remember that many other foods, especially baked goods, are prepared with eggs — and those eggs count toward your daily cholesterol limit. People with high LDL blood cholesterol levels or who are taking a blood cholesterol-lowering medication should eat less than 200 mg of cholesterol per day. Learn more about [cooking for lower cholesterol](#).

Cholesterol: quality is more important than quantity

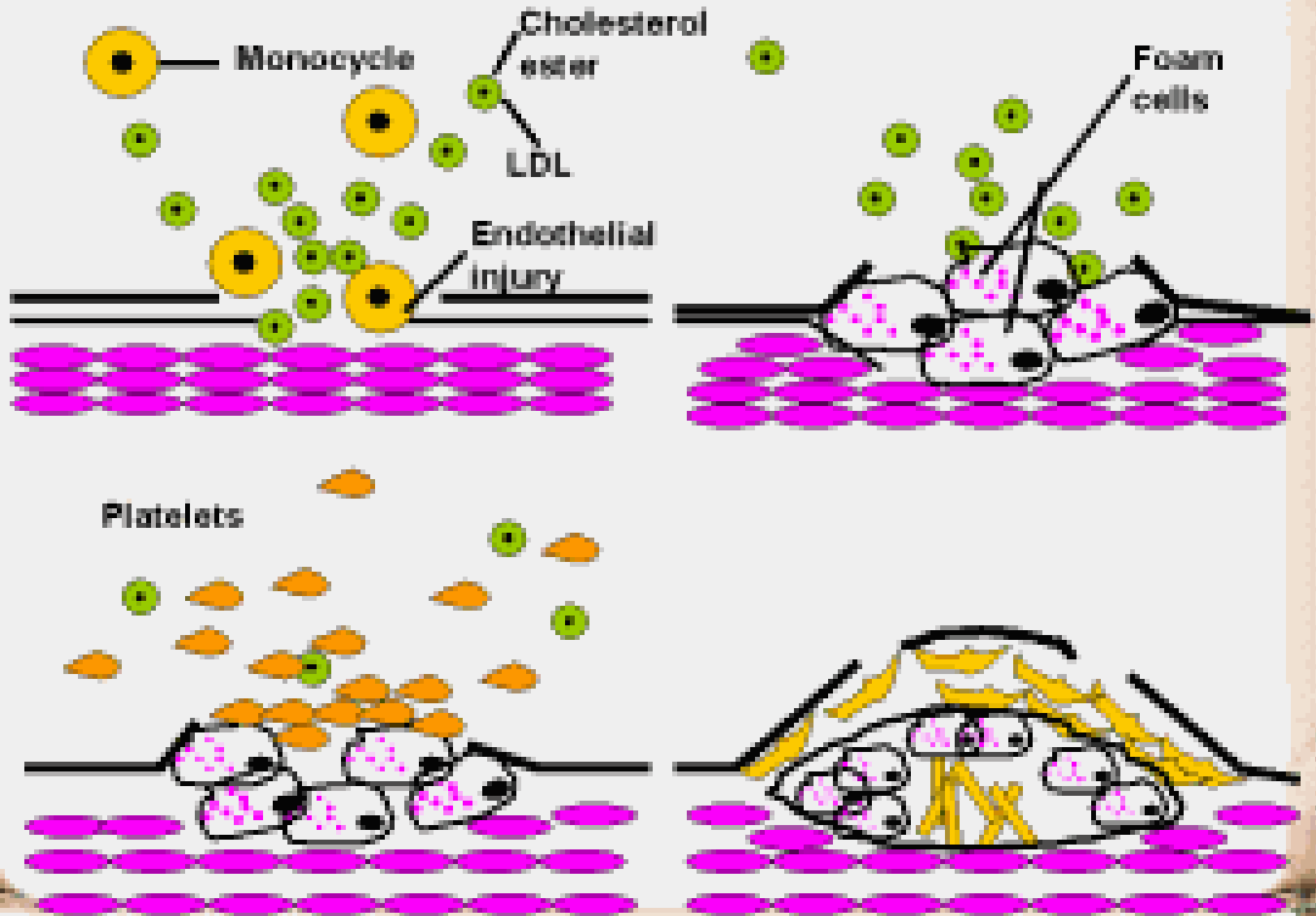
- Although doctors routinely monitor the quantity of the cholesterol, they do not routinely monitor its quality. They are missing a crucial factor: whether the cholesterol has been oxidized into potentially harmful molecules that damage the cardiovascular system. "Natural, un-rancid cholesterol is an antioxidant. Blaming coronary heart disease on healthy cholesterol is like blaming pure water for illness. Rancid cholesterol, like polluted water, can cause disease. So, the focus must be on rancidity of cholesterol rather than on its blood level." Ali, M. Aging Healthfully magazine, p.37.

