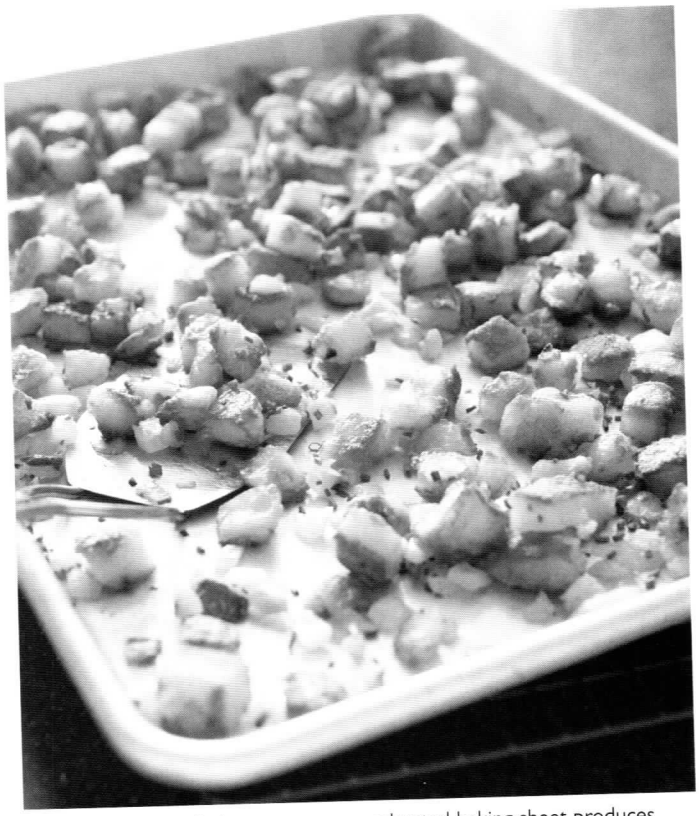
Great Home Fries for a Crowd

Could the key to really good, genuinely crisp home fries be really bad boiled potatoes?

BY ANDREA GEARY

Despite the cozy image conjured by the name, few people actually make home fries at home. That's probably because producing the perfect article—a mound of golden-brown potato chunks with crisp exteriors and moist, fluffy insides dotted with savory onions and herbs—calls for more time, elbow grease, and stovetop space than most cooks care to devote to the project. First of all, when you start with raw potatoes, achieving that ideal crisp, well-browned exterior requires frequently turning them in the pan for the better part of an hour. Then there's the matter of the yield: Even a roomy 12-inch skillet barely holds enough potatoes to serve two people. But since the prospect of juggling multiple sizzling skillets is enough to give even the most confident cook pause, making home fries for a larger gathering is out of the question. No wonder most of us eat our home fries at diners or buffet tables, where large-scale production and lengthy holding times often result in potatoes that are limp and greasy.

I wanted to find a way out of this sorry situation. My goal: nicely crisped home fries with tender interiors that would serve six hungry people—and wouldn't chain the cook to the stove for an hour.



Roasting the parboiled potatoes on a preheated baking sheet produces extra-crisp crusts.

Boiling Point

Since time was a priority, I decided to rule out any recipes that began with raw spuds and look for those that called for some form of parcooking. Even though it would dirty more dishes, parcooking would dramatically cut down on frying time. Our science editor also pointed out that using a moist heat method like boiling would actually aid in my goal of a crisp exterior. This is because when the starch granules in potatoes absorb water, they swell and release the water-soluble starch amylose. Once the amylose on the surface of the potato dries out, it hardens, creating a crisp shell. Parboiling it would be.

I wasn't sure which type of potato would work best, so I tested the three main kinds: waxy, low-starch red-skinned spuds; all-purpose, medium-starch Yukon Golds; and floury, high-starch russets. I peeled and diced the potatoes into rough ¾-inch chunks, covered them with cold salted water, and boiled them until just cooked through. After draining the diced potatoes, I let them cool and dry slightly while I heated three cast-iron skillets. While I was frying the potatoes in the skillets with some vegetable oil for about four minutes per side, frantically flipping, I added another goal to my list: only one cooking vessel at a time.

