

In Defense of Turkey Burgers

Think turkey burgers are dry, tough, or bland? Then you haven't tried these.

BY ANNIE PETITO

Confession time: I genuinely enjoy turkey burgers. If you've encountered a truly bad version (plenty exist) or consider it a punishment to eat a burger made from anything but beef, hear me out: There's a lot to like about a well-made turkey burger. Think a light, juicy texture; savory meat; and a tender, well-browned crust.

For turkey burger success, you must first make peace with the obvious: Ground turkey isn't ground beef. It's very wet—71 percent water versus 66 percent for beef—which makes it hard to work with, yet it can easily cook up dry. That's because ground turkey must be cooked to 160 degrees. At that temperature, nearly all the turkey's abundant moisture will have been squeezed out by contracting proteins. Thorough mixing also causes the myosin (a sticky protein) in the ground turkey to link up tightly, so the burger turns dense.

Many recipes mitigate dry, compact patties by adding mix-ins such as vegetables, beans, and grains that either contribute or trap moisture or break up the texture of the patty. Unfortunately, with too many additions, the result often resembles a veggie burger, perpetuating the idea that ground turkey makes a laughable meal for a meat lover. It's true that to make an extraordinary burger, ground turkey needs a little help. The key is to choose the right mix-ins and use as little of them as you can get away with.



Our deep knowledge of poultry and ground meat helped us take turkey burgers to a new level.

Let's Talk Turkey

Pulsing a whole cut of turkey in the food processor would have allowed me to produce a coarse grind for a loose-textured patty, but that was too much trouble for an everyday recipe, so I set my sights on improving the preground stuff. Just like packaged ground

beef, packaged ground turkey is blended to have a range of fat contents. I knew that the 99 percent lean type was a nonstarter; the greater amount of fat in 93 percent lean turkey (more widely available than 85 percent lean) would provide more flavor and moisture.

To address the dense consistency that the sticky myosin produces, I added panko bread crumbs, which physically disrupted the proteins and made the meat feel coarse and light (rather than tough and dense) on the tongue. For 1 pound of turkey, 3 tablespoons of panko did the job without making the burgers taste bread-y.

But panko wasn't a panacea. Kneading and squeezing the turkey to evenly incorporate the bread crumbs created too sturdy a myosin gel, resulting in a springy, sausage-like consistency. To get around this, I broke the slab of ground turkey into ½-inch pieces prior to adding the panko. This exposed more surface area for even dispersal of the crumbs, reduced the amount of mixing required, and kept the meat loose.

Now the turkey had a pleasant texture, but after reaching 160 degrees, it still wasn't juicy. A couple of test kitchen tricks took care of that. First, I bathed

Turkey Needs Help

Ground turkey is full of moisture—more so than ground beef—but since you have to cook it to 160 degrees, it's virtually impossible to keep the juices in the meat unless you give it some help. Here's how we deliver all the qualities that make a turkey burger taste good—really good.

SAVORY FLAVOR

Glutamate-rich soy sauce and Parmesan cheese contribute savoriness.

LIGHT, LOOSE CONSISTENCY

Panko bread crumbs prevent proteins from bonding too tightly.

JUICINESS

Baking soda helps the meat retain moisture; gelatin adds juicy richness.

RICH TASTE AND TEXTURE

Just 1 tablespoon of melted butter adds fat and richness to lean turkey.



the meat in a solution of baking soda dissolved in a teaspoon of water. The baking soda solution raised the pH, changing the protein structure and enabling the meat to better retain moisture. (It also sped up the Maillard reaction, providing better browning.) Second, I added a bit of unflavored gelatin to hold moisture, creating a juicy mouthfeel.

Fat and Flavor Boosters

A satisfying burger needs some richness, so next I added a bit of melted butter. A single tablespoon solidified when it hit the cold meat, creating tiny particles of fat throughout the patties that remelted during cooking to produce a rich taste and texture.

To augment the meat's savoriness, I experimented with glutamate-rich soy sauce, Parmesan, and ground shiitake mushrooms separately and in combination. The mushrooms overwhelmed the meat, but 1½ tablespoons of soy sauce together with 3 tablespoons of grated Parmesan packed a solid umami punch without being overpowering. When shaping the patties, I used a gentle hand to keep the burger mix coarse and loose.

Cold Turkey

We often cook burgers by searing the patties in a sizzling-hot skillet. The outside of the meat quickly browns while the interior stays cooler. But the interior of a turkey burger needs to be cooked thoroughly, and in a hot skillet the exterior is likely to overcook and turn leathery by the time the interior is done. Unless I wanted to negate all the advances I had already made, I needed to come up with a new method.

I made a couple of bold decisions. First, I would start the patties in a cold oiled skillet. Once they were in place, I turned the heat to medium, and then, when I started to hear sizzling, I covered the pan. The lid trapped the moisture that escaped from the turkey, enveloping the burgers in steam so they cooked quickly and evenly. After about 2½ minutes, I flipped the patties (which were nicely browned on the bottom), covered them, and continued to cook them until they reached 160 degrees and the second side was golden brown. These burgers hit all the right notes: deep browning; a tender crust; a pleasantly coarse and juicy texture; and rich, savory flavor.

I melted cheese onto the burgers and then sandwiched them between soft buns with the works: lettuce, tomato, ketchup, and mayonnaise. And for those times when I wanted to go all out, I created a recipe for my new favorite burger topping: quick-pickled avocado slices. Almost any fruit or vegetable can be pickled, including fatty avocados. The result is both creamy and tangy—the ideal crown for a turkey burger worth bragging about.

