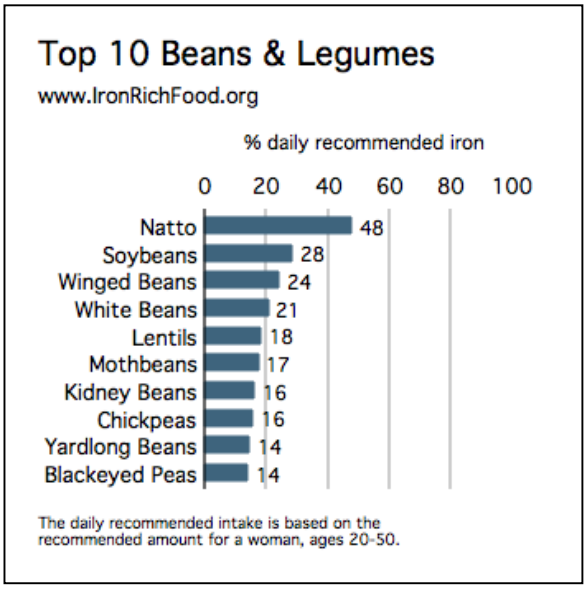
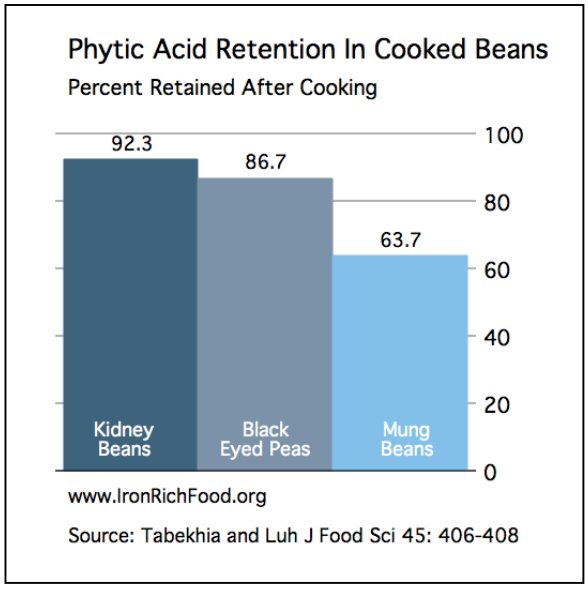
Beans, Legumes, Pulses



Beans are so tasty and inexpensive. We have a five-gallon stainless steel cooking pot that we fill with beans, vegetables, and meat to create the most fantastic meals.

The beans most rich in iron are listed in the graph at right. Natto tops the list – a fermented soy food. Soybeans have a great deal of iron content in them but you will learn from this chapter that it is ideal to consume fermented soy foods to improve your iron. The rest of the beans provide many options for a daily diet that relies on beans and legumes for iron. Back when I relied on beans to provide my core nutrition, I should have known better how to prepare them.

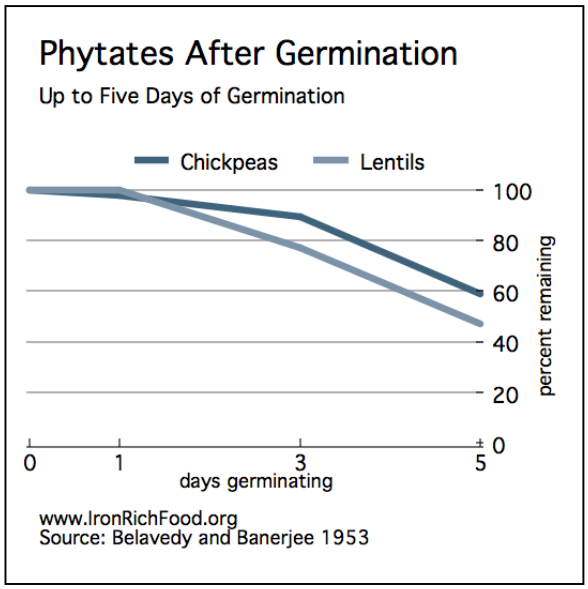
If you could just cook phytic acid out of beans, cooking would not be nearly so adventuresome. Researchers have examined the phytic acid level in cooked beans compared to the original phytic acid content in their uncooked state. One study found between sixty-three and ninety-three percent of the phytic acid remaining in the beans.



Beans have some of the fundamentals going for them: **Moisture + Warmth + Time**.

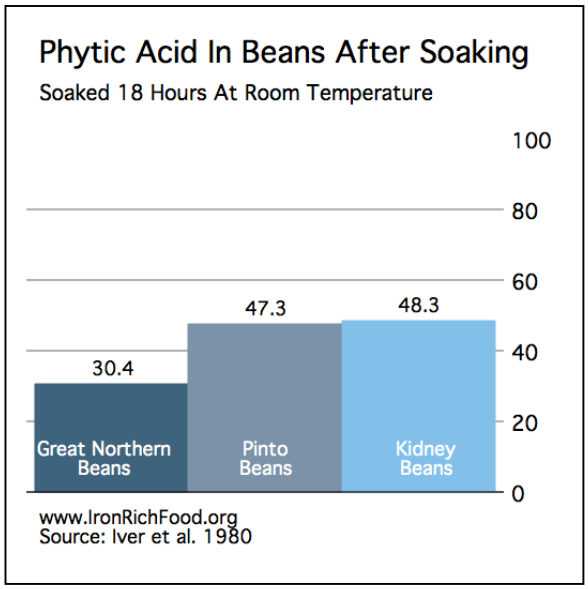
They cook in hot water usually over some hours, depending on their size.

We can get fancy with beans and sprout them to add more time to the equation. Sprouting tends to increase the nutrient content of food, but it is not actually the most effective method to reduce the phytic acid in beans. One study of chickpeas and lentils found that after five days of germination, the beans still had between forty and sixty percent of the original phytic acid content.



What we can do to decrease the phytic acid in the beans further is to soak the beans before they cook. My mom used to soak her beans so that they would cook much more quickly. It saved her cooking time and, unbeknownst to her, it increased her mineral absorption because it reduced the phytic acid content.

One study examined phytic acid levels in soaked beans, specifically great northern beans, pinto beans, and kidney beans. Soaking the beans for 18 hours at room temperature was certainly better than simply cooking the beans. But food scientists have shown us how we can do even better: we can soak them in *really* warm water.



One study soaked California small white beans for three hours at various temperatures. Temperatures too hot or too cold were not very effective at reducing phytic acid. The most effective soaking temperature was 140° Fahrenheit.

Keep in mind that the temperature study soaked the beans for only three hours. The soaking study soaked them for 18 hours. At 140° Fahrenheit the temperature study reduced in three hours about the same percentage of phytic acid as the soaking study that soaked beans for 18 hours at room temperature.