



# Food Vending Marketing and Promotion Strategies in School Environments in Tanzania

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**Abstract:** Marketing and consumption of ultra-processed foods have increased across countries in Africa and it is associated with the risk of childhood obesity. The current school food environment has been reported to contribute to the increase in obesity rates worldwide; hence a need for increasing attention to the roles of the school environment in changing children's dietary behaviour. This study assessed marketing and promotion strategies for foods sold around the school environments in Tanzania. A cross-sectional study involved 335 parent/caregiver-child pairs from rural and urban settings of Morogoro region. A stratified sampling technique was used to acquire a sample of children from registered primary schools. The schools were stratified into districts based on location and sampled separately through a probability sampling technique whereby, the population of school children in each school was divided into strata based on school ownership and area of residence. A total of eight schools were sampled with an equal number of private and public schools in each of the locations. Data on food marketing and promotion strategies were collected from 32 food vendors while information on food availability and factors influencing purchasing behavior were obtained from the children through structured questions. An observation checklist was used to collect additional information on food availability and marketing and promotion strategies for foods sold around the school environment. Data was analyzed using IBM -SPSS) version 21 software. Chi-square was used to test the difference between foods available in rural and urban school environments. The findings revealed that 60% of foods were processed in rural compared to urban areas (40%). More ultra-processed foods such as carbonated soft drinks, candies and ice lollies were identified in the urban (60.8%) than in rural-based schools (39.2%). The most purchased foods around schools were potato balls (49.4%), ice cream (47.5%), corn snacks (chama) (46.2%), chocolates (43.9%), carbonated soft drinks (37.3%), candies (36.6%) and sweet ice-lollies (34.4%). The most common marketing and promotion strategies around schools were posters, price reduction and packaging. Feeling hungry, food price, environment and social pressure were the factors contributing to food purchasing behaviour for foods sold around schools. Most of the foods consumed around the schools were ultra-processed and multiple marketing and promotion methods were used. The government through the Ministry of Education should regulate the types of foods sold in schools and plan for healthier school meals for all students by strengthening the school feeding program.

**Keywords:** marketing, school environment, children, food choices, ultra-processed foods

## 1. Background Information

School as a place of learning is also used for selling and buying food by providing a healthy environment for the children and encouraging healthy eating both inside and outside the school (Micha *et al.*, 2018). Food places such as super/mini markets, kiosks, wholesalers and retailer shops, cafeterias and roadside stalls are physically accessible around the school environment which allows students to buy food in cash and negotiate on the price to some extent. Most of these places offer a large number of cereals and processed food products but have a limited number of legumes, fresh fruits and vegetables (Khonje *et al.*, 2019; Rischke *et al.*, 2015). Despite that the proportion of supermarkets and fast-food restaurant chains is rising in Sub-Sahara Africa; informal food vendors still make up a large proportion of the food retailers which initiate the consumption of fast food,

especially around schools (Spires *et al.*, 2020). The fast foods that are commonly sold are carbonated soft drinks and French fries. According to the NOVA food classification system, food is classified into four categories that include unprocessed or minimally processed foods; processed culinary ingredients; processed foods and ultra-processed foods (Monteiro *et al.*, 2019). Consumption of Ultra-processed foods amongst children is of great concern due to high fat, salt or sugar content. The convenience and cost of the ultra-processed foods in most school areas make them an immediate choice for most of the children which leads to changes in dietary practice and food behavior.

Furthermore, food purchasing behaviour has significant implications for both overweight and obesity (Bhuiyan *et al.*, 2013). The purchasing power among children tends to shape



and predict their future eating habits and dietary patterns since most of the children who attend schools are likely to receive a small amount of pocket money from their parents or guardians hence, this gives them a chance to decide on what to eat or not to eat (Mwaikambo *et al.*, 2015). Furthermore, these children spend most of their money on purchasing unhealthy foods which may increase the prevalence of childhood overweight and obesity (Vincent *et al.*, 2021).

