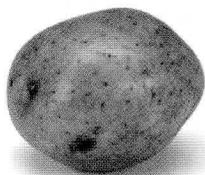
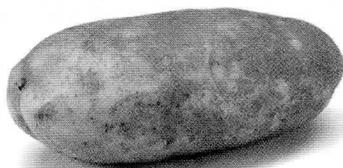


Tuber Testing



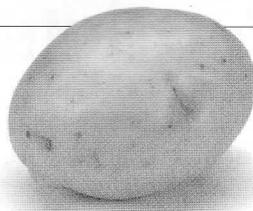
RED POTATO

Red Bliss potatoes were overly dense.



RUSSET

Russet potatoes yielded a tacky texture.



YUKON GOLD

Yukon Golds had winning flavor and a lighter, creamier texture.

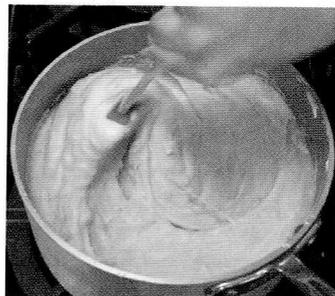
and milk. Sour cream produced results that were certainly creamy but also way too rich. Ditto on the version made with cream, which sated tasters with a single bite. In the end, whole milk proved best, providing depth without going overboard. I found that the amount of milk it took to loosen the texture varied from batch to batch, depending on the moisture content of the potatoes. As for butter, after testing various amounts, I settled on 6 tablespoons for 2 pounds of potatoes. (Some recipes called for as much as two sticks for the same quantity of spuds, but with the cheese still to come, that was overkill.)

At last, I could concentrate on selecting the cheese. For testing purposes, I'd been using Cantal—which seemed like a good bet, given that it's an older cousin of the authentic choice, tomme fraîche. But adding handfuls of the shredded cheese thickened my potatoes so much that I needed brute force to stir them. Plus, the dish lacked the stretchiness I remembered from my bistro meal. Searching for a more elastic substitute, I tried cheddar and then Swiss, with similarly unsatisfactory results. Grabbing a quick piece of pizza one day and watching how ribbons of gooey mozzarella stretched between two slices, it came to me: Why not try typical pizza cheese, the prepackaged mozzarella from the supermarket dairy section? If it worked, who would care that this cheese was about as far as you could get from aligot's French farmhouse origins?

The Science of Stretch: Rough 'Em Up

Normally we wouldn't dream of mashing potatoes in a food processor, let alone whipping them by hand for a protracted period—two techniques called for in our aligot recipe. Such rough handling causes the release of amylose, the tacky gel-like starch found in potatoes that spells the end of light, fluffy texture. But in these cheesy, garlicky French mashed potatoes, the release of amylose is actually a good thing. When combined with the cheese in the recipe, it helps produce aligot's signature stretch.

Here's how it works: When cheese is stirred vigorously into the hot boiled potatoes, this rough treatment causes the waterlogged starch granules in the spuds to burst, releasing sticky, gluey amylose. At the same time, the protein molecules in the melting cheese are uncoiling and stretching out like curly hair straightened by a flat iron. When amylose released from the potatoes comes into contact with the uncoiled proteins, it links them together into long, elastic fibers that give aligot its stretch. —C.K.



WHIP INTO SHAPE

For smooth, elastic texture, stir potatoes three to five minutes.

This was a stretch in the very best way—after adding a generous 3 cups, I could lift my wooden spoon and entertain my colleagues with the aligot's incredible expansion. Yet its taste fell flat: The mozzarella was just too mild. Stirring and lifting, I tested versions in which I replaced some of the mozzarella with slightly stronger tasting Cantal (in smaller portions, it didn't lessen elasticity), sharp cheddar, and nutty Gruyère. Gruyère turned out to be the top choice. Still there were complaints: With 3 cups of cheese and 2 pounds of potatoes (a lesser proportion of cheese than most recipes called for), tasters thought the aligot was still overly rich. Cutting back to just a cup of mozzarella and a cup of Gruyère reduced the stretch slightly, but kept richness in check.

As for the stirring, at this point my arm was going around in circles in my sleep. Testing proved that stirring was key to the aligot equation: Too much and the aligot turned so rubbery that it reminded me of chewing gum; too little and the cheese didn't truly marry with the potatoes for that essential elasticity. I eventually surmised that five minutes was the right workout. But I still didn't understand why the stirring worked so well, since the vigorous motion (like that of the food processor) releases amylose, the pesky starch molecule that turns good potatoes gluey. After consulting with our science editor, I learned that in this case, amylose was an asset—the sticky molecules were binding with the proteins from the melted cheese,

enhancing its stretch without causing glueyness (see "The Science of Stretch: Rough 'Em Up" below).

Thus informed, I could focus on the remaining element: garlic. Adding two minced cloves to the potatoes as I pureed them in the food processor yielded just the right amount of garlic punch.

At last my aligot was so rich, garlicky, and stretchy I was willing to bet it would even pass muster in Auvergne.

FRENCH MASHED POTATOES WITH CHEESE AND GARLIC (ALIGOT)

SERVES 6

The finished potatoes should have a smooth and slightly elastic texture. White cheddar can be substituted for the Gruyère. For richer, stretchier aligot, double the mozzarella.

- 2 pounds Yukon Gold potatoes (4 to 6 medium), peeled, cut into ½-inch-thick slices, rinsed well, and drained
- Table salt
- 6 tablespoons unsalted butter
- 2 medium garlic cloves, minced or pressed through garlic press (about 2 teaspoons)
- 1–1½ cups whole milk
- 4 ounces mozzarella cheese, shredded (about 1 cup) (see note)
- 4 ounces Gruyère cheese, shredded (about 1 cup) (see note)
- Ground black pepper

1. Place potatoes in large saucepan; add water to cover by 1 inch and add 1 tablespoon salt. Partially cover saucepan with lid and bring potatoes to boil over high heat. Reduce heat to medium-low and simmer until potatoes are tender and just break apart when poked with fork, 12 to 17 minutes. Drain potatoes and dry saucepan.

2. Transfer potatoes to food processor; add butter, garlic, and 1½ teaspoons salt. Pulse until butter is melted and incorporated into potatoes; about ten 1-second pulses. Add 1 cup milk and continue to process until potatoes are smooth and creamy, about 20 seconds, scraping down sides halfway through.

3. Return potato mixture to saucepan and set over medium heat. Stir in cheeses, 1 cup at a time, until incorporated. Continue to cook potatoes, stirring vigorously, until cheese is fully melted and mixture is smooth and elastic, 3 to 5 minutes. If mixture is difficult to stir and seems thick, stir in 2 tablespoons milk at a time (up to ½ cup) until potatoes are loose and creamy. Season with salt and pepper. Serve immediately.

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HOW TO MAKE

• French Mashed Potatoes with Cheese and Garlic (Aligot)