LDL is not dangerous until it is oxidized



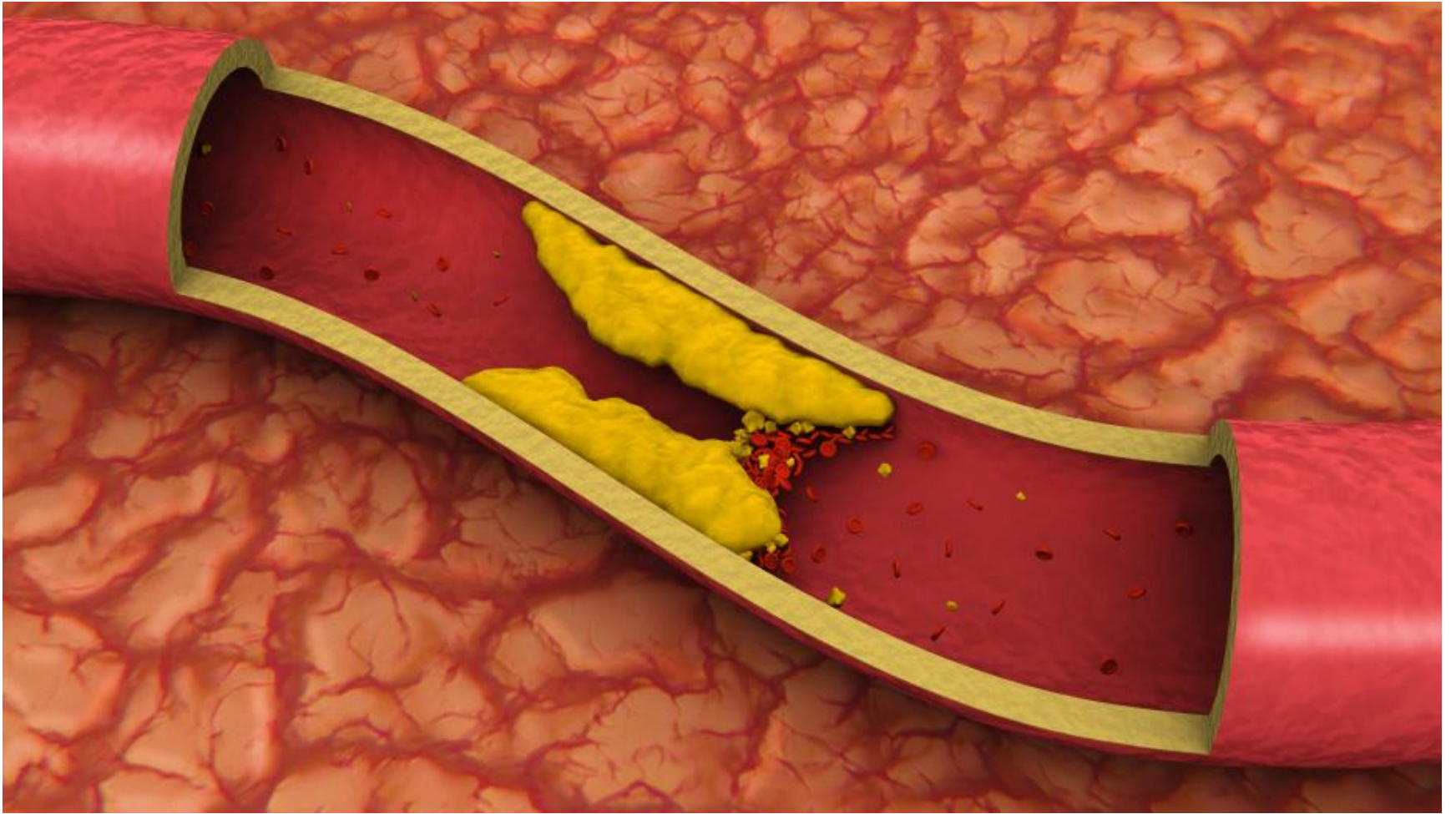
- Oxidation, caused by free radicals, alters the quality of your cholesterol when your adrenaline levels shift due to stress. When you eat starchy carbohydrates and sweets, you are also creating free radicals that oxidize your cholesterol by spiking your insulin levels. A low antioxidant diet, a diet low in fruit and vegetables, does not protect your cholesterol from this oxidation. Eating too late or too much, with the resulting poor digestion, can also further oxidize your cholesterol.
- Research is clear on the fact that a good diet and exercise can effectively lower cholesterol

