



Foolproof Spaghetti Carbonara

From *America's Test Kitchen* Season 14: It's Pasta Night!

WHY THIS RECIPE WORKS:

Most carbonara pastas are so rich that it's hard to eat a whole bowlful. We lightened the usual recipe by dismissing additions like cream and butter, cutting any oil, and including only a tablespoon of the rendered bacon fat. Having done so, we had to find other ways to make our sauce smooth and prevent the eggs from setting into curds and the cheese from melting into lumps. Reducing by half the amount of water typically used to boil pasta gave us a concentrated starchy liquid that we reserved for our sauce. The starch in the water coats the proteins and fats in the cheese and prevents them from separating or clumping together. Starch also works in concert with the egg white proteins to lend viscosity to the sauce. Egg yolks introduce a pleasant custardy richness, but they also have a powerful emulsion and thickening capability that can turn the sauce into glue just minutes after serving if too many are used. Three egg whites and four yolks gave us a sauce with the custard flavor that we were after and an ideal thickness that did not change significantly as it cooled during a 15-minute serving window. Mixing the spaghetti with the sauce in a warm serving bowl rather than a hot skillet or pot allows the residual heat of the pasta to "cook" the sauce without any chance of overcooking the eggs.

Serves 4

It's important to work quickly in steps 2 and 3. The heat from the cooking water and the hot spaghetti will "cook" the sauce only if used immediately. Warming the mixing and serving bowls helps the sauce stay creamy. Use a high-quality bacon for this dish; our favorites are Farmland Hickory Smoked Bacon and Vande Rose Farms Artisan Dry Cured Bacon, Applewood Smoked.

INGREDIENTS

- 8** slices bacon, cut into 1/2-inch pieces
- 1/2** cup water
- 3** garlic cloves, minced
- 2 1/2** ounces Pecorino Romano, grated (1 1/4 cups)
- 3** large eggs plus 1 large yolk
- 1** teaspoon pepper
- 1** pound spaghetti
- 1** teaspoon salt

INSTRUCTIONS

1. Bring bacon and water to simmer in 10-inch nonstick skillet over medium heat; cook until water evaporates and bacon begins to sizzle, about 8 minutes. Reduce heat to medium-low and continue to cook until fat renders and bacon browns, 5 to 8 minutes longer. Add garlic and cook, stirring constantly, until fragrant, about 30 seconds. Strain bacon mixture through fine-mesh strainer set in bowl. Set aside bacon mixture. Measure out 1 tablespoon fat and place in medium bowl. Whisk Pecorino, eggs and yolk, and pepper into fat until combined.

2. Meanwhile, bring 2 quarts water to boil in Dutch oven. Set colander in large bowl. Add spaghetti and salt to pot;

cook, stirring frequently, until al dente. Drain spaghetti in colander set in bowl, reserving cooking water. Pour 1 cup cooking water into liquid measuring cup and discard remainder. Return spaghetti to now-empty bowl.

3. Slowly whisk $\frac{1}{2}$ cup reserved cooking water into Pecorino mixture. Gradually pour Pecorino mixture over spaghetti, tossing to coat. Add bacon mixture and toss to combine. Let spaghetti rest, tossing frequently, until sauce has thickened slightly and coats spaghetti, 2 to 4 minutes, adjusting consistency with remaining reserved cooking water if needed. Serve immediately.

TECHNIQUE

WARM THE BOWL

To help the sauced pasta stay creamy longer, warm the mixing bowl (and the serving bowls).

Drain the cooked spaghetti in a colander set in a large serving bowl. The water will heat the bowl, and some of it can be reserved for the sauce.



TECHNIQUE

LESS FAT, MORE STABLE SAUCE

The hardest part about making carbonara isn't coming up with the right ratio of egg whites to yolks to make a creamy, rich sauce; it's figuring out how to make a sauce that doesn't curdle, turn gritty, or tighten up into a glue—the usual problems as the pasta cools down. Some recipes get around the issues by adding lots of fat, which boosts the viscosity of the sauce and makes it more stable. We came up with a better, less cloying alternative: starchy pasta cooking water. Starch performs two functions. First, it coats the proteins in the eggs and the cheese, preventing them from curdling in the heat and clumping, respectively. Second, it combines with ovomucin, a protein in the egg whites, to form a network that is relatively resistant to temperature change, which means the sauce does not tighten up as it cools.

To take full advantage of the starch's effect, we concentrate it by cooking the pasta in half the usual amount of water and then add up to 1 cup of the starchy water to the sauce. The dressed pasta stays silky for a good 15 minutes.

CREATE SUPER-STARCHY WATER: Boiling pasta in less water concentrates the starch.



RESERVE 1 CUP TO ADD TO SAUCE: Starch stabilizes the egg-based sauce.
