

## SIMPLE SAUSAGE MATH

Using a precise amount of salt—1.5 percent of the weight of the meat—is essential for properly cohesive, well-seasoned sausage, and the only way to guarantee that you'll end up with that percentage is to weigh the trimmed pork, calculate the amount of salt you need to add, and then weigh the salt.

The calculation allows you to use any kind of salt and to easily scale the recipe. Be sure to weigh in grams for accuracy. Because most kitchen scales measure in 1-gram increments, you will likely need to round a decimal to the nearest gram to get a measurable weight of salt.

### FORMULA

$$\text{WEIGHT OF TRIMMED PORK} \times \frac{0.015}{(1.5 \text{ percent})} = \text{WEIGHT OF SALT}$$

EXAMPLE:  $900 \text{ g} \times 0.015 = 13.5 \text{ g}$   
Rounded weight of salt = **14 g**

### Chill Before Grinding

One of the biggest sausage production mistakes you can make is not chilling the meat mixture before you grind it. Chilling compensates for the significant heat created by the friction of the grinding process—and if you skip that step, the relatively warm fat will soften during grinding, separate (or “break”) from the protein, and then leak out when the sausage is cooked, leaving behind dry, crumbly meat.

“Heat is the enemy of fat,” said Brian Polcyn, chef and coauthor of *Charcuterie: The Craft of Salting, Smoking, and Curing* (2005). He said that commercial sausage production is always done under refrigeration.

When I compared sausage ground from pork chunks that I'd frozen for 45 minutes before grinding (long enough to firm up the meat but not freeze it solid) to a batch made from fridge-cold meat, I could literally see the difference. The freezer-chilled pork broke down into defined bits of meat and solid fat, while the fat in fridge-cold pork smeared into the meat like a paste.

“That one little step, that one little extra effort,” Polcyn stressed about chilling, “will have dramatic results to the end product.”

### Knead Briefly but Vigorously

Salting and grinding the meat encourages some of its sticky myosin proteins to cross-link and bind into a strong network, but for properly cohesive, springy sausage, you need to encourage even more of that cross-linking by briefly but vigorously kneading the ground meat mixture. Conceptually, it's a lot like kneading bread dough to develop gluten: The more you work the meat, the more myosin dissolves out of the muscle and cross-links, and the snappier the sausage will be. All it takes is a couple minutes of working the meat by hand in a mixing bowl; you'll know it's done when the meat becomes tacky on its surface.

## FRESH BULK SAUSAGE

MAKES ABOUT 2 POUNDS SAUSAGE  
TOTAL TIME: 1 HOUR, PLUS 8 HOURS SALTING

Because sausage requires a precise ratio of salt to trimmed meat, you'll need a scale that measures in grams, and you'll need to do some simple math. This recipe requires at least 8 hours of salting. Because you'll be measuring the salt by weight instead of volume, you can use either table salt or kosher salt. Pork butt roast is often labeled Boston butt. For the best texture, buy a well-marbled roast that has a defined fat cap. This recipe can easily be halved or doubled and freezes well.

- 2 pounds boneless pork butt roast with at least ¼-inch-thick fat cap
- Salt
- 1 recipe sausage seasoning

1. Leaving fat cap intact, cut pork into ¾-inch pieces, trimming and discarding all sinew and connective tissue. Weigh trimmed pork and note weight in grams. Multiply weight of pork by 0.015 to determine salt amount (round to nearest gram). Weigh out salt.

2. Toss pork, salt, and seasoning in bowl until well combined. Cover and refrigerate for at least 8 hours or up to 2 days.

3. Transfer pork to rimmed baking sheet and spread in single layer, leaving space around each chunk. Freeze until pork is very firm and starting to harden around edges but still pliable, 35 to 55 minutes.

**4A. FOR A GRINDER:** Place meat grinder attachments, including coarse die (¾ or ¼ inch), in freezer for at least 1 hour before using. Set medium bowl in large bowl filled with ice. Grind pork at medium speed into prepared medium bowl.

