Tropentag, September 15-17, 2021, hybrid conference

"Towards shifting paradigms in agriculture
for a healthy and sustainable future"

Do Mothers in Southwest Ethiopia Use Fermentation and Malting for Processing Complementary Foods?

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Abstract

Background: Poor complementary feeding is a significant driver of malnutrition, micronutrient deficiency and infant and child mortality, especially in developing countries. Traditional food processing methods such as fermentation and malting can improve the nutritional qualities of complementary foods. Information is lacking regarding their utilisation in the preparation of complementary foods in Southwest Ethiopia.

Objective:- To assess the use of fermentation and malting in the processing of complementary food and associated factors among index mothers of children aged 6–23 months in Jimma zone, Southwest Ethiopia.

Methods: A community-based cross-sectional study was conducted in Jimma zone among 636 index mothers of children aged 6–23 month, from April 1–30, 2018. Study participants were selected using a multistage stratified sampling technique. Data were collected using a pre-tested semi-structured interviewer-administered questionnaire and analysed using SPSS version 20. Bivariate and multivariable logistic regression analyses were used to isolate independent factors at 95 % confidence interval and $p < 0.05$.

Results: Three hundred sixty two (56.9 %) and 3.9 % of mothers used fermentation and malting in processing of complementary foods, respectively. Those mothers who considered fermentation to improve digestibility [AOR=16.5 ,95%CI=(7.12, 38.4), p-value<0.001], those mother who considered fermentation to improve taste [AOR=6.15, 95%CI= (4.2,10.12), $p < 0.001$], child age [AOR=1.12, 95 % CI= (1.08, 1.16), $p < 0.001$], who do not attended formal education [AOR=1.95, 95 % CI= (1.33,2.86), $p = 0.001$], who had no diarrheal morbidity in a year [AOR=1.88, 95%C I=(1.28,2.75),$p = 0.001$] and not got complementary feeding advice [AOR=2, 95 % CI= (1.34,2.99), p-value=0.001] were found to be significantly associated with the use of fermentation and malting.

Conclusion: In this community, most participants used fermentation but not malting as a food processing method for processing complementary foods. Age of the child, formal education, complementary feeding advice, and diarrheal morbidity in a year, perceptions such as fermentation improves digestibility, and fermentation improves taste were independent predictors of using fermentation and malting. Therefore there is a need to give nutrition education to mothers on the benefits of malting and fermentation.

Keywords: Complementary feeding, fermented food, traditional food processing techniques

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