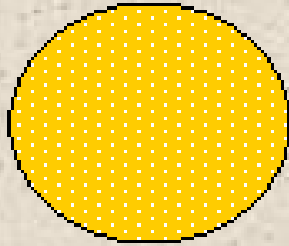
Role of LDL in atherosclerosis- oxidation



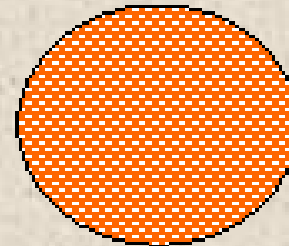
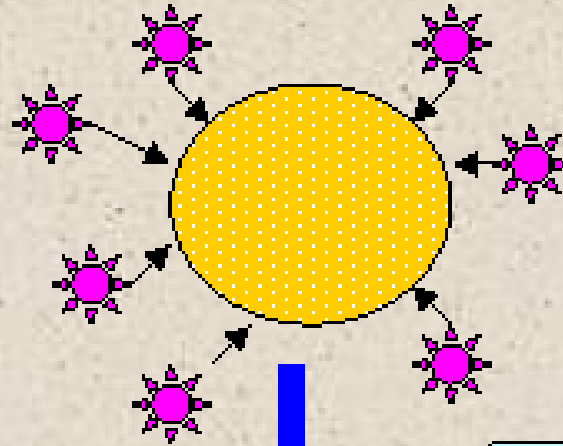
What cause cholesterol to become oxidized?

- The key answer is that the right nutrients are our first hedge against oxidation. The antioxidants such as vitamins C, A, E, the carotenes and the bioflavonoids protect us from oxidation. All of these are found in fresh fruits and vegetables—the single food group most lacking in the American diet.
- HDL cholesterol helps protect LDL from being oxidized and again, what keeps HDL high, first and foremost is a good, wholesome diet. The B vitamins, and particularly niacin, found in abundance in high quality protein such as meat, fish and eggs, lower LDL levels and raise HDL levels.





