

Did You Know?



This spring, you and your family might have gone on an egg hunt. Likewise, ARS scientists continually hunt for ways to ensure our food is nutritious and safe to eat.

Scientists at ARS's Human Nutrition Research Center on Aging in Boston, MA—working with the Egg Nutrition Center in Washington, DC—found that the human body is better able to absorb lutein from eggs than from any other dietary source, including supplements. The researchers suspect that's because of other components in the egg's yolk, such as lecithin. And this suggests that eggs can be an inexpensive source of highly bioavailable lutein.

ARS scientists at the Southeast Poultry Research Laboratory in Athens, GA, are also doing their part to make sure the eggs we eat are safe to consume. They focus on reducing the risk of contamination of eggs from pathogens, like *Salmonella*. That pathogen has been associated with eating raw or undercooked eggs, and it can cause diarrhea, stomach cramps, fever, and—in some instances—death.

Scientists at the ARS Eastern Regional Research Center in Wyndmoor, PA—working with the Princeton Plasma Physics Laboratory in Plainsboro, NJ—found that positioning individual eggs between two electrodes that send radio waves back and forth through the egg (radio frequency or RF heating), followed by a brief hot-water bath, can kill 99.999 percent of the *Salmonella* within the egg. Unlike conventional heating, RF heating warms the egg from the inside out, so that the heat-tolerant yolk receives more heat than the delicate, heat-sensitive white (albumen). From start to finish, the treatment takes around 20 minutes, making it about three times faster than the conventional hour-long hot-water-immersion pasteurization method. And not only is this method faster, but it doesn't ruin the taste, texture, or color of the eggs.

So whether you're hunting for eggs or other good foods to eat, you can get *egg-cited* about the fact that your ARS colleagues are doing their part to help ensure your food is nutritious, tasty, and safe to eat.

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