Studies conducted in high and middle-income countries showed that school food environment plays a greater role in influencing obesity risk among children (Pacific *et al.*, 2020; Down *et al.*, 2020; Nguyen *et al.*, 2019). Moreover, foods that are high in sugar and/or fat, which are globally available in school environments are associated with an increased risk of overweight/obesity and their consumption is reported to increase even in rural settings (Sauer *et al.*, 2021).

Food marketing in African towns and cities is generally fast-growing and becoming one of the putative factors responsible for the rising rates of overweight/obesity among children (Khonje *et al.*, 2020). The community has shown that market-based vendors sell unhealthy foods in cities and rural areas. Globally, most schools make food and beverages available in the school shops and the most marketed foods include fast foods (Downs *et al.*, 2020). Factors including food availability; people's knowledge; attitudes and perceptions; culture and other social factors have influenced children's consumption patterns and behaviour (Chortatos *et al.*, 2018). There is also a rapid transformation across countries which influences changes in consumption patterns between children in rural and urban areas which is associated with childhood obesity risk (Nguyen *et al.*, 2021; Sauer *et al.*, 2021).

Tanzanian researchers reported rural-urban variations in the prevalence of overweight and obesity among school-aged children in other regions (Chomba *et al.*, 2019; Pangani *et al.*, 2016; Tluway *et al.*, 2018). The variations observed could be due to regional differences in food consumption patterns and/or physical activity levels. Despite the rising prevalence of childhood overweight and obesity in Tanzania, there is limited information on food availability, marketing and promotion around the school environment. Furthermore, there is little known about how promotion strategies influence purchasing behaviour among rural and urban school children. Therefore, the current study was conducted to explore marketing and promotion strategies for foods consumed by Tanzanian primary school children and to determine the factors influencing their food purchasing behaviours around and outside the school environment in Morogoro region, Tanzania.

## 2.0 Methodology

### 2.1 Description of the Study Area and Study

#### Population

This study was conducted in Morogoro region in two districts; Morogoro municipality representing an urbanized population, and Kilosa district representing a rural area. Administratively Morogoro region has nine districts including, Ulanga, Gairo, Ifakara, Kilosa, Mvomero, Morogoro rural, Morogoro urban, Malinyi and Mlimba in

which the main ethnic groups are; Luguru, Sagara, Ndamba, Kaguru and Pogoro. The region has a total of 2,218,492 persons, in which Kilosa district (538,755 persons) and Morogoro municipal (394,528 persons) had the highest population compared to other districts (National Bureau of Statistics (NBS, 2022).

The economy of the region is dominated by agriculture and allied activities. The major staple food crops produced are maize and paddy, others include; sorghum, sweet potatoes, beans, cassava, millet, groundnuts, tomatoes, fruits and vegetables and the main cash crops are cotton, coffee, sisal, onions and oil seeds such as; simsim, sunflower and some cocoa along the mountain slopes (NBS, 2022).

Morogoro region has a total of 914 primary schools of which 101 are located in Morogoro municipality and 165 in Kilosa district. These schools served as a sampling frame from which the sample was drawn.

### 2.2 Sample size and sampling procedure

This descriptive cross-sectional study included parent/caregiver-child pair (age 7-12 years old) attending selected private or public day primary schools in urban Morogoro municipality and Kilosa district.

A total of eight primary schools, that is; four government and four private schools located in urban and rural areas were randomly selected. The sample size was calculated according to the formula by Hajian-Tilaki (2011) ( $N = Z^2 \times p \times (1-p) / d^2$ ) whereby: N= Sample size,  $z = 1.96$  for a confidence limit of 95%, P= prevalence of overweight/obesity among school-aged children in Dar es Salaam Tanzania which is 22.6% (Pangani *et al.*, 2016) and  $d =$  level of precision was 5%. The sample size obtained was 272 and the attrition rate for non-responsive was assumed to be 15% then by substituting for this it was found to be;  $N = (272) / (1-0.15)$  and the adjusted sample size was 320.