Normal lipid particle

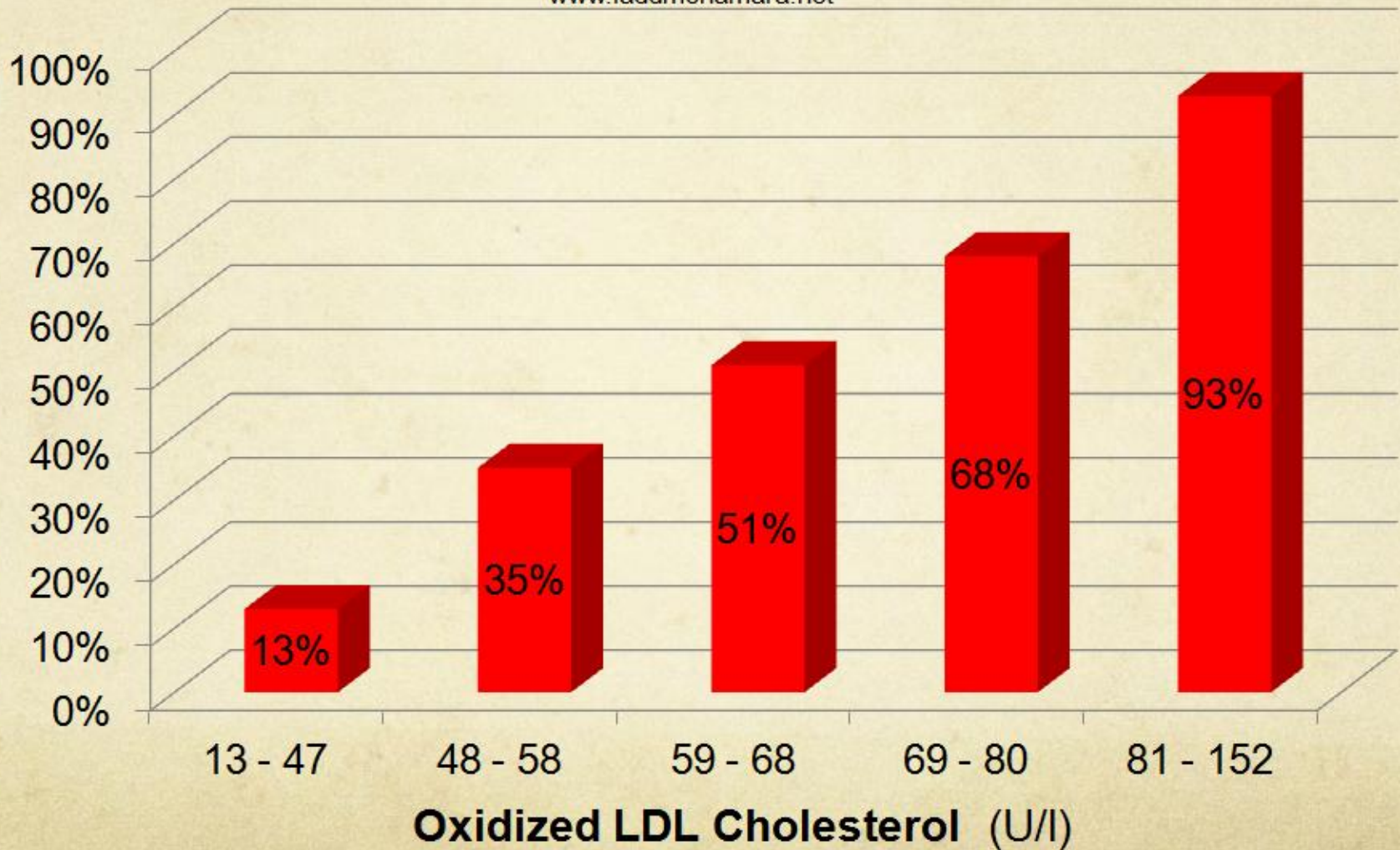


After reacting with ROS, lipid particles become oxidized and are more likely to promote heart disease

Relationship Between **OXIDIZED** LDL Cholesterol and Coronary Artery Disease

www.laddmcnamara.net

Percentage of Coronary Artery Disease in Patients



Tips to reduce cholesterol intake

- **Cholesterol is a waxy, fat-like substance found in body cells of humans and animals.**
- **Cholesterol** is a fatty substance that's found **in animal-based** foods such as meats, poultry, egg yolks, and whole milks
- Choose skinless chicken when possible, or cut the skin off chicken pieces. **Chicken skin is 50 percent fat by weight.**
- The light meats, such as chicken breast, are lowest in fat and cholesterol

Read more: <http://www.livestrong.com/article/309581-chicken-good-cholesterol/#ixzz2cEvzaen5>

Thank you for your time!



GOOD HEALTH TO YOU!

Designed by Lanson Lan

TCM, Nutrition, Sports Medicine

Email: 715515212@qq.com, Skype: nutriforce