Tasters almost universally rejected the texture of the red-skinned potatoes as too waxy for home fries. Though some praised the creaminess of the Yukon Golds, the majority preferred the earthy flavor of russets. I also knew that the higher starch content of russets would make for a crustier exterior. But as it did with the other potatoes, precooking caused the russets to become more porous, so they absorbed almost all of the oil in the pan before they'd been turned even once. The upshot was that only the first side of each cube came out golden brown while the other sides stuck to the pan, leaving their browned crusts behind. The simple fix was to boil the potatoes just until their outsides were softened but their insides were still firm. This meant that only the outermost, fully cooked layer of potato absorbed oil, leaving more oil in the pan to prevent sticking and promote even browning.

With browning under control, it was time to turn to the next pressing issue: batch size. Since I'd vowed not to repeat the stressful experience of multiple skillets, I tried successive batches in a single skillet, holding each completed batch in a warm oven until all of the potatoes were fried. Not only was this approach too time-consuming, but the potatoes waiting in the oven grew soft outside and dry in the middle as moisture migrated from their cores to their surfaces.

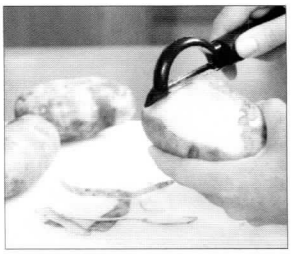
Home-Roasted Potatoes?

I couldn't ignore the fact that the oven was ideal for large batches, so I decided to try high-temperature roasting. I was heartened to find plenty of Internet recipes purporting to make "oven home fries" without any parboiling at all. While many of these recipes produced evenly browned potatoes, they sadly did not deliver the crucial crisp texture of the real deal, plus they required nearly an hour of roasting time.

Undaunted, I decided to see if parcooking the potatoes, which at least encouraged a crisp exterior, would help. (It would also cut down on roasting time.) As before, I parboiled my potatoes for five minutes until they were nearly (but not completely) cooked through. I tossed them with butter (for flavor) and then transferred them to an oiled, rimmed baking sheet that I had preheated in a 500-degree oven to mimic the surface of a hot skillet. After 40 minutes of roasting (and occasional turning), the exteriors were perfectly brown and crisp—but the insides were dry and overcooked. Cutting the roasting time to 25 minutes left the insides moist and creamy but the outsides pale and soft.

Given that a baking sheet had the potential to yield three times as many servings as a skillet, I had to find a way to make the oven work.

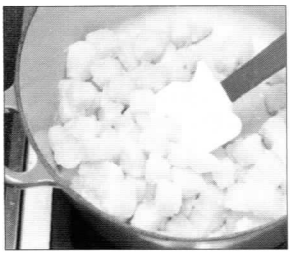
HOW MUSHY BOILED POTATOES LEAD TO CRISP HOME FRIES



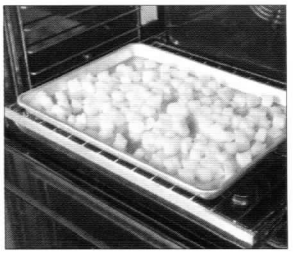
USE RUSSETS We like the earthy flavor that russets bring to home fries, plus their high starch content helps create a substantial golden-brown crust.

PARBOIL Adding potatoes to boiling (not cold) water cooks them more on the outside than on the inside—just the uneven effect we want.

ADD BAKING SODA Baking soda accentuates the uneven cooking by quickly breaking down the exteriors, leaving the insides nearly raw.



TOSS WITH SALT Salt roughs up the drained potatoes, so their moisture evaporates more readily, leading to better crisping in the oven.



ROAST Pretreated potatoes achieve a "fried" texture after oven roasting. This technique yields three times as many servings as frying in a skillet.

The World's Worst Boiled Potatoes

What I needed to do was somehow alter the boiling step to exaggerate the difference in doneness between the exterior and the interior of the potatoes before I roasted them. I wanted a thin outer layer of blown-out, starchy potato that would brown thoroughly in the oven but a raw middle that would stay moist during the time that it took to brown the outside. In short, I needed a method for making really bad boiled potatoes.

I remembered a test kitchen potato salad recipe in which we'd discovered that adding a bit of vinegar to the boiling water keeps potatoes firm during cooking. The acid slows the breakdown of the pectin that holds the potato cells together, resulting in boiled potatoes that stay firm and intact. If a bit of acid in the water produced the best boiled potatoes, would adding its opposite—an alkaline substance—produce the worst?

