

"This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Land O'Lakes International Development and do not necessarily reflect the views of USAID or the United States Government."

How to Process Jack bean (and other types of Beans) as Human Food

What is jack bean?

Canavalia ensiformis (scientific name for jack bean) is a bean species that is a stronger soil fertilizer than any other bean and can grow through dry spells that would kill other beans. It can be planted alone, to enrich the soil, before planting, after harvesting maize, or another crop, or intercropped with maize to improve yield. Jack bean also protects maize from pests such as the Fall Army Worm. But to eat jack bean, it is essential to process them through germination.



Why Germinate?

Germination is the process of stimulating seed development. We can use this process to germinate any kind of bean to cook and gain other benefits, but for jack bean it is obligatory. There are many benefits of germinating:

- Germination reduces the toxins present in jack bean, making it suitable for human consumption.
- Germination encourages beans to produce more nutrients, such as vitamin C and vitamin B, and to release minerals such as zinc, calcium, copper, and iron, and protein making them more bioavailable.
- Sprouted beans cook much faster than just soaked beans, so less time and fuel is used, freeing up time and money.
- The sprout that emerges from the beans bursts and facilitates the removal of the seed coat (where most of the toxins accumulate), which makes some food recipes, such as abajias, much less tiring to make.











How to Germinate



Germination is easy.

- I. Choose the type of beans you want (jack bean or another type), a bowl or something similar and a plastic to cover the bowl.
 - 2. Soak the dried beans for an entire day.
 - 3. Clean and remove rotten beans, stones, and other dirt.
- 4. Remove the water after a full day. The beans have to breathe while they are germinating, so leave the beans in the basin without water and cover.
 - 5. Each morning and evening wash the beans, remove the water and cover again. Washing and covering, prevent the beans from rotting due to pests and bacteria. The beans will produce a smell, and this is normal. If the beans smell fermented, then the beans have spoiled, and have to be thrown out.















- 6. When the beans sprout is two or more centimetres long, it is ready to cook. Some beans will sprout before others. Wait until all the beans have sprouted enough. The duration of germination depends on temperature, bean species and bean age, but most often takes 2-4 days.
- 7. Remove the bean peel.
- 8. Cook as you wish.



By: Zachary Hall



