NIXTAMALIZATION

OBJECTIVES:

After this lesson, students will be able to:

- **Describe** the general steps of nixtamalization.
- **Explain** the importance of nixtamalization.

ASSESSMENTS:

During this lesson, students will:

- Learn how to make masa and tortillas.
- Learn about the nutritional benefits of processing corn via nixtamalization.

Warm-up (7 min)



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- What is corn used for today?
 - Corn starch, high-fructose corn syrup, animal feed, and fuel.

Nixtamalization

- We've learned about the history of corn and how it was domesticated.
- However, like many grains, corn cannot be eaten raw and must go through some processing before it can be consumed.
- One of these processes is called *nixtamalization*.

The Ancient Chemistry Inside Your Taco



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Nixtamalization Video Questions

- Why is nixtamalization important?
 - It affects the smell, flavor, color, and shelf life of the product.
 - It also converts the corn kernels into an edible form by removing all the impurities so it is safe to consume.
- What are the general steps in nixtamalization?
 - First, you clean the maize and mix it with lime and hot water.
 - Then, you grind and knead it to make masa, which can be used to make tortillas or other foods.

Garden Activities (15-20 min)

- Make your own masa and tortillas!
- Grind the corn kernels until it form a pasty, dry dough. This is masa.
- Then, slowly add water and knead until the dough comes together.

Sources

- <u>Alliance for Science</u>
- MesoAmerican Research Center
- <u>Milpa</u>
- Planet Forward
- Polyculture Macroscope
- <u>Scientific American</u>
- <u>The Ancient Chemistry Inside Your Taco</u>
- The history of the world according to corn