I put 3½ pounds of peeled, chunked potatoes in a saucepan and covered them with 10 cups of cold water plus 2 teaspoons of alkaline baking soda, which I hoped would speed up the breakdown of pectin on the outside of the potato and turn it mushy. But after five minutes of boiling, the potatoes were blown out through and through. Undeterred, I cut back on the baking soda. After experimenting, I found that just ½ teaspoon produced the desired effect: floury outsides and uncooked insides. But could I take things even further? Since starting potatoes in cold water helps ensure even cooking and my goal was uneven cooking, why not chuck the spuds into boiling water? This not only made the outsides even pastier and left the insides totally raw but also reduced the parcooking to one minute. Perfect.

I had one more trick to try. I was already tossing the drained parcooked chunks with butter before placing them on the baking sheet, but I tossed them with kosher salt as well. In the past we've found that the coarse salt roughs up the surface of the potatoes so that moisture evaporates faster, leading to better browning. This worked beautifully to create nicely browned home fries with just the crisp, fried texture that I'd been seeking—and I'd only had to turn the potatoes twice in the oven.

My recipe still lacked onions, so I searched for a way to incorporate them without compromising the now-perfect texture of the potatoes. Mixing chopped onions with the spuds before they went into the oven left the onions burnt on the outside and raw in the middle; mixing them in halfway through roasting had a similar effect. In the end, I found that placing oiled and salted onions in the center of the baking sheet 15 minutes into roasting the potatoes (at which point I also turned the potatoes) allowed them to soften a bit. After another 15 minutes, I mixed the onions and potatoes together and cooked them about five minutes longer. A pinch of cayenne tossed with the salted potatoes gave them kick, and a sprinkling of chives at the end enhanced the onion flavor.

I could now make great home fries for a group without working myself into a tizzy. And I didn't even need to haul out the skillet.

HOME FRIES

SERVES 6 TO 8

Don't skip the baking soda in this recipe. It's critical for home fries with just the right crisp texture.

- 3½ pounds russet potatoes, peeled and cut into ¾-inch dice
- ½ teaspoon baking soda
- 3 tablespoons unsalted butter, cut into 12 pieces
- Kosher salt and pepper
- Pinch cayenne pepper
- 3 tablespoons vegetable oil
- 2 onions, cut into ½-inch dice
- 3 tablespoons minced chives

1. Adjust oven rack to lowest position, place rimmed baking sheet on rack, and heat oven to 500 degrees.

2. Bring 10 cups water to boil in Dutch oven over high heat. Add potatoes and baking soda. Return to boil and cook for 1 minute. Drain potatoes. Return potatoes to Dutch oven and place over low heat. Cook, shaking pot occasionally, until any surface moisture has evaporated, about 2 minutes. Remove from heat. Add butter, 1½ teaspoons salt, and cayenne; mix with rubber spatula until potatoes are coated with thick, starchy paste, about 30 seconds.

3. Remove baking sheet from oven and drizzle with 2 tablespoons oil. Transfer potatoes to baking sheet and spread into even layer. Roast for 15 minutes. While potatoes roast, combine onions, remaining 1 tablespoon oil, and ½ teaspoon salt in bowl.

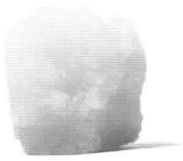
4. Remove baking sheet from oven. Using thin, sharp metal spatula, scrape and turn potatoes. Clear about 8 by 5-inch space in center of baking sheet and add onion mixture. Roast for 15 minutes.

5. Scrape and turn again, mixing onions into potatoes. Continue to roast until potatoes are well browned and onions are softened and beginning to brown, 5 to 10 minutes. Stir in chives and season with salt and pepper to taste. Serve immediately.

SCIENCE Potato Chain Reaction

While developing a potato salad recipe not too long ago we discovered that adding vinegar to the cooking water creates an acidic environment that slows the breakdown of the pectin that holds potato cells together, resulting in a firm, intact texture. So when our home fries required a thin outer layer of mush that would brown thoroughly in the oven, we took the opposite approach: We created an alkaline environment by adding a little bit of baking soda to the water. After just one minute in the pot, the exteriors of the potatoes became so soft that they were mushy—but the interiors remained raw. This lead to potatoes that more readily crisped on the outside when roasted but didn't dry out on the inside.

How could just ½ teaspoon of baking soda added to 10 cups of water be so powerful? It's because alkaline baking soda triggers a chain reaction that literally unzips the backbone of the pectin molecules and causes them to fall apart. This requires only enough alkali to raise the pH of the water high enough to start the reaction, after which it becomes self-sustaining.



BOILED WITH BAKING SODA (pH 3)

BOILED W VINEGA (pH 8.1