

PENNY SAVER NEWS

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Green Eggs, With or Without the Ham

Eggs are quick, eggs are easy, eggs are nutritious. But why oh why do eggs sometimes turn green? No added spinach, no extra parsley, but you've probably cracked open a hard-cooked egg to find that ugly greenish-gray layer around the yolk. Or maybe you made a big pan of scrambled eggs for the church breakfast, put them safely in the oven to stay hot, and came back after the service to find a whole pan of green eggs! Ugh! What is going on, and more importantly, what can you do to prevent it from happening?

What's going on in there is that some protein is breaking down, and minerals that are usually safely tied up away from each other get together. It's almost like keeping the dog tied in the back yard and the cat confined to the basement. All is peaceful. But let the two of them into the same room and it will not be pretty.

Most proteins have some minerals, either inside them as part of them, or tied to the outside. Eggs have one protein that carries iron around. This is a safety factor for us. If any bacteria happen to get inside the shell of a fresh egg they won't be able to grow because the iron they need is safely tucked away in this protein where they can't get at it. Once the egg is cooked however that protein can't hold onto its iron any more. This is why cooked eggs won't keep as long in the refrigerator as fresh eggs. If any bacteria manage to get inside the egg, they'll be able to grow quickly.

Some of the proteins in the egg yolk have sulfur in them. This mineral is part of

the protein. As long as the egg is raw the sulfur is tied into the protein. If the egg is gently cooked, as hard cooked or scrambled or baked in a cake, the sulfur stays tied up. But if the egg is cooked at too high a temperature, the proteins will start to break apart and the sulfur gets loose. Now it can move around in the egg.

Unfortunately, when sulfur starts moving, if there's any iron around, that's where it heads. And when sulfur and iron get together, they form an ugly gray-green compound. So when an egg is boiled for too long and the proteins in the yolk let their sulfurs loose, they find the iron from the egg white and together they make that green line around the yolk. It's not harmful, just not pretty.

So, what can we cooks do? Actually there are several ways to avoid the green. First, cook eggs at lower temperatures and not too long. Overcooked eggs that got too hot or stayed hot too long, are more likely to turn color. This is why eggs should only be simmered, not held at a full boil, to make hard-cooked eggs. They should be called hard-cooked, rather than hard-boiled eggs too! Use medium heat in the skillet, not high. If you're holding a pan of cooked eggs in the oven, set the oven for 225°F, not 400°F.

Second, for eggs that will be cooked and held, use fresh eggs. If you want eggs that peel easily, as for deviled eggs, use older eggs. But to make scrambled eggs or an egg casserole that will be baked and held, fresh eggs are best. Fresh eggs are just a little bit more acidic, and acid helps keep the iron in its place.

Then, here's a final trick that cooks and chefs use. If you are making a large pan of scrambled eggs or an egg casserole that you know will need to be kept hot for some time, add a little bit of acid. A quarter to half a teaspoon of lemon juice or vinegar for each egg, added when the eggs are broken and mixed, will be enough to keep the iron

tied to the protein, where it can't turn green. For a dozen eggs, that translates to 1 tablespoon of lemon juice. You won't be able to taste that little bit of acid. But your casserole will stay much prettier.

Here's an egg casserole that's a little bit spicier than our usual ham, egg and bread dishes. Use this for dinner with salad, or even for breakfast if you need to wake the family taste buds up. Serve a mild salsa on the side.

Mexican Egg Casserole

10 eggs, or equivalent egg substitute 4 Tbsp margarine, melted

½ cup self-rising flour ½ tsp baking powder

2 cups low fat cottage cheese salt, pepper to taste

12 oz reduced fat Monterey Jack cheese 1 8oz can chopped green chilies

Oil a 9x13" baking dish. Preheat oven to 350°F. Shred the Jack cheese, drain the chilies. Whisk eggs in bowl until blended. Stir in butter. Combine flour, baking powder, salt and pepper if using, and mix into eggs. Stir in both cheeses and green chilies. Spoon mixture in to baking dish. Bake for 35 minutes or until center is set. Serve immediately. Serves 12.