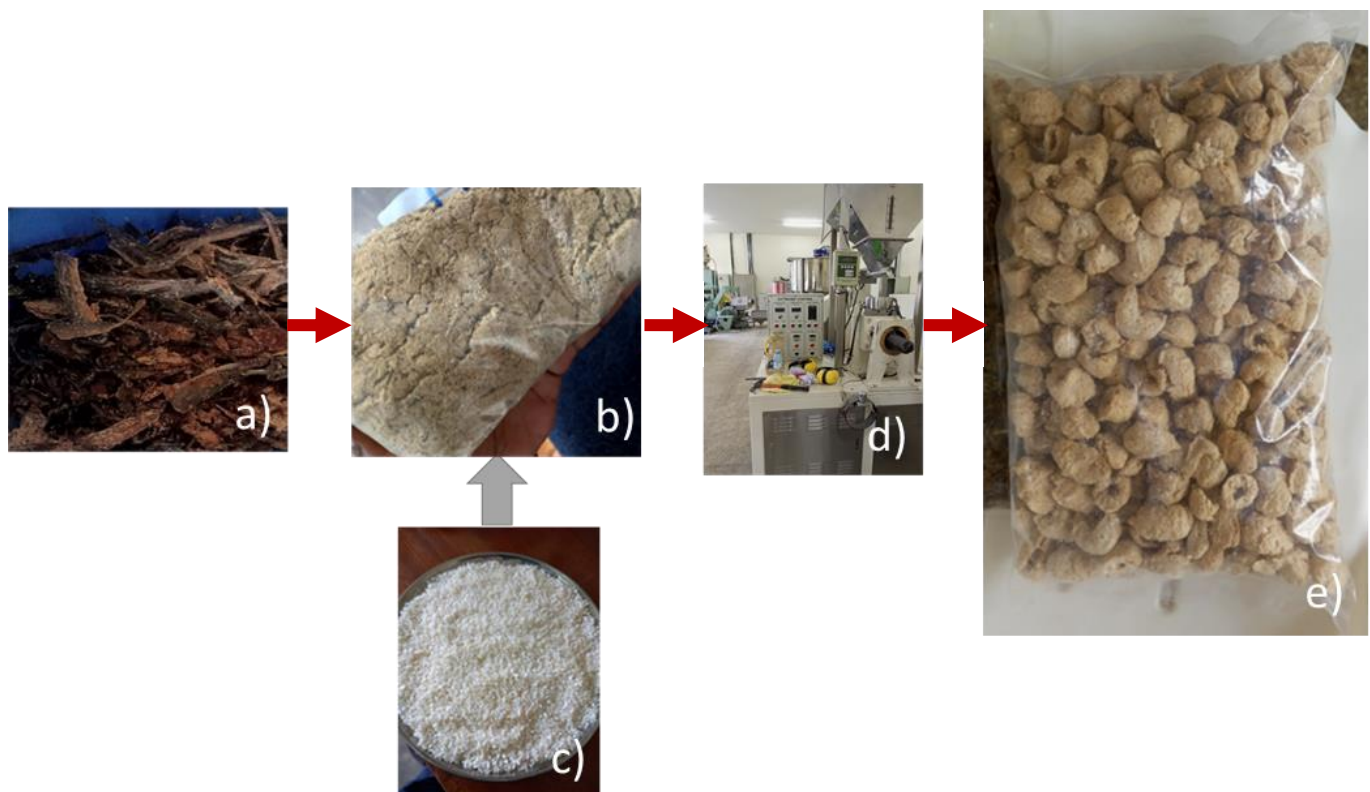


PRACTICE ABSTRACT n° 49

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Extruded Fish bone-Maize Snack

Nutritious, extruded ready to eat snacks can be processed using micronutrient dense fish bone powder as a base. Extruded fish bone-maize snack was prepared with fish powder from bones of tilapia and catfish. Maize grits were ground to pass through 200 μm sieve using laboratory mill. The coarse fish bone flour was mixed with the coarse maize flour in the ratio of 1:2 in the ribbon blender for 15 min to ensure uniform mixing. This ratio was found to be ideal after preliminary trials showed that a higher fish bone flour ratio resulted in clogging of the extruder due to high fat content of the carcasses. Salt and dried spices of choice (in powder form) were added at 2% into the mixture and again blended for 10 min. The mixture was introduced in the extruder hopper and extruded at 150 °C, screw speed - 1450 rpm and cutting speed 350 rpm.



a) dried fish carcasses, b) fish bone powder after milling, c) maize grits, d) extrusion of fish bone powder-maize grits mixture e) fish bone-maize snack