

Great Pan-Seared Flank Steak

Flank steak has it all: rich, beefy flavor; lean meat; and a reasonable price tag. Its one downfall? It only seems to work on the grill.

≧ BY ANDREA GEARY ≦

In a perfect world, cooking a flank steak would be as simple as throwing it into a hot pan and searing it on each side. The outside would be crusty and brown by the time the inside was cooked to a rosy, even medium. But in the real world, flank steak can be too long to squeeze into a 12-inch skillet, so its ends reach up the sloped sides, making it awkward to cook. Plus, it's made up of long muscle fibers that contract when heated, causing the steak to buckle and therefore brown unevenly. The long muscle fibers also shrink unevenly as the meat cooks, so one end becomes thicker than the other. This means that the steak can turn out rare at the thick end and medium-well at the thin end. To top it off, the prolonged sear causes the meat just beneath the exterior to overcook and turn gray.

Moving outside to the grill solves most of these problems: There's no skillet to squeeze into (or smoke alarm to set off), and the more intense heat browns the steak better, even if it warps a bit. The uneven cooking and gray layer persist, but most cooks accept such imperfections as the price they pay for a quick grilled dinner.

But I wanted a year-round way to cook this beefy, lean steak—and a tolerance of imperfection is not among my more notable qualities. I was determined to find a reliable indoor method for producing a well-browned flank steak that was cooked medium throughout. (We like loose-textured, wide-fibered steaks like flank cooked to medium because at this degree of doneness the fibers shrink a bit more, which translates to greater tenderness.)

Thinking Inside the Box

Hoping to limit smoke and spatter, I decided to try cooking the steak in the oven. To get any crust development, the meat was going to have to sit flat on a very hot, broad surface. But, alas, broiling the steak on a rimmed baking sheet was a failure. As it slowly heated up, moisture beaded on the wide,



To prevent the meat from buckling and therefore browning unevenly, we flip it frequently during searing. We slice the steaks before serving.

flat surface of the meat, inhibiting browning and leaving me with a gray steak that tasted steamed.

If I wanted that flavorful brown crust, I was going to have to use the direct heat of the stovetop. I started by dividing the steak into quarters. It was an unconventional move, but I had two reasons: First, doing so helped the steak fit neatly into the skillet. Second, it meant that I could remove the individual steaks from the skillet as they finished cooking, so they would all be cooked to a perfect medium.

I heated 2 tablespoons of oil in a skillet over medium-high heat until it was just smoking and added the steaks. Thinking that minimal interference would yield the best sear, I resolved to wait 3 minutes before moving them. The steaks buckled, though not as severely as the full steak had, and I hoped the warping would be reversed when I flipped them. Unfortunately, the damage was irreversible. The first sear had set a concave shape, so the steaks browned only around the edge of one side and only in the middle of the other.

I removed the two thinner steaks from the skillet

after about 8 minutes when they reached 125 degrees. The thicker steaks took about 4 minutes longer. After resting, they were all cooked to medium, but there was a sizable band of gray, overcooked meat around the edges, and the browning—though better than my oven attempts—was still not up to par. As I wiped up the splatter on the stove, I knew there had to be a better way.

A Hybrid Approach

Cutting the steak into quarters gave me better control of the internal temperature of the meat and enabled me to fit it all in the pan, so I'd stick with that, but I had to reconsider the cooking method. Perhaps I had been hasty in eliminating the oven as a possibility.

One of the best methods for cooking thick steaks is the test kitchen's hybrid method that involves heating them gently in a 275-degree oven until they approach the perfect internal temperature and then transferring them to a hot skillet on the stovetop to brown. The oven step accomplishes three things: First, the precooked meat doesn't cool down a hot pan as drastically as a room-temperature steak would, so browning starts almost immediately. Second, some of the

steak's surface moisture evaporates in the oven, so there's less to be converted to steam before browning can begin. Third, this accelerated browning means that the steak doesn't have to spend much time in the skillet, so the meat just below the crust doesn't overcook. There's also less time for splatter and smoke.

It's the best way to cook uniformly thick, hefty steaks like rib eyes or strip steaks, but would flank steak's irregular thinness be suited to this treatment? To find out, I divided my steak into quarters and seasoned them with salt. I also sprinkled on a teaspoon of sugar to assist in browning when the time came. I placed the meat on a wire rack set in a rimmed baking sheet and baked it in a 275-degree oven until the thickest steak reached 120 degrees, about 20 minutes. Then I seared the steaks in a hot skillet.

This time I was not as restrained about flipping the steaks. Reasoning that the buckling was caused not so much by the tightening of the fibers on each side of the steak as by the *unequal* tightening of those fibers, I flipped the steaks every minute to keep the surface tightening on each side pretty much



See Our Method

Video available free for 4 months at [CooksIllustrated.com/oct15](https://www.cooksillustrated.com/oct15).