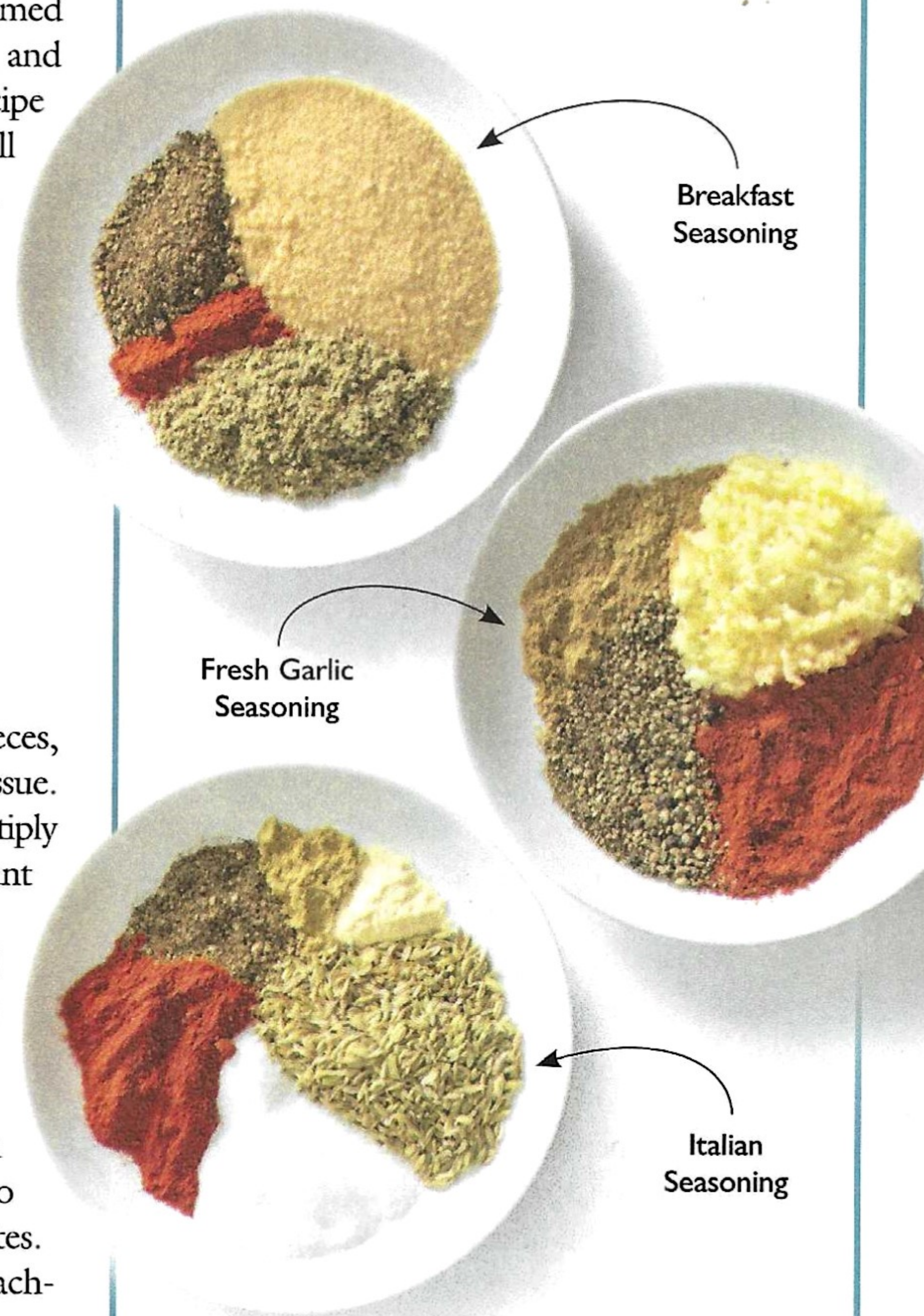
**4B. FOR A FOOD PROCESSOR:** Place one-quarter of pork in food processor and pulse until ground into ⅛- to ⅙-inch pieces, 14 to 16 pulses, stopping to redistribute pork around bowl as necessary to ensure meat is evenly ground. Transfer ground pork to large bowl. Repeat with remaining 3 batches of pork.

5. Inspect ground pork carefully, discarding any strands of gristle or silverskin. Using your hands or stiff rubber spatula, knead pork vigorously, smearing against sides and bottom of bowl, until pork begins to tighten, feels tacky, and sticks to bottom of bowl and palm of your hand, 1½ to 2 minutes. Use immediately or wrap bowl tightly in plastic wrap and refrigerate for up to 24 hours (or transfer sausage to zipper-lock bag and freeze for up to 1 month).

**TO MAKE PATTIES:** Using your damp hands, divide meat into 16 pieces (about 2 ounces each) and form into 2½-inch patties about ½ inch thick. Heat 2 teaspoons vegetable oil in 12-inch nonstick skillet over medium heat. Cook half of patties until well browned on both sides and meat registers 145 to 150 degrees, 3 to 5 minutes per side. Transfer to serving platter and tent with aluminum foil. Repeat with remaining patties. Serve. (Raw sausage patties can be refrigerated, covered, for up to 24 hours or frozen for up to 1 month. Cook frozen patties for 7 to 9 minutes per side.)

## Season to Taste

Use any of these classic spice blends, or your own mixture, to season the sausage. Mix each blend in a small bowl before adding it to the meat.



### BREAKFAST SEASONING

- 1 tablespoon packed light brown sugar
- 2 teaspoons rubbed sage
- 1 teaspoon pepper
- ¼ teaspoon cayenne pepper

### FRESH GARLIC SEASONING

- 1 tablespoon minced garlic
- 1 teaspoon paprika
- 1 teaspoon pepper
- ½ teaspoon ground coriander

### ITALIAN SEASONING

We like the flavor of the sausage made with both whole and ground fennel, but you don't have to buy both forms; simply use a spice grinder or mortar and pestle to finely grind the whole seeds. For “hot” Italian sausage, add 1 tablespoon of red pepper flakes and ¼ teaspoon of cayenne pepper.

- 4 teaspoons fennel seeds
- 2 teaspoons sugar
- 2 teaspoons paprika
- 1 teaspoon pepper
- ¼ teaspoon ground fennel
- ¼ teaspoon garlic powder