

Feed the Future Innovation Lab for Livestock Systems

Improving Nutrition in Children through Increased Egg Consumption in Burkina Faso

Burkina Faso is burdened by high rates of malnutrition and stunting in children under 5 years old. Undernutrition can have significant long term physical, cognitive, and socioeconomic impacts on a child's development, as well as on the future economic success of the country. Animal source food (ASF) consumption can improve growth, nutritional status, cognitive development, and health in children. In Burkina Faso, ASF consumption is low, particularly among women and children. Livestock is typically produced for income, gifting, and socio-religious practices, rather than for direct household consumption. Barriers, such as cultural beliefs and stigmas, prevent the consumption of chicken eggs in Burkina Faso and many other parts of Africa.

This study aims to address the challenges to ASF consumption and improve smallholder farm poultry practices in rural Burkina Faso. As an innovative intervention intended to increase egg consumption, chickens will be given by religious leaders as gifts to children between 6 and 12 months of age. Each child's caregiver will commit to feeding their child one egg a day from the gifted chickens. Children are often the least likely to consume ASF, despite their unique needs. Because food allocation inequities often exist, this study design proposes that the child be the true owner of the chickens as well as the beneficiary and recipient of the eggs for consumption.



credit: ILRI

This study will properly test a pilot study conducted in Ethiopia¹ that increased the portion of children consuming 3 or more eggs a week from 5% to 70% through the gifting of chickens by religious leaders to children. It involves behavioral change methods that empower caregivers as poultry producers by improving their access to livestock production resources, providing tools for improved decision making, and enhancing knowledge of nutrition. This study targets vulnerable populations of smallholder farms and women and children, and it intends to improve poultry production, egg consumption of children, nutrition, and household level resilience.

Research Approach

We will examine if improved poultry inputs through gifting chickens by a religious leader, coupled with integrated livestock management and nutrition trainings, will lead to higher ASF consumption among children in Burkina Faso. This community intervention trial will target families with children ages 6 to 12 months of age living in rural villages.

Objectives

- To increase ASF production through delivering chickens and providing monthly agricultural training on proper chicken husbandry
- To increase ASF, particularly egg consumption, through innovative nutrition messaging and integrated nutrition and agriculture trainings

- To build resiliency by increasing food security at targeted households
- To promote gender equality by engaging women in animal extension services and training female caregivers in chicken husbandry practices to increase flock size
- To reduce zoonotic diseases through integrated nutrition and agriculture training and WASH sanitation education

Expected Outcomes

- Increased egg consumption in children under five
- Increased household poultry production
- Improved poultry practices
- Improved knowledge and attitudes about nutrition and ASF consumption

Quick Facts

- Duration: 1 year (January 2018 to January 2019)
- Location: the town of Kaya, central Burkina Faso
- Full project name: Improving nutrition in children under two through increased egg consumption in Burkina Faso

Contacts and Key Partners

This project will work in collaboration with the *Institut de l'Environnement et de Recherches Agricoles* (INERA), Kamboinsé Agricultural Environmental and Training Research Center (CREAF), St. Thomas d'Aquin University in Burkina Faso, and Hawassa University in Ethiopia.

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¹ Omer, A., Mulualem, D., Classen, H., Vatanparast, H., Whiting, S. 2018. A Community Poultry Intervention to Promote Egg and Eggshell Powder Consumption by Young Children in Halaba Special Woreda, SNNPR, Ethiopia. *Journal of Agricultural Science*, Vol. 10, No. 5. Canadian Center of Science and Education.