Have you hugged an egg today?

On page 78 of his revised edition of *On Food and Cooking*, Harold McGee describes eggs as “one of the most nutritious foods we have... unmatchable as a balanced source of the amino acids necessary for animal life; it includes a plentiful supply of linoleic acid, a polyunsaturated fatty acid that’s essential in the human diet, as well as of several minerals, most vitamins, and two plant pigments, lutein and zeaxanthin, that are especially valuable antioxidants. The egg is a rich package.”

We agree with Mr. McGee. We love eggs. An intact and unprocessed whole food eaten for thousands of years deserves a presumption of innocence until proven guilty. It is easy to prove that egg yolks are impressively high in cholesterol, BUT DIETARY CHOLESTEROL FROM FOOD IS NOT RELATED TO HEART DISEASE. Given the disrespect shown to eggs over the last sixty years, can you imagine the number of outraged yolks that could be rounded up for a class-action lawsuit? Wow! The world’s largest custard!

Looking at the evidence

Eating egg yolks will not increase your risk of heart disease or diabetes. The National Health and Nutrition Examination Survey (NHANES III and follow up) showed that egg consumption was unrelated to heart disease or stroke deaths.\(^1\) Another showed that eating eggs was not associated with risk of diabetes,\(^2\) and a third study even suggested that eating eggs for breakfast was associated with lowering risk of diabetes and reduced overall calorie intake.\(^3\) One recent study actually used eggs as part of a cholesterol reduction diet.\(^4\)

Some studies of egg consumption, particularly one older analysis from the Nurses Health Study, suggest increased diabetes risk from eating eggs. However, the data may be confounded by other factors; for example, those who eat a lot of eggs tend to have habits like eating bacon and smoking, both individual risk factors for poor health.

One fascinating egg study in the New England Journal of Medicine\(^5\) presents an 88 year old man who, for at least 15 years, ate 20-30 soft-boiled eggs daily. This is clearly unbalanced behavior—and difficult to think about without feeling a bit sick—but the study did note that he had normal cholesterol and no heart disease!

The *real* heart disease risk factors

When we look at recent large, well done epidemiological studies like Greek EPIC or INTERHEART, we don’t find dietary cholesterol and saturated fat intake among the significant heart disease risk factors. Three important risk factors identified were *not enough vegetables and fruit*, *too much refined carbohydrates* like sugar, white flour, white rice, and ready-to-eat breakfast cereal, and *hydrogenated oil* as a source of trans fats.

This counter-intuitive fact that eating more cholesterol in the form of whole foods usually does not raise blood cholesterol is related to a number of processes we don’t tend to think about. For example, much of our blood cholesterol doesn’t come from food, but is manufactured in the liver. This explains why the most successful cholesterol

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medications are not those that target the absorption of cholesterol, but rather those that reduce liver synthesis of cholesterol, like statins.

Why we don’t like egg substitutes
We consider eggs to be a particularly nutritious whole food, but egg substitutes (like the kind that come in pint-sized cartons) should definitely be regarded as controversal. These highly-processed egg replacements are presented as healthy alternatives to real eggs, and at the same time are perpetuating the myth that food manufacturers can create a “food” with a nutritional profile that is better for you than the original whole food. (Think margarine, Cool Whip, non-dairy creamer, artificial sweetener, and so on.) **There is no reason to consider these products as safer, let alone better, than the whole food they imitate.**

Egg substitutes typically include a refined version of egg whites (probably highly stressed with separation anxiety) combined with salt and other spices, gums, starches, and synthetic vitamins and minerals. Sometimes there is vegetable oil and artificial color added to mimic the missing yolk. The synthetic nutrients are of uncertain benefit and even some potential risk, and the multiple processing and preserving steps themselves are destructive to the nutritional value of whole foods. It is not a good idea to let factories mess with your food. As Michael Pollan says, “If it came from a plant, eat it; if it was made in a plant, don’t.” (Rule 19 in his book *Food Rules.*)

An egg a day . . .
Eating an egg or two a day is a reasonable choice for most of us. Being a complete protein, they can take center stage at breakfast — fried, poached, scrambled, boiled — or play a subtle but foundational role in lunch, dinner, and dessert. To give an extra boost to the nutritional benefit, serve them with a generous portion of a whole plant food. (A good example of this is *Green Eggs and Rice,* posted on [www.goodfoodgreatmedicine.com](http://www.goodfoodgreatmedicine.com).) Frittatas are tasty ways to sneak extra vegetables into your diet— tomatoes, onions, bell peppers, mushrooms, spinach, and so on. See recipe on the right — or just chop up a tomato and toss it into the hot pan with your morning egg as it cooks. The bright flavor of tomato is a perfect complement to the richness and mild character of the egg. Try cooking your eggs in extra-virgin olive oil instead of using butter (or non-stick spray) — butter is fine but olive oil is always the optimal choice.

**Fast Frittata with Tomato and Onion**

The only tricky thing about frittatas is remembering whether to put the two t’s in the middle or the end of the word. They have the advantages of omelets but are more like thick, tender egg pancakes.

*(Serves 1 – 2)*

2 eggs, lightly beaten with fork  
¼ teaspoon salt  
¼ teaspoon freshly ground pepper  
2 teaspoons extra-virgin olive oil  
¼ cup thinly sliced green onions  
1 tomato, diced

1. Combine eggs and seasoning. Heat a small skillet over medium heat and add oil. *(When oil is hot enough it should spit when you add a drop of water.)* Add green onion. Sauté for 10 seconds, or until sizzling but still bright green.

2. Add the diced tomato. Sauté only long enough to heat the tomato through. Add the egg and distribute it evenly around the vegetables. Cook until the eggs are set, lifting sections of cooked egg to let any uncooked egg flow underneath.

3. Flip so the golden-brown underside shows, slice into wedges, and serve.

**Esophagitis study update**

Thanks to your gifts and a matching grant from Safeway, we are moving ahead with the study using yogurt, glutamine, and honey to reduce radiation damage during cancer therapy. Our first patients are being enrolled this month.

**Speaking Events**

**7/8-7/10/2011 – Cardiology Update for the Primary Care Provider:** Miles Hassell MD: *Are there any nutritional supplements that are beneficial? The Anti-Inflammatory and Anti-Atherogenic Diet.* Blaine, Washington. Conference participants only.


*“Prove all things; hold fast that which is good.”*  
1 Thes. 5:21(KJV)