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"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

## A gentle push towards behaviour change: Designing nudge interventions to increase hygiene and food safety at pork joints in Uganda

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## Abstract

Most of the perishable food in low- and middle-income countries is sold in informal markets where food handlers are not usually trained in good hygienic practices. There are different approaches to improve food safety in those markets, some of which include capacity building. However, one-off trainings are not usually sustainable as behaviours are deeply rooted and often lead to unconscious practices that can increase risk of food contamination. Close follow-up is intense in terms of human and financial resources. Nudges have been described to influence behaviour with varying results, partly depending on whether they have been imposed on or co-created with the end-users. In this study we describe the human-centred-design process from identifying critical control points between slaughter and retail to co-creating nudges that could potentially lead to better compliance of meat handlers in Uganda with good hygienic practices. Three of the WHO "Five Keys To Safer Food" were selected as the target behaviours to improve. The qualitative research was implemented in the greater Kampala area between October 2020 to December 2021 and involved 119 meat handlers, pork joint customers, food safety and veterinary technical experts and over 20 project stakeholders. Findings from the initial 'explore' phase generated a number of insights on meat handlers' perceptions and attitudes that were later used to generate ideas and solutions in cocreating nudges during the 'experiment' phase: 1) Meat handlers eat the pork they handle at work and have low risk perception; 2) Meat handlers feel their practices are acceptable; 3) Meat handlers see 'broken windows' which set the norm for unhygienic behaviour; 4) Meat handlers follow the path of least resistance; 5) Meat handlers keep up appearances for customers; and 6) Owners want to see returns on hygienic investments. Fourty-two early prototypes were co-created with potential end users and after several iterations, two nudge kits emerged, e.g. the "Keep Clean Loop" and the "Tricolour Kitchen". In a subsequent pilot test we assessed if the nudges help reducing the burden of foodborne pathogens and if behaviour of meat handlers changes sustainably.

Keywords: Behaviour, food safety, hygiene, meat handler, pork, Uganda

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