

Soaking beans in plain water and then changing the water before cooking is just as likely to help.

There is evidence that adding baking soda reduces some nutrients, particularly vitamin B. Baking soda also can make the beans taste saltier or even soapy, so they should be rinsed very well if you use it. Adding baking soda also may affect the texture, making the cooked beans mushy instead of tender.

If the beans are really old then they might take many, many hours to cook, even if they were pre-soaked. Another reason beans might take forever to soften up is if there are lots of minerals in your water (i.e., if you have hard water).

That got us curious — just how damaging is baking soda? So we got in touch with an expert, Guy Crosby, who teaches at the Harvard School of Public Health, is science editor for America's Test Kitchen, and coauthored 2012's *The Science of Good Cooking* with the editors of *Cook's Illustrated*. Turns out cooking food with baking soda (a.k.a. sodium bicarbonate) can indeed damage a number of nutrients, such as vitamin C, vitamin D, riboflavin, thiamin, and one essential amino acid. Yet it doesn't hurt others, including vitamin A, vitamin B12, niacin, and folic acid.

How does *cooking* affect the nutritional content of beans? A nutritionist interviewed by Cook's Illustrated says: "More than 70 percent of bean nutrients are retained during cooking, including 86 percent of the protein, 83 percent of the iron, 96 percent of the zinc, 66 percent of the niacin, and 70 percent of the thiamine. About 53 percent of the calcium content, however, is lost. These numbers take into account that nutrient concentration diminishes during cooking because the beans take on moisture. For instance, one cup of dry kidney beans containing 44 grams of protein expands during soaking and cooking to two and one-half cups containing 38 grams of protein."

However, if you want to cook your beans in a stew for a long time without them falling apart then adding some acid can actually be useful

Some sources claim that dried kombu (the kelp that is used to make dashi stock) neutralizes difficult-to-digest small carbohydrates in beans. I haven't seen this tested, but Cook's Illustrated did test the effect of kombu on flavor and texture. They say that cooking beans with a strip of kombu "not only boosts bean flavor but also improves texture: Pinto beans soaked and then cooked in water with a strip of kombu had soft skins and smooth interiors; soaked beans cooked in water alone were more grainy and tough." They say that the kombu is essentially achieving