



Tropentag 2021, hybrid conference  
September 15-17, 2021

Conference on International Research on Food Security, Natural Resource  
Management and Rural Development  
organised by the University of Hohenheim, Germany

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## Factors Explaining Purchase Choices of Packaged Child Food in Kenya and Benin

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### Introduction

Child malnutrition is a widespread problem in African drylands. Those affected are hindered to develop their individual potentials. Thereby development opportunities of entire countries are reduced (Bagriansky et al. 2014). This results in irreversible negative health effects and intensified poverty (Adebisi et al. 2019).

Malnutrition is, among other factors, caused by caring practices that are not clearly linked to income (Herforth and Ahmed 2015). Particularly in peri-urban areas, a nutrition transition takes place. By that commercially available, diverse packaged child foods are increasingly used in child feeding (Debela et al. 2020). In order to shift paradigms towards healthier and more sustainable product choices, redesigning food environments through nudging might be an option. This presupposes a comprehensive understanding of parents' motives underlying food choice for their children (Fenko 2019).

Data on behavioural routines related to choices of child food from Sub-Sahara Africa is rare. The present study aims to reveal the child food choices of parents from peri-urban and urban areas of northern Kenyan and northern Benin. These areas and their inhabitants are, like many other regions in Sub-Saharan Africa, affected by climate change and the resulting lifestyle and nutritional transitions.

### Data and Methods

Shops and supermarkets in the town of Marsabit, northern Kenya and in Nikki, Banikoara and Parakou in northern Benin offering a larger than average range of child food products were selected for data collection. In March 2021, shop keepers in these shops were interviewed by computer assisted personal interviews (CAPI). They were asked to identify various categories of child feeding products offered in their shops. Also they declared the bestselling and unpopular products in each category. In addition, they shared their assessment, why customers like or dislike the mentioned products. Product photos were taken and an online form was used to collect the data and participants could choose predefined reason and add additional ones.

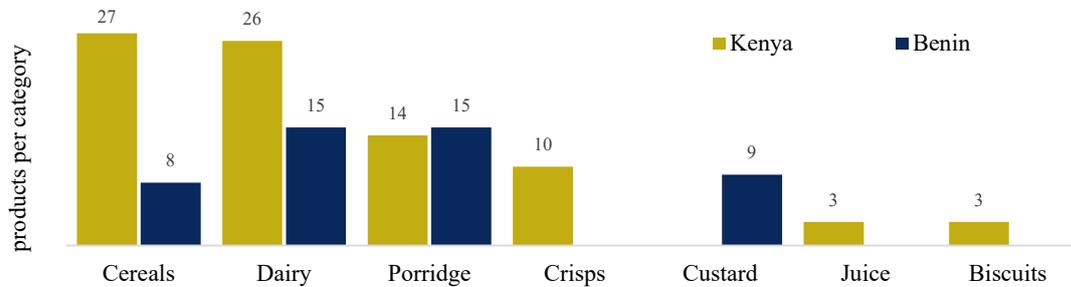
### Results

#### *Categories and Products Identified*

The best-selling as well as unpopular products used to feed children below the age of 60 months were named in each category.

In Kenya, a total number of 83 child food items was identified by the shop keepers, of which 54 (65 %) were best-sellers and 29 (35 %) unpopular. The products recorded belonged to the following categories: Cereals (27 products), dairy (including baby formula) (26 products), porridge (14 products), crisps (10 products), juice (3 products) and biscuits (3 products).

In Benin, 47 products were identified; 34 (72 %) best-sellers and 13 (28 %) unpopular ones. The products recorded belonged to the categories porridge (15 products), dairy (including baby formula) (15 products), custard (9 products) and cereals (8 products).

