

INPLASY

Food Safety and Quality in the Milk Value Chain in Kenya

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ADMINISTRATIVE INFORMATION

Support - CIRAD.

Review Stage at time of this submission - Data extraction.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2023120076

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 19 December 2023 and was last updated on 19 December 2023.

INTRODUCTION

Review question / Objective To identify biological and chemical hazards associated with milk consumption in Kenya (according to prevalence within beverages and incidence and health burden in humans).

Rationale This is a study on occurrence of hazards in milk in Kenya. It aims to 1) identify the hazards 2) Identify any other key gaps in the evidence on milk quality and safety.

Condition being studied Milk safety in Kenya.

METHODS

Search strategy Milk AND (safety OR quality OR borne OR related OR associated OR illness OR disease OR pathogen OR poison* OR microb* OR

virus* OR parasit* OR toxin OR toxicant OR metabolite OR chemical OR intoxicat* OR contaminat* OR pesticide OR hazard OR bacter* OR protoz*) AND Kenya* NOT "breast milk" NOT "breastmilk".

Participant or population Milk consumed in Kenya.

Intervention Not applicable.

Comparator Not applicable.

Study designs to be included Primary observation and analytical studies and secondary studies, (literature) reviews.

Eligibility criteria Inclusion criteria • Type of studies: observational studies, secondary data analysis, (literature) reviews. • Time limits: Studies

published from 2000 to June 2023. • Language – English. Exclusion criteria • Studies that do not consider biological or chemical hazards associated with milk. • Studies conducted outside the established time frame (2000 - June 2023). • If the population is outside Kenya. • Experimental laboratory studies. • Antimicrobial resistance studies. • Studies not reporting information on milk-associated hazard presence, prevalence, incidence or health burden (i.e., studies looking at prevalence of hazards at primary production on targets that are not food per se: i.e., faeces from animals, serology from animals, or carriage in vectors).

Information sources Online databases: PubMed, CABI, Web of Science, African Journals Online and Google Scholar.

Main outcome(s) • Prevalence (% of contaminated products) and Concentration of hazards
 • Incidence (annual n. of clinical cases, annual n. of deaths resulting from milk-associated hazards)
 • Health burden (DALYs; % of symptomatic cases; severity; mortality; hospitalization; duration of illness; long-term sequelae)
 • Produce a prioritized list of milk-borne associated hazards in Kenya.

Additional outcome(s) Not applicable.

Data management Data will be extracted and cleaned using a pretested MS Excel worksheet.

Quality assessment / Risk of bias analysis Cochrane “assessment of bias” will be used
http://handbook.cochrane.org/chapter_8/8_assessing_risk_of_bias_in_included_studies.html.

Strategy of data synthesis Extracted data will be synthesised for descriptive statistics using data analysis software or programs such as R and STATA.

Subgroup analysis Not applicable.

Sensitivity analysis Not applicable.

Language restriction Only studies in English language.

Country(ies) involved Kenya, United Kingdom.

Keywords Milk, Milk Safety, Hazard, Disease, Illness, Foodborne, Risk, Kenya.

Dissemination plans This study will be disseminated as a peer-reviewed journal paper.

Additionally, the results will be used to steer proper policy on milk safety in Kenya.

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