A stratified sampling technique was used to acquire a total sample of 335 children. Through this probability sampling technique, a population of school children in each school was divided into strata according to age, gender and education level. Based on proportional size, an average of 48 children were selected from each of the government and 36 children from the private schools. Approximately 5 to 7 students were randomly selected from each class. The majority of children selected were enrolled in public schools (56.7%) because most public schools had more students than private ones. In addition, a total of 32 food outlets, in which each of the 4 outlets was purposively selected from each of the eight primary schools. The selection criteria were the food vendors found around school premises. The outlets involved were 20 stalls, 5 school shops and 7 mobile vendors, averages of 7 outlets were present in each primary school. Ten boarding schools and 7 for children with special needs ( $n=7$ ) were excluded.

### 2.3 Data collection

Observation and face-to-face interviews using a structured questionnaire were used for data collection. A pretested questionnaire was administered to both parents and children to collect information on social demographic characteristics. Data on food marketing and promotion strategies were



collected from food vendors and that on food availability and drivers of purchasing behavior were obtained from children. An observation checklist was used to obtain information from 32 key informants on marketing and promotion strategies for foods sold around the school environment. Information on foods that were available in both rural and urban schools and the commonly purchased and consumed foods around schools were obtained through observations.

Foods sold around the schools were classified into four categories according to the NOVA food classification system including; unprocessed or minimally processed foods, processed culinary ingredients, processed foods and ultra-processed foods (Monteiro *et al.*, 2019) (Table 1).

**Table 1: The NOVA food classification system**

NOVA food groups	Definition	Examples
Unprocessed or minimally processed foods	Unprocessed or natural foods are obtained directly from plants or animals and do not undergo any alteration following their removal from nature Minimally processed foods are natural foods that have been submitted to removal of inedible or unwanted parts, grinding, drying, fermentation or other processes that may subtract part of the food, but which do not add oils, fats, sugars or other substances to the original food.	Fresh, squeezed, chilled, frozen, or dried fruit and leafy and root vegetables, grain; such as white rice and legumes such as beans and chickpeas, Starch roots and tubers; potatoes, sweet potatoes and cassava
Processed culinary ingredient	These are products extracted from natural foods or from nature by processes such as pressing, grinding, crushing, pulverizing and refining.	Butter, coconut fat, lard, vegetable oils with added anti-oxidants; salt mined or from seawater.
Processed foods	Are products manufactured by industry with the use of salt, sugar, oils, or other substances added to natural or minimally processed foods to preserve or to make more palatable.	Sugared or salted nuts and seeds, fruits in syrup, bread, tortillas, bans, doughnuts, cheese, smoked meat or fish, canned vegetables or legumes.
Ultra-processed foods	Are formulations of ingredients, mostly of exclusive industrial use made by a series of industrial processes many requiring sophisticated equipment and technology	Carbonated soft drinks, candies, cookies, pastries, cakes, sweetened fruit yoghurt, energy drinks, chocolate and ice cream.

## 2.4 Data Analysis

Data was analyzed using IBM-SPSS™ version 21 software. Descriptive statistics, such as frequencies and percentages, were calculated for social demographic data, commonly purchased foods, and factors influencing food purchasing behaviour. This helped in understanding the distribution and trends within the data. Additionally, the chi-square test was employed to examine significant differences between foods available in rural and urban school environments, providing insights into the variability of food choices based on location. The analysis also included cross-tabulations to explore associations between various demographic variables and food purchasing patterns. These statistical methods were instrumental in identifying key factors and trends, which were further analyzed to understand the implications for food vending practices in schools. Moreover, advanced statistical techniques were used to validate the reliability and accuracy of the findings, ensuring that the conclusions drawn were robust and reflective of the actual patterns observed in the data. This comprehensive analytical approach allowed for a nuanced understanding of the factors influencing food purchasing behaviour in different school environments.