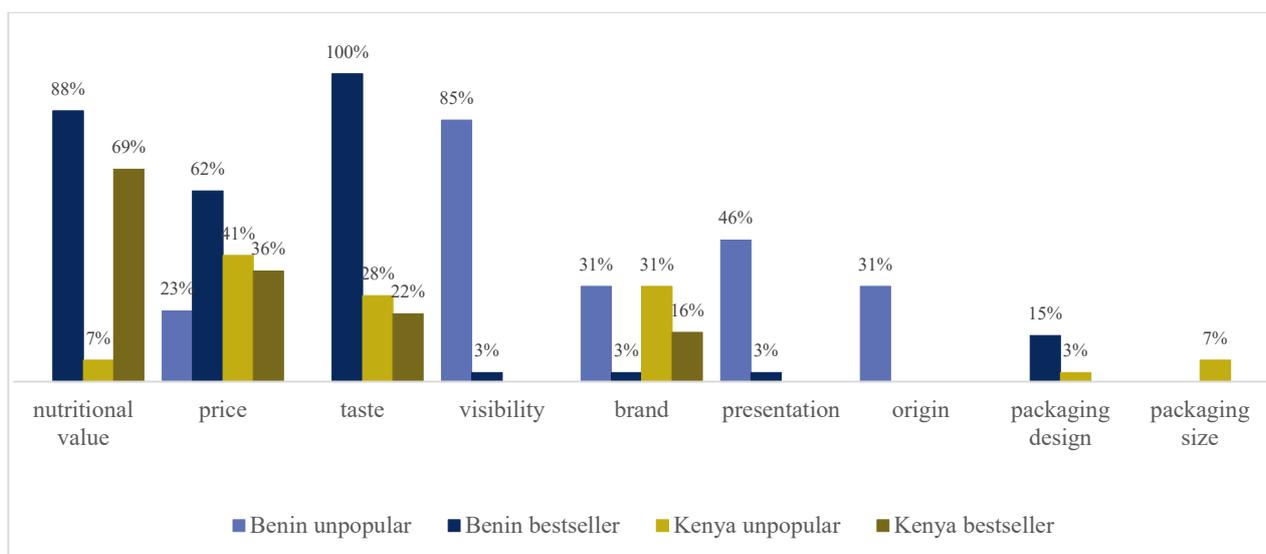


**Figure 1: Number of products per category identified by shop keepers**

***Frequency of reasons given to explain why a product belongs either to the group of the best-sellers or unpopular products***

In the case of unpopular products, Kenyan shop keepers explained that customers dislike the product’s price (41 %), followed by a dislike of the product’s brand (additional comments: ‘unknown’, ‘new to the market’) in 31 % of the cases, customers do not like the product’s taste (28 %), its nutritional value (7 %), packaging size (7 %) and packaging design (3 %). Shop keepers believed that customers like the best-selling child food products because of their nutritional value (69 %), price (36 %), taste (22 %) and brand (16 %).

In Benin, shop keepers mentioned that in 85 % of the cases consumers find that unpopular products were, due to their placement in shops, not visible, followed by a dislike of the product’s presentation (46 %), its brand and its country of origin (both 31 %) or its price (23 %). Shop keepers stated that customers like the best-selling child food products because of their taste (100 %), nutritional value (88 %), price (62 %), packaging (15 %) as well as brand, visibility and presentation (each 3 %).



**Figure 2: Frequency of reasons given to explain why a product is either a bestseller or unpopular**

### ***Product photos***

In Kenya, the frequency of packaging displaying detailed nutritional information differed significantly between locally manufactured products and those from global brands; Fisher's exact test,  $p < 0.001$ . While 100 % of the global products provided nutritional information, only 29.7 % of local products contained this information.

In Benin, many of the products mentioned have prominent declarations of nutritional benefit labeled on the front of their packages (e.g. 'enriched with iron', '11 minerals' 'rich in vitamins and minerals'). All baby milk formula packages have these declarations, 89 % of the cereals and 69 % of the porridge packages.

