#### MAGNACARE

### **INFORMATION** FOR PEOPLE WITH DIABETES

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### **CRACKING A CHOLESTEROL QUESTION**

January is a time for New Year's resolutions. Maybe you've resolved to eat better, lose weight, or actually use that gym membership. It's very easy to veer from your ideal food plan during the holidays, but there's no need to dwell on what's past. It's time to put that behind you. The New Year is a great time to wipe the slate clean and start fresh.

The end of one year merging into the next also reminds us of the circle of life and of rebirth. This is often symbolized by a certain round food. No, not the donut. It's the humble egg.

## An egg-cellent source of protein and essential fatty acids

The egg is packed with vitamins, minerals, and protein. Among protein foods, eggs contain the richest mix of essential amino acids, the building blocks of proteins, required for cell growth and repair. The high protein (6 grams per egg) causes the egg to be very filling, so it may curb unhealthy cravings and help promote a healthy weight. The egg is also very affordable and versatile.

It isn't widely spoken about, but the human body requires certain essential fats that our body cannot produce. Eggs are a good source of these omega-3 fatty acids. But eggs also contain cholesterol (200 grams per egg), and as we all know, cholesterol is associated with cardiovascular disease. Since cardiovascular disease (which leads to heart attack and stroke) is by far the most frequent cause of death in both men and women with diabetes, diabetics have been told to avoid eggs entirely.

#### Does the old research have egg on its face?

You may have heard about new research that is leading scientists and nutritionists to rethink the egg's impact on cardiovascular disease. But don't run to the diner for a three-egg omelet just yet. We will get you up to speed on the latest research and on how many eggs you can eat as a person with high blood sugar, but first we need to explore what is cholesterol, where it comes from, and its effect on the body.

#### What is cholesterol?

Cholesterol is a type of fat produced in your liver and found in foods. The body needs cholesterol to perform several functions including cell maintenance, and like so many things, too much can be a problem. You have also likely heard the terms "LDL" and "HDL" bandied about, referring to "bad" and "good" cholesterol, respectively. (If you can't remember which is which, a good mnemonic is that your LDL number should be Low and your HDL number should be High.) LDLs and HDLs are particles that transport cholesterol in your blood.

LDLs are "bad" because they bring cholesterol to tissues, where it's stored by the body. This causes the formation of plaque in the blood, damaging and blocking arteries.

HDLs are "good" because they bring cholesterol to the liver, which discards it from the body. HDLs also work to clear LDLs from the blood, keeping the arteries open. When your HDLs are too low, fewer LDLs are removed from the blood, increasing the risk of damage to the arteries. Another type of fat, triglycerides, also plays a role in heart health. Triglycerides block HDLs from removing LDLs from the blood. Triglycerides also produce LDLs, which block arteries.

If there is too much "bad" cholesterol in the blood, some of the excess can become trapped in artery walls. Over time, this builds up and is called plaque. The plaque can narrow vessels and make them less flexible, a condition called arteriosclerosis, or hardening of the arteries. If the coronary arteries become partly blocked by plaque, then the blood may not be able to bring enough oxygen and nutrients to the heart muscle. The condition is called coronary artery disease (CAD), which is the most common type of heart disease. When the amount of blood isn't adequate for the heart's demands, chest pain is the result. When the artery becomes blocked, that is a heart attack.

# Which came first, the cholesterol or the diabetes?

Eggs and other foods don't cause diabetes. Some of the previous instructions to avoid eggs entirely came from the fact that we know there is a relationship between cholesterol, diabetes, and heart disease, and that high blood sugar and high cholesterol and other blood fats are not good for the heart.

Getting back to eggs, when deciding whether to include eggs in your diet, consider the recommended daily limits on cholesterol in your food:

- If you do not have high blood sugar, consume no more than 300 mg of cholesterol a day.
- If you have diabetes, high cholesterol, or heart disease, limit the daily cholesterol intake to no more than 200 mg a day.

So, you can eat eggs, but limit them if you are eating the whole egg. The great news is that there's no need to limit the amount of egg whites you eat, since they're predominantly made up of protein and are low in fat. You'll get all the benefits of the essential amino acids and the appetite-suppressing activity of the protein. Stick to egg whites and avoid yolks completely if you take large doses of statins or have a strong family history of heart disease.

#### The best ways to prepare or order eggs



How you prepare your eggs can also affect how diabetes-friendly they are. When you're cooking at home, stick to an olive oil spray instead of butter and make them in whatever style you like scrambled, over easy, or sunny-side up.

When you're out for breakfast, a poached egg is a good choice because it's cooked in water so has no additional fat. It's also a good option because you're less likely to prepare poached eggs at home, making it more of a treat.

Of course, soft-, medium-, and hard-boiled eggs also don't add fats when cooking, so they're great choices as well.

If you've reached your weekly limit of egg yolks, you can still eat egg whites, which are high in protein and contain no cholesterol. Just be careful about the fat in which they're prepared.

### Hatching your plan

The bottom line? Eggs are an excellent source of protein. You can most likely add eggs to your meal plan, but be careful not to eat too many egg yolks. Consult with you doctor or nutritionist for guidance.

Sources:

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