## 2.5 Ethical Considerations

The study obtained ethical clearance from the National Institute for Medical Research with reference number NIMR/HQ/R.8a/Vol.IX/3667. Permission to conduct the study was sought from the Regional Administrative Officer, respective District Executive Officers, and head teachers of the selected schools. Parents were informed about the aim and procedure of the study, and parental consent along with child assent were sought prior to commencing research activities. Confidentiality of the information was ensured whereby all participants were identified by numbers.

Additionally, the study adhered to ethical guidelines that ensured the protection of participants' rights and well-being. This included providing detailed information about the study's objectives, methods, potential risks, and benefits to both parents and children. The researchers made sure that participation was entirely voluntary, and participants could withdraw at any stage without any repercussions.

To further protect the privacy of the participants, all data collected was securely stored and only accessible to the research team. The findings were reported in a manner that maintained the anonymity of the participants, ensuring that no individual could be identified from the published results. The study also followed the ethical principles of beneficence, ensuring that the research was conducted with the intent of maximizing benefits while minimizing any potential harm to the participants.

Regular monitoring and adherence to the ethical protocol were maintained throughout the study to ensure compliance with the approved ethical standards. The research team was committed to upholding the highest ethical standards to respect and protect the rights and dignity of all participants involved in the study.



### 3.0 Results and Discussion

#### 3.1 Socio-Demographic Characteristics of Parent-Child Pair

A total of 335 school children of age range from 7 to 12 years old participated in this study and 51.3 % were females. Slightly more than half of the children (56%) were of the age range 10-12 years old. A high proportion of the parents/caregivers (71%) were middle-aged adults (36-55 years) most of them were married (74%) and about half (52.5%) were self-employed (Table 2).

**Table 2: Socio-demographic characteristics of participants (N=335)**

Variable	Category	N	%
Age of child	7 - 9 Years	147	43.9
	10 - 12 Years	188	56.1
Sex of child	Male	163	48.7
	Female	172	51.3
Type of School	Public	190	56.7
	Private	145	43.3
Residence of child	Rural	165	49.3
	Urban	170	50.7
Age of parents	Young adults (18-35 years)	44	13.1
	Middle-aged adults (36-55)	237	70.7
	Older adults (56+ years)	54	16.1
Sex of parents	Male	141	42.1
	Female	194	57.9
Marital status of parents	Single	87	26
	Married	248	74
Education level of parents	Post-secondary education/college	103	30.7
	Secondary education	111	33.1
	Primary education	78	23.3
	No formal education	43	12.8
Employment of parents	Unemployed	41	12.2
	Self-employed	176	52.5
	Formal Employment	118	35.2
Household Daily Income of parents	<5000Tsh	67	20
	5000-10000Tsh	89	26.6
	>10000Tsh	179	53.4
No. of people in a household	1 -3	179	53.4
	4-7	134	40
	8 and more	22	6.6
No of children	1-2	141	42.1
	3-5	186	55.5
	5 and more	8	2.4

#### 3.2 Food Availability According to Residence

From the observation, the foods that were commonly available in both rural and urban areas were processed foods such as potatoes balls, samosa, cowpeas cakes, bans, doughnuts and ultra-processed foods for example carbonated soft drinks, cookies, candies, chocolate, corn snacks (*chama*), ice lollies and cakes. The proportion of unprocessed/minimally processed foods was higher in rural areas (64.6%) while the proportion of ultra-processed foods

was higher in urban areas (60.8%). There was no significant difference in ultra-processed foods that are available in rural and urban areas ( $p>0.05$ ). Unprocessed foods that were available in the schools included boiled cassava, bananas and sweet potatoes (Table 3).