### **Discussion**

The nutritional value of a child feeding product was the most frequent reason in favour of a purchase decisions in Kenya and the second most frequent in Benin. However, Røed et al. (2020) describe that there is a discrepancy between the high importance most parents put on healthy eating and the fact that this does not necessarily translate into actual behavior. Since not all of the Kenyan products evaluated display nutritional information it is unclear how consumers evaluate the nutritional value. In Benin, consumers might be triggered to perceive a product as healthy by prominent health declarations on the packaging (Hughner and Maher 2006). In both countries, social desirability bias (Russell et al. 2015), as well as an overall difficulty experienced by low-literate consumers to read and understand the information provided (Choudhury et al. 2019) are reasons explaining the gap between the caretaker's motives and the fact that information is not always available. In addition, the strong influence of visual cues like advertisements, shape, colour, materials, imagery and informational cues of packaging on the perceived healthiness of a product (Fenko 2019; Plasek et al. 2020) play a role.

The taste of the child feeding products is the most important purchase criterion according to the opinion of Beninese shop keepers. They state that all best-sellers are bought not only, but also because of their taste. This is in line with findings from Kenya, where taste is one of the most important reasons for purchase decisions, too.

The data from both Benin and Kenya shows that the product price has a strong influence on parental decisions. However, price is less important than taste and nutritional value. This suggests that even in subsistence markets the nutritional value of child food is a higher priority than its price.

Purchase decisions in Benin are strongly influenced by the visibility and presentation of products in retail outlets (Ali et al. 2012). Shopkeepers of the present study name 'visibility' and 'presentation' as the two most frequently named rejection criteria for unpopular products. Both reasons were not mentioned in the Kenyan study.

Both in Benin and Kenya, brand was mentioned by shop keepers as very relevant reasons both for choosing as well as rejecting a product. This could be explained by the fact that consumers in Sub-Saharan Africa are inadequately protected by consumer laws and lack the purchasing power to simply replace dissatisfactory products. Therefore they rely on choosing products manufactured by brands they know and trust (Chikweche and Fletcher 2010).

Shop keepers in both countries mentioned 'origin', 'packaging design' and 'packaging size' as the least important reasons.

In Benin, some of the unpopular products to which the reason 'origin' was allocated were produced in Nigeria. Some of the best-selling ones where 'packaging' was given as a reason were packaged in re-usable tins with plastic lids. But 'origin' was also brought up in the case of products made in Benin. According to Houessou et al. this might be the result of mistrust in local products due to insufficient marketing initiatives (2020). However, it remains partly unclear what shopkeepers had in mind when mentioning the motive 'packaging' in the case of best-sellers packaged in unspecific plastic bags. Similar to our findings Houessou et al. (2020) found that packaging was not considered an important attribute in their Beninese study. Despite this, various other studies conducted in Benin reveal the influence of packaging and product presentation on customers.

Given the infrequent mentioning of these reasons in Kenya, they seem to be rather unimportant from a cognitive perspective. However, they might influence purchase decisions subconsciously.

## Conclusions and Outlook

The categories chosen by shopkeepers in both countries were similar. Also the main reasons and frequency of reasons given to explain the purchase choices were comparable: taste, nutritional value and economic factors. The specific situation in Sub-Saharan Africa lets customers heavily rely on the performance of a specific product. Therefore 'brand' is an important purchase criterion, too.

A combination of reasons suggest that purchase decisions are in many cases influenced by visual cues. Subconscious believes caused by the packaging design, brand and presentation of products are assumed to impact purchase choices. The importance of the influence of packaging design and presentation on parents' food choices suggests that redesigning food environments through nudging might break up existing behavioural routines. As nudges are not universal but depend on culture specific features, learning about attractive attributes will help to develop a more tailored way of presenting child food. This would help to promote more sustainable and healthier food choices. Thereby locally produced and processed foods would become more attractive. Competition with standard child food produced by multinationals could be strengthened.

Further research directly involving customers should be done to gain a deeper understanding of the influence of packaging elements on purchase decisions in Sub-Saharan Africa.

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