

MAIZE NIXTAMALIZATION (PRE-COOKING MAIZE WITH LIME)



Nixtamalization: typically refers to a process for the preparation of maize, or other grain, in which the grain is soaked and cooked in an alkaline solution, usually limewater, and hulled.

Benefits-

- It reduces **afatoxin** in maize by 60-70%.
- It has nutritional benefits
 - Improves bio-availability of protein and Niacin. Niacin prevents pellagra (drying cracking of the skin and mouth)
 - It increases calcium and phosphorus that give strong teeth and bones.
- Diversifies ways of utilizing maize and market potential

Requirements for lime pre-cooking

- 4kg dried maize
- 6 litres water
- 100gm (2 table spoons lime)
- Note: If lime is not available, use 1 cup of sieved maize cob or bean Stover ash (soaked in water and sieved)

Procedure

1. Put water to boil.
2. Add the lime and clean maize and stir while cooking for 20 minutes or until the grain peels easily by hand.
3. Remove from the fire and let stand for 3 hours.
4. Wash while rubbing the grain on a sieve.
5. Mill the grain when still wet to make a dough “Masa”.
6. Use the dough to make many products such as tortilla, crackles, scones, pancake, cookies, and crisps.
7. Alternatively dry the pre-cooked maize, grind into flour and make Ugali.

