

# Development of edible and medicinal mushrooms as functional foods in Ghana

Mary Obodai /CSIR-Food Research Institute

Care giver feeding a toddler with mushroom based cerealmix



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## Research Approach:

- Mushroom germplasm collection from three forests in Ghana
- Analysis of Beta-glucans, Vitamin D content and other bioactive compounds of 57 mushroom samples collected from the forests
- Developed nutrient-rich mushroom based infant foods from Ghanaian food commodities
- Focus group discussions used to understand caregivers attitude to using mushroom as an ingredient in making foods for their 2 to 5 yr. old children
- Explored the sensory and nutritional properties of foods made with mushrooms that will appeal to children aged 2 to 5 yr. based on caregivers opinion



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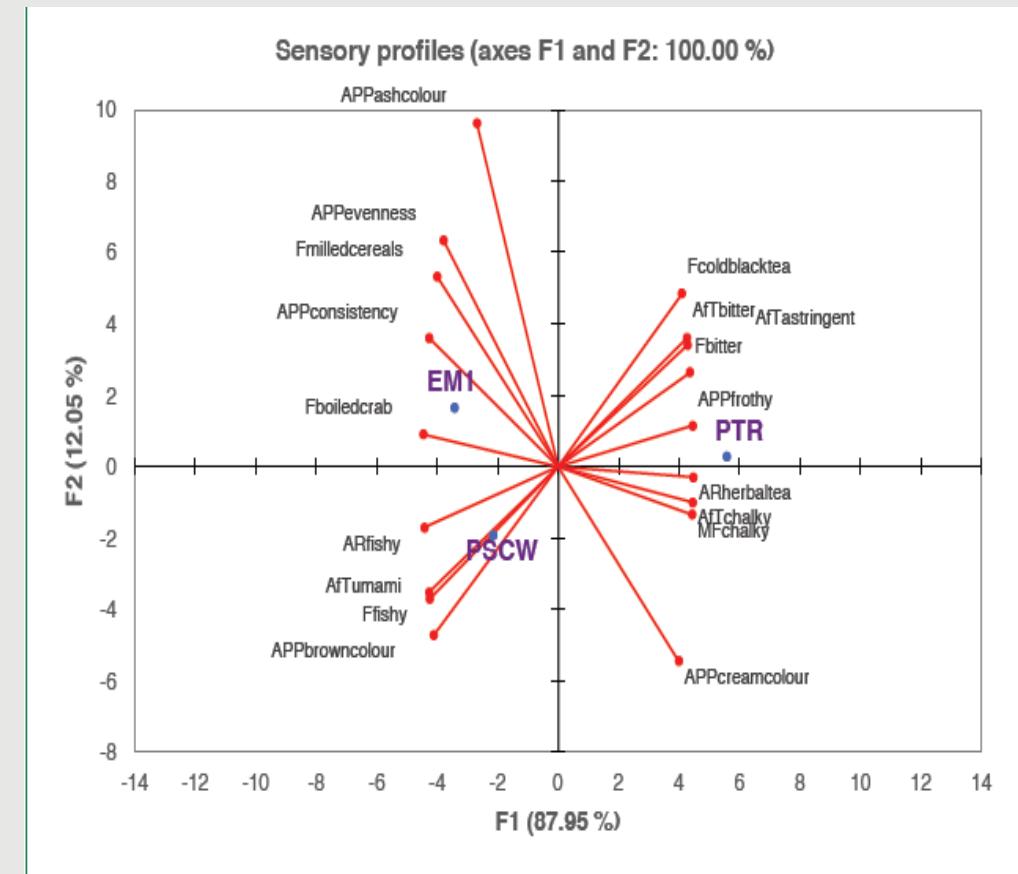
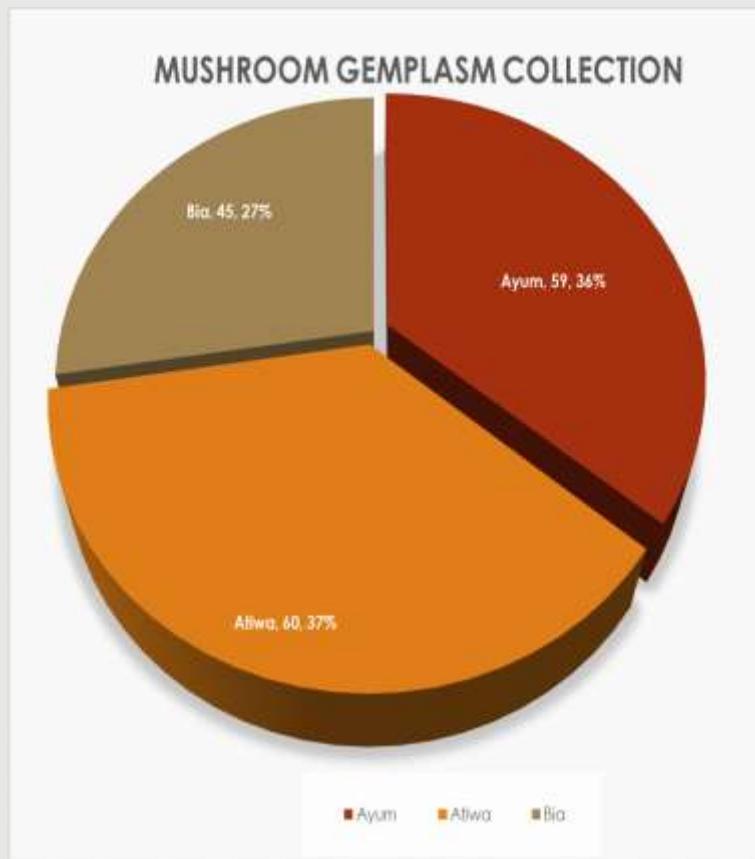
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## Key results

- New Ganoderma species identified as *Ganoderma mbrekobenum*.
- Presence of Beta-glucans and Vitamin D in varying proportions in the mushrooms tested. These have potential for biotechnological applications
- Three food products developed: Mushroom based cerealmix, Mushroom soup and Mushroom Orange Fleshed Sweet Potato (OFSP) mash
- Mushroom based cerealmix product most preferred by care givers

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Top next steps for your project:

- Continue trainings for care givers and mushroom farmers in mushroom production and Mushroom based cerealmix formulation
- Sale of new mushroom spawns
- Develop policy briefs for stakeholders