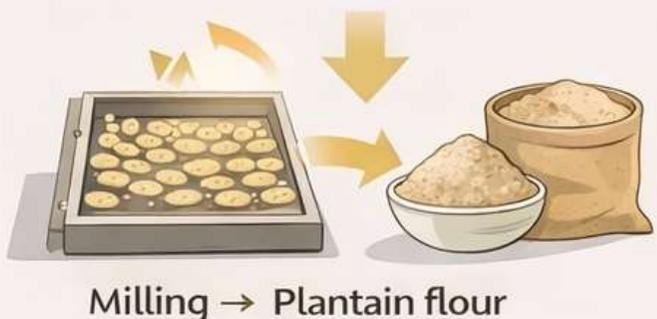
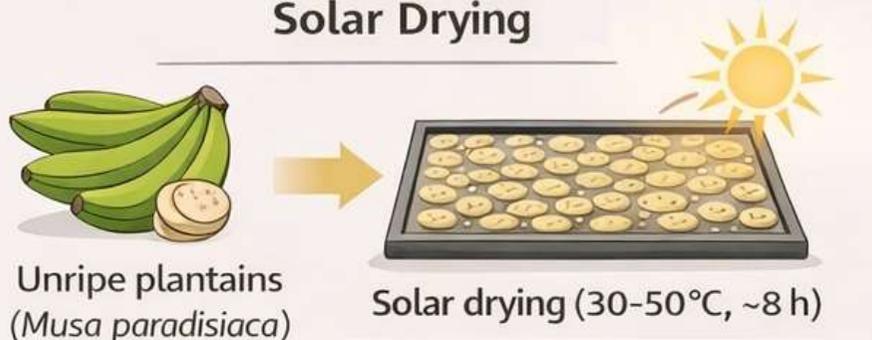


# Solar-Dried Plantain Flour as a Sustainable Ingredient in Cookies

## Solar Drying

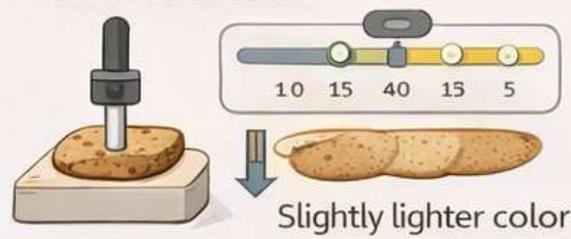


## Cookie Formulation & Evaluation

### Physicochemical

- ↑ ↑ Fiber
- ↑ ↑ Ash (minerals)
- ↓ ↓ Protein
- ↓ Browning (Maillard reaction)

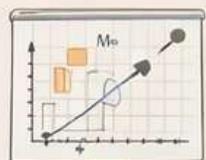
### Texture & Color



### Sensory Analysis (n = 100)



### Best Formulation Identified: 50% plantain flour



### PCA + Total Order Ranking Test

- ✓ Nutritional improvement (fiber, minerals)
- ✓ Acceptable texture & flavor
- ✓ Consumer acceptance
- ✓ Sustainable processing



Solar-dried plantain flour enables sustainable, fiber-rich cookies with high consumer acceptability, reducing post-harvest losses and wheat dependency.

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