RECIPES TO MAKE IT A MEAL

Find these sides in our archive: Easier French Fries (July/August 2009), Pan-Roasted Broccoli (March/April 2006), Roasted Sweet Potatoes (November/December 2008).

DON'T COOK TURKEY LIKE BEEF

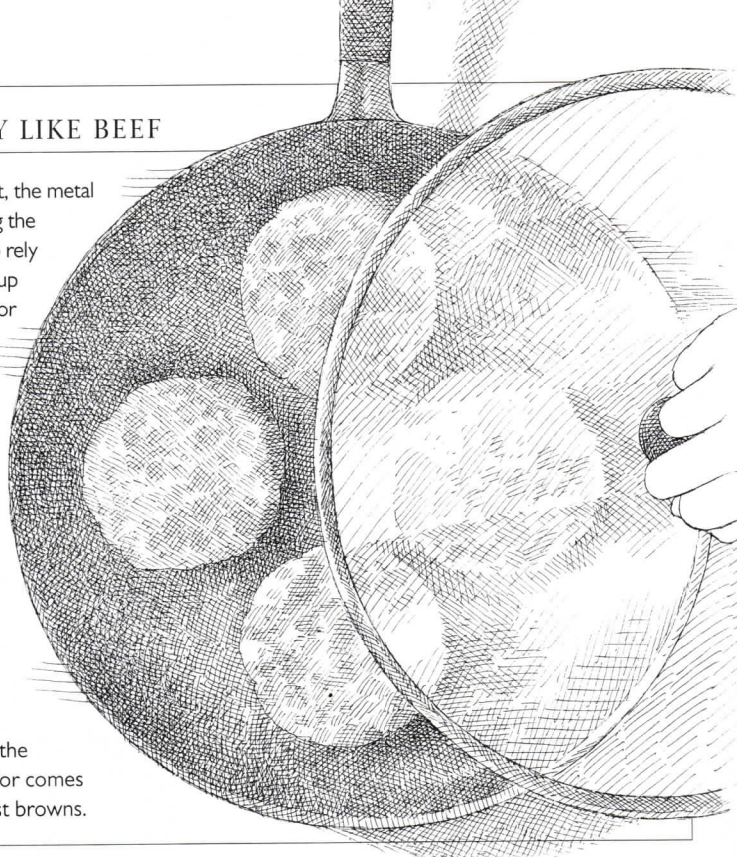
When you cook a burger in a skillet, the metal heats the part of the patty touching the skillet, but the rest of burger has to rely on the meat itself to conduct heat up through the patty. But meat is a poor conductor of heat, so when you need to cook a burger all the way to 160 degrees, the exterior will almost certainly overcook before the interior is done.

START COLD

Starting turkey burgers in a cold pan means that the exteriors of the patties will slowly start to brown while the interiors have time to cook through.

COVER THE SKILLET

Putting a lid on the skillet bathes the patties in steam so that the interior comes up to temperature while the crust browns.



SKILLET TURKEY BURGERS

SERVES 4 TOTAL TIME: 40 MINUTES

When mixing and shaping the patties, do not overwork the meat, or the burgers may become dense. A pair of fish spatulas works well for flipping the burgers. Serve with your favorite burger toppings and Pickled Avocado (recipe follows), if desired. Our recipe for Skillet Turkey Burgers for Two is available for free for four months at CooksIllustrated.com/feb20.

- 2 teaspoons vegetable oil
- 1 teaspoon water
- ¼ teaspoon baking soda
- 1 pound 93 percent lean ground turkey
- 1½ tablespoons soy sauce
- 1 tablespoon unsalted butter, melted
- 3 tablespoons panko bread crumbs
- 3 tablespoons grated Parmesan cheese
- ½ teaspoon unflavored gelatin
- ¼ teaspoon pepper
- ⅛ teaspoon table salt
- 4 slices American cheese (optional)
- 4 hamburger buns

1. Place oil in 12-inch nonstick skillet and set aside. Combine water and baking soda in small bowl. Place turkey in large bowl. Using your hands, break up meat into rough ½-inch pieces. Drizzle baking soda mixture evenly over turkey, followed by soy sauce and melted butter. Evenly sprinkle panko, Parmesan, gelatin, pepper, and salt over turkey mixture. Using your hands, gently toss to combine.

2. Divide meat into 4 lightly packed portions, about 4 ounces each. Gently flatten 1 portion into patty about ½ inch thick and about 4 inches in

diameter. Transfer patty directly to prepared skillet and repeat with remaining portions.

3. Heat skillet over medium heat. When patties start to sizzle, cover skillet and cook until patties are well-browned on bottom, about 2½ minutes (if patties are not browned after 2½ minutes, increase heat). Carefully flip patties, cover, and continue to cook until second side is well browned and burgers register 160 degrees, 2½ to 3 minutes longer. If using cheese, place 1 slice on each burger about 1 minute before burgers finish cooking. Transfer burgers to plate and let rest for 5 minutes, then transfer to buns and serve.

PICKLED AVOCADO

SERVES 4

TOTAL TIME: 10 MINUTES, PLUS 30 MINUTES CHILLING

Use a relatively firm avocado for this recipe.

- ½ cup distilled white vinegar
- ½ cup water
- 1 tablespoon sugar
- 2 teaspoons table salt
- 1 ripe but firm avocado, halved, pitted, and sliced ¼ inch thick

Combine vinegar, water, sugar, and salt in medium bowl and whisk until sugar and salt are dissolved, about 30 seconds. Add avocado (avocado should be submerged) and refrigerate for at least 30 minutes or up to 2 hours. Drain and pat dry before using.



STEP-BY-STEP VIDEO AND NUTRITION INFORMATION
CooksIllustrated.com/FEB20