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# What Role Did Edible Insects Play in the Traditional Practices and Nutrition in Sub-saharan Africa? A Review on Insect Safety

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**Abstract**

Insect rearing is gaining popularity worldwide and is likely to contribute to increased nutrient intake in the malnourished population, especially in times of climate change, the intensified use of insects as a source of food and feed is a sensible approach to mitigate the worsening crisis. There is a likelihood that interest in edible insect consumption for food and feed will increase due to its nutritional, nutraceutical, and medicinal potential. Wild harvested insects are traditionally consumed in many parts of the world, and cannot be sustained under the current population pressure. Food security and expensive animal protein sources are a major concern in developing countries and there is a need to search for alternative sources to curb malnutrition. Although nutrition is secured in developed countries, a major concern is food safety and the environmental sustainability of food production. This calls for new ways that can increase the availability of animal protein sources and increase other nutrients such as essential fatty acids and minerals while addressing climate change, food quality, and environmental sustainability. Insects can greatly contribute to providing high-quality animal protein in an ecologically sustainable way. Edible insect rearing is on the rise; however, policies to guide the edible insect industry are not yet fully developed, as many laws governing the use of edible insects are currently in the making. The results of the research already conducted will likely inform policy on the consumption and general adoption of edible insects as a novel food source. ContamInsect project with the support of the German federal ministry of food and agriculture did a review that focuses on the use of edible insects and the safety concerns raised in sub-Saharan Africa. Microbial contaminations in wild-harvested insects were closely linked to poor hygiene conditions, while chemical and physical contaminants were closely linked to the environment and instruments used for insect collection. With the widespread wild harvesting and few legislations that govern the edible insect industry, there is a need for further research to ensure acceptance of edible insects as safe food and feed in Kenya and other regions with a similar setup.

**Keywords:** Chemical contaminants, edible insects, food safety, insect farming, insects for food and feed, microbial contaminants, wild harvesting

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