**Table 3: Distribution of food availability according to residence**

Variables	Rural		Urban		P-value
	n	(%)	n (%)		
Unprocessed /minimally processed foods	104	64.6	57	35.4	0.14
Processed foods	156	60.0	144	40.0	0.12
Ultra-processed foods	153	39.2	160	60.8	0.10

The general aim of this study was to identify marketing and promotion strategies for foods consumed among Tanzanian primary school children. This study reported that processed and ultra-processed foods were the most common foods available in both schools found in rural and urban areas. The availability of a high proportion of processed foods could be due to low prices since the amount of money given to children was enough to buy these foods. This study indicates the signal of the penetration of processed and ultra-processed foods in rural areas of Tanzania, which might be linked to the recent acknowledgement of increased risk of overweight/obesity among children in rural areas as associated with high consumption of processed foods (Gudrun *et al.*, 2011; Sauer *et al.*, 2019). Similar studies done by Nguyen and Sauer *et al.* (2021) found that consumption of processed foods is on the rise in African's rural areas even among the traditional convenience stores thus, contributing to overweight/obesity as well as non-communicable diseases. The possible explanation for the availability of ultra-processed foods in urban schools is increased rapid urbanization which initiates easy availability, and affordability in terms of price and convenience due to their keeping quality. Ultra-processed foods are highly associated with free sugar, salts and saturated fats hence, likely to increase the risk of being overweight/obese among children (Khonje *et al.* 2020). These findings are similar to the study conducted by Louzada *et al.* (2015) who found high consumption of ultra-processed foods among children in urban areas in Africa. Another study conducted in South Africa and Ghana confirmed high levels of purchasing and consumption of ultra-processed foods in urban settings due to the increase in global sales of ultra-processed foods in urban areas (Khonje *et al.*, 2019).

Furthermore, the current study found that unprocessed foods such as cassava, plantains and sweet potatoes were mostly available in schools located in rural areas because most of these foods were grown around the areas hence, more accessible and affordable. These foods were the local Tanzanian snacks preferred by the children therefore; they are most likely to be sold around the school environments. However, in most cases, these foods are deep fried and involve the re-use of oils which leads to increased intake of overheated oils and fats which may lead to health consequences such as increased risk of obesity, coronary heart disease and certain types of cancer (Pacific *et al.* 2020).



This study is in line with the study conducted by Vincent *et al.* (2022) in Kilimanjaro which explained that local vendors within school premises usually sell local snacks such as fried cassava and plantains, chips, and samosas with mixed vegetable salads.

### 3.3 Commonly Purchased Foods Around the School Environment

The study found that foods such as potato balls, corn snacks (*chama*), ice cream and carbonated soft drinks were the most commonly purchased foods in schools (Table 4).

**Table 4: Commonly purchased foods around the school environment (N=335)**

Variable	Rural		Urban	
	n	%	n	%
Samosa	79	23.7	94	27.8
Fried cassava	77	23.0	44	13.1
Fried banana	85	25.4	41	12.2
Potato balls	163	48.7	168	50.1
Cakes	8	5.4	31	9.3
Candies	30	38.8	115	34.3
Chocolates	54	46.0	140	41.8
Groundnuts	0	3.0	22	6.6
Corn snacks ( <i>Chama</i> )	163	48.7	146	43.6
Sweetened ice lollies	94	28.1	136	40.6
Ice cream	157	46.9	161	48.1
Carbonated drinks	138	41.2	112	33.4
Energy drinks	0	0	2	0.6
Other sweetened drinks	114	34.0	104	31.0

The study reported that foods such as potato balls, chocolates, candies, ice cream, sweetened ice lollies, corn snacks (*chama*) and carbonated soft drinks were commonly marketed and purchased by schoolchildren in urban and rural areas. The finding shows that potato balls were the most purchased snacks in both schools located in urban and rural areas. These foods are usually affordable due to low prices compared to other foods sold in schools as children were required to pay only fifty Tanzanian Shillings per potato ball. These findings are in line with the study done by Mwaikambo *et al.*, (2015) in Dar es Salaam who reported that children are likely to purchase low-price food products because of the limited amount of money given to spend in schools. Our study is similar to the study conducted by Vincent (2022) who found that children were most likely to buy local Tanzania snacks such as samosas, plantains and fried cassava. Although not packed and labelled, deep-fried foods may equally be dangerous to the health of school children. Other ultra-processed foods like chocolates, candies, carbonated soft drinks, ice cream and sweetened ice lollies due to low price and sweet taste were preferred by most children.

