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Don't soak your dried beans! Now even the cool kids agree

Should you soak your beans? Times Food editor Russ Parsons has the answer.

By RUSS PARSONS
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Are you still soaking dried beans? Why?

For years I've been telling people that you don't need to soak most beans. Now the cool kids are agreeing. Yesterday my old e-friend, J. Kenji Lopez-Alt, published on Serious Eats his findings on cooking black beans. The headline: "So you like flavor? Don't soak your black beans!"

He's a nice young man, so he very generously mentioned a piece I'd done many years ago on soaking versus not soaking dried beans. This prompted me to fire up the L.A. Times WayBack Machine and retrieve that story.
7 terrific no-soak bean recipes »

It's a funny thing about cooking: I'm always changing my opinions as I learn new things. But I have to say that this holds up almost entirely. The only change is that I now cook the beans at 350 degrees rather than 250. It saves time with no damage to flavor or texture.
Here is my story from 1994. And just for fun, I included a sidebar I wrote on beans and flatulence. Because, well, "Beans and Flatulence"!

"Beans: To Soak or Not to Soak, It's No Longer a Question"
Almost every recipe in every cookbook you've ever read says you must soak dried beans before you cook them. In almost every case that advice is wrong.

Letting dried beans sit overnight in a bowl of cold water does nothing to improve their flavor or their texture. In fact, it does quite the opposite. While soaking shortens the unattended cooking time of beans somewhat, the time saved is marginal and there are no other labor-saving benefits. Finally, soaking does absolutely nothing to reduce the gas-producing properties of beans.

These may be difficult ideas to get used to, flying as they do in the face of everything most of us have been taught about cooking beans. One friend, an Arizonan, dismissed the idea out-of-hand, attributing it to my New Mexican background. "What do they know about beans?" she said.

But cooking unsoaked beans is not new. No less an authority than noted Mexican cookbook writer Diana Kennedy has advocated it for years. "If you want the best-flavored beans, don't soak them overnight, but start cooking in hot water," she says in "The Cuisines of Mexico" (Harper & Row: 1972).

In fact, the more I asked around, the more people I found who cooked beans this way -- mostly, it seemed, people from Mexican or Central American families -- although at least one prominent New American chef and another well-known French chef agreed.

What's more, few commercial canners soak dried beans before cooking. In fact, in a way they don't cook the beans at all. The heat and pressure of the canning process (called the retort) is enough to cook -- perhaps even overcook -- the beans right in the can.

Still, I wanted to see for myself. Call it trial by frijoles.
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First, I cooked three pots of beans: one soaked overnight, one quick-soaked (brought to a boil and left to sit, covered for one hour), and one simply covered with boiling water. To each pot I added a hunk of salt pork, some sliced onion and a bit of garlic. I simmered them slowly on top of the stove, covered.

The two soaked beans did cook more quickly than the unsoaked -- they were finished in about 1 hour and 15 minutes, as opposed to two hours. But when I sampled them, the extra 45 minutes paid off. The two pots of soaked beans were pallid compared to the unsoaked (though the long-soaked were better than the quick-soaked). The unsoaked beans had a noticeably deeper flavor; they were firmer to the bite, and they did not break up as much in cooking.

Then came the ultimate test. I sat down with a big bowl of the cooked unsoaked beans (after a little refrying with bacon and a handful of grated Monterey Jack cheese) and ate lunch. I waited, half expecting to blow up like a balloon (as a precaution, I did this test at home, alone). Nothing untoward happened.

That experiment was far from scientific, but after talking to a couple of researchers who confirmed my results, I moved on to more phone calls and other tests.
All of us, it seems, have our own set of folk tales about cooking beans. And most rules are followed simply because that's the way someone told us to do it, rather than as a result of any kind of testing.

--Some people told me quite firmly that beans should never be salted before cooking -- that this keeps them from softening during cooking. In fact, Kennedy herself makes this claim.
So I cooked beans with salt added (1 teaspoon per pound of beans turns out to be about the right ratio) and without. They cooked to exactly the same degree of softness in almost exactly the same time.

Interestingly, though, to get the same level of saltiness in the unsalted batch of beans, I had to add more than twice as much salt. And even then, it was more a case of the broth being salty than the beans.

--Other people said that the type of pot in which beans are cooked is the most important thing -- only earthenware will do.

I cooked beans in three different pots -- earthenware, stainless-steel and unlined aluminum. There was some difference in the rate at which the beans soaked up water (or, probably more accurately, the pans soaked up water). The earthenware needed more water early but then seemed to maintain a steady level a little better. I could find little difference in flavor between the earthenware and the stainless-steel, but the unlined aluminum lent a distinctly metallic flavor to the beans.

