

# Factors affecting fruit and vegetable consumer behaviour among adults in sub-Saharan Africa: A rapid review

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## Introduction and Objective

- Diets rich in fruit and vegetables (FV) provide promising solutions to micronutrient deficiencies and are associated with a reduced risk of developing non-communicable diseases.
- Consumption of FV in most low and middle income countries (LMICs), particularly in sub-Saharan Africa, is below the WHO recommendations of min 400 grams per day.
- What, where, when, how and why people choose to eat is influenced by various factors and requires an understanding of how individuals are embedded in their environments.
- In the sustainable food systems framework, consumer behaviour is acknowledged as important entry point for food systems transformation towards improved diets.
- In order to develop effective interventions to increase FV consumption, the factors of consumer behaviour need to be better understood.

The aim of this rapid review is to assess and synthesise data on individual, social, physical and macro-level factors that affect fruit and vegetable consumption and purchase among adults living in Africa.

## Methods

### Conceptual framework

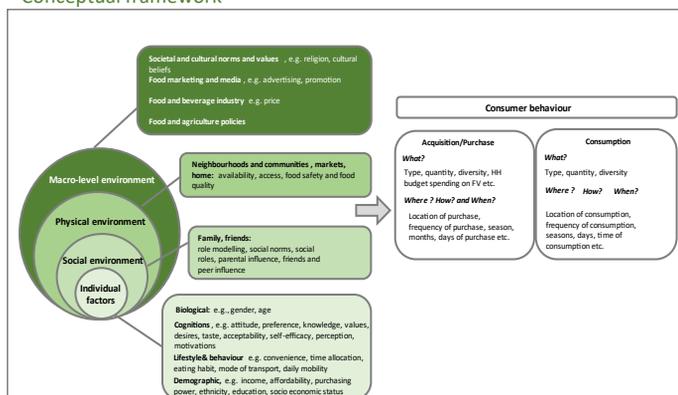


Figure 1: Socio-ecological framework of potential factors impacting consumer behaviour towards FV (adapted from: Story, 2008; Osei-Kwasi et al., 2019; Turner et al., 2018; HLPE, 2020)

### Guidelines and tools applied

- Cochrane recommendations for rapid review methods (Garrity et al., 2021)
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Liberati et al., 2009)
- Protocol has been developed and registered at PROSPERO [www.crd.york.ac.uk/prospero/display\\_record.php?ID=CRD42021248475](http://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42021248475)
- Webtool: Cadima ([www.cadima.info](http://www.cadima.info))
- Risk of bias tools: e.g. Appraisal tool for Cross-Sectional Studies (AXIS), Newcastle-Ottawa Scale (NOS) for case control and cohort studies

### Eligibility criteria

Table 1: Eligibility criteria based on Population, Exposure and Outcome (PEO)

PEO	Inclusion	Exclusion
Population	Healthy adults, aged between 18 to 65 years	< 18 or > 65 years; in-patient/clinical population
Exposure	Individual, social, physical and macro – level factors (see figure 1)	Supplementation
Outcome	<ul style="list-style-type: none"> <li>Type, quantity and diversity of FV consumed</li> <li>Type, quantity, diversity of FV acquired/purchased</li> <li>Any additional measured consumer practice, including where (e.g. location) when (e.g. season or month or day) how (e.g. the frequency) FV are consumed or purchased</li> </ul>	Disease, anthropometric and biochemical nutritional status
Context	All sub-Saharan African (SSA) countries, rural urban, peri-urban areas	Studies outside SSA areas
Study design	<ul style="list-style-type: none"> <li>Observational studies including cross-sectional, cohort or case-control study design.</li> <li>Experimental studies, including randomised controlled trials and quasi-experimental studies</li> </ul>	Qualitative studies
Other	Language: English; Publication period: 2000 to 2021	

## Results

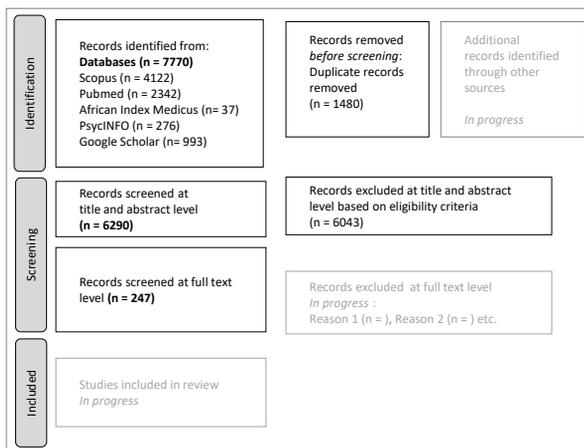


Figure 2: PRISMA diagram showing the information flow through the different phases of the review

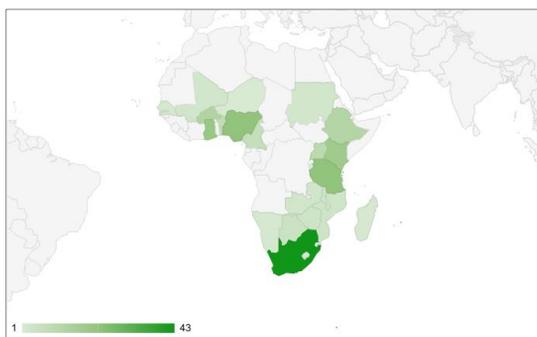


Figure 3: Number of articles included per country (title- abstract level)

- At title and abstract level most articles are from South Africa (43), followed by Nigeria (22), Tanzania (22) and Ghana (20) (see figure 3).
- Results show that economic status, age, gender, education, marital status, subjective knowledge about vegetables, cost, seasonality, consumers concern for food safety and regional differences are among the factors affecting FV intake and purchase.

## Outlook

- The review will identify potential factors that affect consumption and purchase of FVs, if possible stratified for the subgroups gender and geographic location of studies.
- The results will identify areas for future research and contribute to the evidence base required to develop effective interventions to increase FV consumption in sub-Saharan Africa.

### References

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