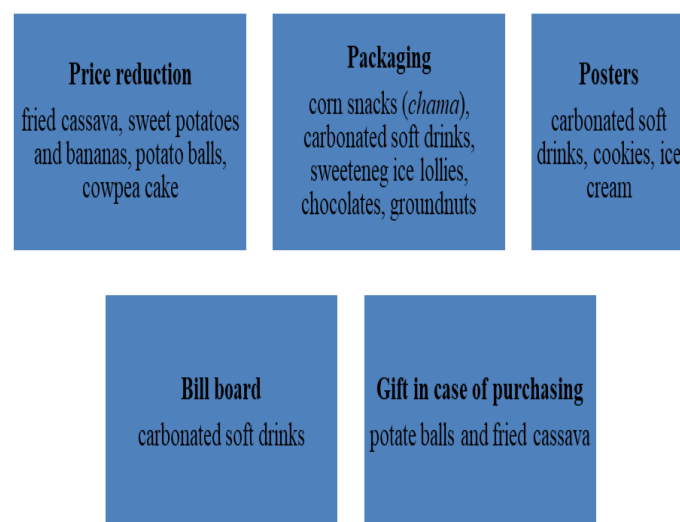
A study by Mwaikambo and colleagues (2015) among primary schools in Kinondoni district, Dar es Salaam found that children are likely to eat most packed foods with high fats and sugar due to their low prices hence, exposed to a risk of developing overweight/obesity. Another study conducted in Ethiopia among primary school children found an increase in purchasing power among children and overconsumption of cheap, palatable, more-energy-dense foods and nutrient-

poor food with high levels of sugar and saturated fats (Desalew *et al.*, 2017).

Furthermore, this study found corn snacks (*chama*) as one of the foods commonly purchased by school children. *Chama* or corn snacks refer to a snack made of maize flour, eggs, tomato source flavour and salt. The children are always attracted by the packaging design, price and taste of this snack. The findings are similar to those reported in a study by Martinho *et al.* (2020) and Ares *et al.* (2021) who reported that package design influences children's in making purchasing decisions by capturing their attention which leads to picking energy-dense food products with high sugar, fat and salt content and are poor sources of health-promoting nutrients.

### 3.4 Marketing and promotion strategies for foods sold around the school environment

The most common marketing and promotion strategies observed around the school environment were posters, promotion on the packaging and price reduction.



Our study observed that price reduction, posters and packaging were the most common marketing and promotion strategies for foods sold around the school environments. Food marketing and promotion around the schools shape children's preferences for foods and put their health at risk (FAO, 2018). The commonly marketed foods were carbonated soft drinks, candies, deep friend cassava and bananas, chocolates, sweetened ice lollies and *chama*. Our study also observed posters as a marketing and promotion strategy used by food sellers. Generally, children were easily attracted by the nature of foods presented on posters, believing that they would eat the same food as what they saw on the pictures/posters.

Furthermore, studies in food marketing and promotion have shown that communication platforms such as posters are primary tools for attracting attention to food products (Ares *et al.*, 2021; Truman *et al.*, 2019). Promotional packaging, especially in items like candies, corn snacks, chocolates, carbonated soft drinks, and sweetened ice lollies, often features pictures of cartoons, fruits, and celebrities to capture



children's attention and influence their purchasing decisions. These marketing strategies often use misleading health-related visual and textual signals, encouraging children and their parents to choose energy-dense foods high in sugar, fat, and salt, which are poor sources of essential nutrients like fibre, protein, minerals, and vitamins. Martinho (2020) supports these findings, noting that packaging influences consumer perceptions of healthfulness and that cartoons on packages positively sway children's buying choices. A study by Ares *et al.* (2021) in Uruguay also confirmed that food package design significantly impacts both children's and parents' purchase decisions by capturing their attention.

### 3.5 Factors Contributing to Food Purchasing Behavior among School Children

The findings showed that hunger (91.4%), price (82.5%), school environment (78.6%) and social pressure (73.4%) were among the factors influencing the purchasing behaviour of the children (Table 4).