--One chef told me he never allowed his beans to be cooked on top of the stove. Only by cooking them in the oven is it possible to get the slow, steady pace they need, he claimed.
Delicious vegetarian recipes from barley bowls to pizza »

I cooked beans both on top of the stove and in the oven. With constant attention and a ready flame-tamer, I could manipulate the temperature well enough to keep the beans at a sufficiently slow simmer. But, covered, in a 250-degree oven, the cooking was almost effortless. All I had to do was check every half-hour or so to make sure there was sufficient water.

The effect of the cover was particularly amazing. Cooking beans in one test without a cover took six hours. The same quantity of beans, cooked at the same temperature with a lid, was done in about 1 hour, 15 minutes (without pre-soaking).

All of these tests were done with commonly available varieties -- pinto and white northern -- that had been purchased from stores that seem to sell a lot of beans. In fact, the age of the bean may be the most important factor.

Dried beans continue to lose moisture as they sit. With very recently picked beans -- say, the Scarlet Runners I pick and shell in the summer in my back yard -- a quick simmer is all that is necessary. (Actually they are quite good even raw when doused with a little olive oil, mint or basil and salt).

On the other hand, those dried flageolet beans you bought on a whim a couple of years ago that have been sitting in the back of the pantry ever since may be quite dry. In fact, with these beans, soaking may be necessary to bring the cooking time down to a matter of hours, rather than days.

Finally, it was time to put the beans to the final test -- cooking them in recipes. What good is science, after all, if it is not in the service of mankind? So test we did, adapting old favorite bean recipes to this “new” way of cooking. The results were gratifying: In every case, the dishes were done in almost the same amount of time as the originals. And the textures and flavors of the beans were much improved.
Progress is great when it tastes so good.
And now for the fun stuff.
“Clearing the Air”

There is no getting around it -- beans cause flatulence. The degree to which different beans affect different people varies, but the truth is inescapable. And there seems to be little a cook can do about it.

Whether to soak beans prior to cooking or not is simply a culinary question. It may shorten the cooking time, but other than that, there’s no effect [on flatulence].

“Whether to soak beans prior to cooking or not is simply a culinary question,” says Gregory Gray, who has been studying beans for 10 years at the U. S. Department of Agriculture’s Western Regional Research lab in Albany, Calif. “It may shorten the cooking time, but other than that, there’s no effect [on flatulence].”

Louis B. Rockland, who has been studying beans even longer -- first at Albany and now with his own research firm, Food Tech Research in Placentia, concurs. “There are lots of old wives’ tales [about reducing flatulence] -- people use bicarbonate of soda, ginger, sulfur, castor oil -- a whole series of them. But there’s no evidence that any of them -- including soaking -- work effectively.”

The problem with beans is well documented. At its root are two factors. First, beans are high in fiber, which most Americans don’t eat much of and which can cause flatulence. Second, beans contain complex sugars called alpha-galactosides. The human body does not produce

enzymes to digest these sugars. Mainly raffinose and stachyose, they pass through the stomach undigested until they reach the large intestine. There they ferment, producing gases -- hydrogen, carbon dioxide and -- in some people -- methane. The rest is faux pas.
It was thought that soaking beans in cold water leached these sugars out of the bean. Throw away the water and you throw away the gas -- it has a simple appeal. Unfortunately, it isn't true. These sugars are part of what the bean uses for nourishment as it grows into a plant, and the bean does not part with them gladly.

"When you soak beans in cold water, the beans are actually still alive and their cell walls are still functional," explains Gray. "Those walls are designed to be a very good barrier -- to take water in, but not to let the seed nutrients out."

Gray and his colleagues developed a method for extracting most of the alpha-galactosides from beans. The beans are boiled for three minutes (effectively killing the bean and allowing the sugars to pass through the cell walls), then allowed to stand for two hours. That water is poured off and the beans are covered and soaked for another two hours. Then they're drained, covered and soaked another two hours before being drained and rinsed a final time.

This method succeeded in ridding the beans of 90% of the troublesome sugars, but as you might expect, there was a side effect. "I used to do this blanch-soak method all the time at home and it works very nicely," Gray says. "The one thing people who ate dinner with us have noted is that you do lose some flavor."

What's more -- without going into details of what they measured and how -- suffice it to say that even with almost all of the alpha-galactosides gone, there wasn't a consistent marked decrease in human flatulence.

"We reduced the alpha-galactoside content by 90% but we haven't done anything to dietary fiber," says Gray, "and dietary fiber produces similar effects."

This casts doubt not only on this particular pre-soaking method but also on the effectiveness of enzyme additions, such as Beano, which supposedly supply the chemicals necessary to break down the problem sugars.

In fact, it seems, the surest cure for flatulence caused by beans is eating more beans. "Apparently, if you eat beans regularly, the microflora [which ferment the sugars causing gas] adjust somewhat," says Gray. "If you eat bean-and-cheese burritos every day, unless you have some kind of specific problem, you probably won't notice it at all. In cultures that routinely eat beans, you don't hear a lot of complaining about flatulence."