Fitting a Rectangle into a Circle

Squeezing a long flank steak into a 12-inch skillet usually means that the ends of the steak creep up the sloped sides of the pan, all but guaranteeing unevenly cooked meat. Cutting our flank steak into four pieces and warming it in the oven before searing (where it shrinks significantly) helps it fit neatly. Smaller pieces also have shorter muscle fibers, so the steaks don't buckle as much during searing.



TIGHT SQUEEZE

A 1 1/2-pound flank steak is simply too big for a 12-inch skillet.

PAN-SEARED FLANK STEAK WITH MUSTARD-CHIVE BUTTER

SERVES 4 TO 6

equal. It worked. This time the steaks were much flatter, which meant that more of the meat stayed in contact with the cooking surface. This, combined with the caramelizing effect of the sugar, yielded the best browning thus far.

But the doneness varied. The thicker ends were cooked to a perfect medium, but the thinner ends were closer to medium-well.

During my next test I was hypervigilant, repeatedly temping each steak and removing each from the oven as it reached 120 degrees. But such frequent temperature taking meant opening the oven several times, and every time it lost heat and had little time to recover before I opened it again. The thinnest steak was done in 20 minutes, but it took almost 50 minutes before the thickest steak reached the target temperature, which was a lot of fuss.

And yet these steaks won me over. They browned beautifully in the skillet, and I was happy with their juicy, rosy interiors and lack of overdone gray meat just below the surface. Was there a hassle-free way to get all the meat to the target temperature at once?

How Low Can You Go?

It occurred to me that high-heat methods like grilling or searing in a skillet had resulted in the biggest doneness differential between the thick and thin steaks. Could I close the gap by using a very low-temperature oven?

I reduced the oven temperature to 250 degrees and inserted a probe thermometer into one of the thicker steaks. When the thermometer registered 120 degrees (since I wasn't opening the oven, this took only about 30 minutes), I transferred all the steaks to a skillet to brown. Sure enough, these steaks were closer in terms of doneness, but the thinner steaks were still a bit overcooked.

Lowering the oven temperature even more did the trick. Steaks that were warmed for 35 minutes in a 225-degree oven registered between 120 and 130 degrees, so that after searing and resting they were a perfect rosy medium. (See "Getting Thick and Thin Ends More Evenly Cooked.")

Flank steaks this great deserved a bit of embellishment. I mixed up some flavorful compound butters and slathered them onto the warm steaks to melt over them as they rested. I sliced the steaks thinly across the grain for maximum tenderness and dotted them with just a bit more butter. Imperfection is no longer part of the flank steak bargain.

- 3 tablespoons chopped fresh chives
- 2 teaspoons Dijon mustard
- 1/2 teaspoon grated lemon zest plus 1 teaspoon juice
- 2 tablespoons vegetable oil

1. Adjust oven rack to middle position and heat oven to 225 degrees. Pat steak dry with paper towels. Cut steak in half lengthwise. Cut each piece in half crosswise to create 4 steaks. Combine salt, sugar, and pepper in small bowl. Sprinkle half of salt mixture on 1 side of steaks and press gently to adhere. Flip steaks and repeat with remaining salt mixture. Place steaks on wire rack set in rimmed baking sheet; transfer sheet to oven. Cook until thermometer inserted through side into center of thickest steak registers 120 degrees, 30 to 40 minutes.

2. Meanwhile, combine butter, 1 tablespoon chives, mustard, and lemon zest and juice in small bowl.

3. Heat oil in 12-inch skillet over medium-high heat until just smoking. Sear steaks, flipping every 1 minute, until brown crust forms on both sides, 4 minutes total. (Do not move steaks between flips.) Return steaks to wire rack and let rest for 10 minutes.

4. Transfer steaks to cutting board with grain running from left to right. Spread 1 1/2 teaspoons butter mixture on top of each steak. Slice steak as thin as possible against grain. Transfer sliced steak to warm platter, dot with remaining butter mixture, sprinkle with remaining 2 tablespoons chives, and serve.

SCIENCE Getting Thick and Thin Ends More Evenly Cooked

Our usual method for cooking steaks is to preheat them in a 275-degree oven and then transfer them to the stovetop to sear their outsides. But when we adapted this technique to flank steak, we ran into a problem: By the time the thick end of the steak reached the target temperature of 120 degrees, the thin end overcooked. The solution? Turn down the oven: At 225 degrees, both the thick and thin ends stay within an acceptable temperature range.

Here's why: The increase in the internal temperature of the steaks is not constant over the course of their time in the oven. Initially, the steaks heat up pretty rapidly, and then they slow as their internal temperature approaches that of the oven. But here's the interesting thing: The rate at which the temperature of the thin steaks and the thick steaks slows is different because their mass is different. The thin steaks heat more quickly, but their rate of increase starts to level off as it approaches the target temperature of 120 degrees. That gives the thicker steaks time to catch up. The lower the oven temperature, the more pronounced this leveling off effect is.