**Table 4: Factors contributing to food purchasing behaviour among school children (N=335)**

Variable	Factors	Yes		No		I don't know	
		n	%	n	%	n	%
Unprocessed/ minimally processed Food	Feeling hungry	300	88.6	32	10.3	3	1.1
	Health state	212	64.5	69	19.9	54	15.6
	Social pressure	234	70.0	72	21.0	29	9.0
	Family economic status	196	56.0	88	26.6	51	17.4
	Food Price	271	9.4	41	12.9	24	7.7
	Advertisement	204	58.5	81	25.5	50	16.0
	Environment	272	0.4	41	13.3	19	6.3
Processed Food	Feeling hungry	307	92.5	21	6.0	7	1.5
	Health state	122	36.8	165	50.1	48	13.1
	Social pressure	272	80.1	46	14.9	17	5.0
	Family economic status	204	60.7	114	34.5	17	5.0
	Food Price	294	86.2	4	2.4	37	11.4
	Advertisement	199	57.5	64	21.1	62	21.4
	Environment	288	81.3	40	17.2	2	1.5
Ultra-processed Food	Feeling hungry	312	93.0	21	6.6	2	0.4
	Health state	121	36.5	100	29.4	114	34.3
	Social pressure	245	70.0	36	8.0	54	22.0
	Family economic status	193	53.8	52	15.7	90	30.5
	Food Price	290	82.0	39	16.0	6	1.0
	Advertisement	202	59.0	118	36.8	15	4.2
	Environment	272	74.1	54	24.2	9	1.7

This study reported that feeling hungry; food price; environment and social pressure were the factors influencing food purchasing behaviour among school children in Morogoro region. Most children leave their homes very early in the morning and there are no common school meals. They also spend a lot of time in school probably because they have to buy food to be able to concentrate on their studies (Mwaikambo *et al.*, 2015). On the other hand, studies conducted across African regions reported that biogenic factors including taste or hunger may enable children to make their choices on eating different food types which shape their eating habits at this stage (Mwaikambo *et al.*, 2015; Oti, 2018). Also, children were influenced by social pressure in making their purchasing decisions and the possible reasons could be due to afraid of being mocked by their peers or not being accepted. It is common for the purchasing decisions of this age category to be influenced by peers. The findings are in line with the study on the influence of peers and siblings on children's and adolescents' healthy eating behaviour which found that peers are the most influential in increasing consumption of unhealthy energy-dense and low-nutrition value foods (Tija *et al.*, 2020).

We noted that there weren't rules or regulations guiding food vendors on selling foods around schools as food vendors were allowed to sell any food of their choice and most of these foods were high in sugar thus jeopardising the health of the children. The food vendors choose to sell foods that are easy to handle and keep longer at room temperature. This study is similar to the study conducted by Pacific *et al.* (2020) in Africa which reported that unhealthy food options are readily available in school environments and children prefer to choose and consume these foods.

### 4.0 Conclusions and Recommendations

This study builds insight into marketing and promotion strategies for foods consumed among primary school children. The most common marketing and promotion strategies for foods sold on the school premises were price reduction, and the presence of posters and packaging in schools found in both rural and urban areas. The commonly purchased foods were potato balls, ice cream, corn snacks, chocolates, carbonated soft drinks, candies, and sweetened ice lollies. Factors driving food purchasing behaviour among school-aged children were lack of something else to eat at school, food price, social pressure and environment. There was no significant difference for ultra-processed foods that were available in rural and urban areas.

Ministry of Education should ensure the provision of school meals and implement regulations on promotion and what should be sold to children so that healthy foods are prioritized to achieve optimal nutrition status. Government and nutrition specialists should educate food vendors on food preparation and the importance of selling nutritious foods around the schools. Children should also be educated about healthier choices so that they can make informed decisions when purchasing foods to build the foundation for a healthy generation tomorrow.

### Competing Interests

The authors declare that they have no competing Interests.

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