Enzymatic Nixtamalization: An Improved Corn Masa Flour Production Process

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Process Developed by
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Enzymatic Nixtamalization eliminates the essential step of cooking whole kernel corn in a solution of lime; there are no alkaline waste streams (nejayote).

The amount of corn solids lost is significantly lower, providing higher masa yields.

Conserves water and energy, hot cooking liquid can be recycled.

Requires significantly lower quantities of lime, as it is need only to achieve an alkaline pH.

Cooking and steeping can be completed in only 3-4 hours.

Hard and soft hybrids, stress-cracked or broken kernels can all be used without adversely influencing corn solids loss.

Superior product quality - extra white masa flour with near neutral pH.

Economically viable - increased product yields alone compensates for enzyme costs. Minimum waste treatment and disposal costs.