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Assessment of Nutritional Knowledge, Dietary Habits, and Oral Health Practices among Children Aged 7-10 Years, in Government Primary Schools in Ibadan, Oyo State

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Abstract

Introduction: Childhood is a critical period for establishing healthy nutrition and oral hygiene behaviors. This study assessed the nutritional knowledge, dietary habits, and oral health practices among children aged 7–10 years attending government primary schools in Ibadan Northeast Local Government Area, Oyo State.

Methods: A descriptive cross-sectional design was employed. A total of 211 pupils were selected using multistage sampling from three government schools. Data were collected using a structured, pre-tested questionnaire and analyzed with SPSS. Descriptive statistics and chi-square tests were performed, with a significance level of $p < 0.05$.

Results: The mean age of respondents was 8.9 ± 1.16 years, with females comprising 55% of participants. Most children identified as Christian (55.9%) or Muslim (40.3%). Overall, 41.7% demonstrated poor nutritional knowledge, while only 18.5% exhibited good knowledge. Gender, age, and socio-religious factors were not significantly associated with knowledge levels ($p > 0.05$). Slightly more girls had good knowledge than boys (20.7% vs. 15.8%), though not statistically significant. Parental education, particularly fathers', showed a nonsignificant trend toward influencing knowledge ($p = 0.099$). Carbonated beverages were the most frequently consumed drinks (39.8% daily), while 10% reported daily alcohol intake. Fruits such as oranges were commonly consumed, whereas dates and guava were least preferred.

Conclusions: The findings emphasize the need for structured school-based nutrition and oral health education programs, enhanced parental involvement, and stricter regulation of unhealthy beverages to promote healthier lifelong behaviors in children.

Keywords: Nutritional Knowledge, Dietary Habits, Oral Health Practices, School-aged Children, Public Primary Schools.

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Introduction

Globally, malnutrition and dental diseases remain major health burdens among school-aged children, especially in developing countries where poverty and weak health systems limit access to care [1]. Dental caries affect most children at some point in their early lives [2], and malnutrition, in its various forms, undernutrition, micronutrient deficiencies, and obesity, continues to affect millions [3]. In Nigeria, stunting rates exceed 40% in some regions, showing the scale of nutritional challenges [4]. The typical diet of school-aged children, especially those in government schools, is often dominated by refined carbohydrates and sugary snacks [5]. This diet contributes to both undernutrition and poor oral health, yet there are few studies that examine these issues together among Nigerian children [6].

Childhood is a vital stage when lifelong health habits begin to form. Between seven and ten years, children experience rapid physical and mental growth, and their behaviors during this stage can influence their future health and well-being [7]. Good nutrition supports proper growth, brain function, and disease prevention [8], while poor dietary habits, such as frequent consumption of sugary and processed foods, are linked to tooth decay, which is among the most common chronic diseases in children worldwide [9]. Early eating patterns often persist into adulthood, making this period

crucial for developing healthy dietary and oral hygiene behaviors [10].

Parents play a major role in shaping their children's nutrition and oral health. When parents understand healthy eating, they tend to provide balanced meals rich in fruits, vegetables, and low-sugar snacks [11, 12]. In contrast, limited nutritional knowledge among parents is linked to poor feeding habits, frequent consumption of sugary foods, and low awareness of oral hygiene practices [13]. Family routines also influence behavior. Shared meals and consistent guidance on tooth brushing are associated with better dietary choices and improved oral health [14]. Children learn by observing their parents; those whose parents model good nutrition and hygiene practices are more likely to develop similar behaviors. However, socioeconomic challenges, such as low income and limited access to health information, often make it difficult for families to maintain healthy routines [15, 16].

A poor diet increases the risk of dental caries, while oral diseases can make it painful to eat, affecting nutritional intake [17]. Children with dental pain often struggle to eat properly, leading to malnutrition, fatigue, and lower concentration in school [18]. These health challenges can limit social interactions and reduce academic performance, showing that oral health is essential for overall quality of life. In Nigeria, changes in lifestyle and urbanization have led to major shifts in children's diets. Traditional foods rich in nutrients are being replaced with processed, energy-dense foods high in sugar and fat [19, 20]. Many children now consume sweets, biscuits, and carbonated drinks daily while eating fewer fruits and vegetables [21]. These foods are affordable and widely available, but they contribute to both poor nutrition and dental problems [22].

Many Nigerian parents and caregivers lack accurate information about how diet affects oral health [23]. Routine dental visits are uncommon, especially in low-income areas where access to dental care is limited [24]. Families facing financial hardship often prioritize inexpensive, filling foods over nutritious options, increasing their children's risk of nutrient deficiencies and dental caries [25]. Poor oral health can also make children avoid certain foods, further reducing dietary variety and nutritional intake.

Understanding how nutrition and oral hygiene are related in this age group is important for designing effective interventions. Schools offer a practical setting for promoting healthy behaviors because they reach children directly and can influence their daily habits. Teachers and school programs can help children learn how to eat well, brush their teeth properly, and understand why these habits matter. Parents also play an important role by supporting these messages at home. When families and schools work together, children are more likely to develop lifelong healthy routines.

This study focuses on assessing the nutritional knowledge, dietary habits, and oral health practices of children aged seven to ten years in government primary schools in Ibadan, Oyo State. The findings will provide insights into the current state of children's health behaviors and help identify areas where interventions are needed. Improving children's nutrition and oral hygiene not only reduces disease burden but also supports better learning, attendance, and overall development. Efforts to strengthen health education in schools and involve parents in health promotion can contribute to achieving the Sustainable Development Goals on health and education. Through this study, it is expected that practical recommendations will emerge to support healthier lifestyles and improved well-being among Nigerian school children.

Materials and Methods

Study Setting

This study adopted a descriptive cross-sectional research design. The study was conducted in the Ibadan Northeast Local Government Area (LGA) of Oyo State, Nigeria. The study population comprised pupils aged 7–10 years attending government-owned primary schools in the Ibadan Northeast LGA.

Sample Size

The minimum sample size was calculated using Cochran's formula for sample size estimation for proportions:

$$n = \frac{Z^2 (p)(q)}{e^2}$$

where:

n = required sample size

Z = 1.96 (standard normal deviate corresponding to a 95% confidence level)

p = estimated prevalence of adequate oral health knowledge (15.1%) [26]

q = 1 – p = 0.849

e = desired level of precision = 0.05

$$n = \frac{(1.96)^2 (0.151) (0.849)}{(0.05)^2}$$

= 196

Allowing for a 10% non-response rate (≈19.6), the final sample size was 215 respondents. However, at the end of data collection, 211 questionnaires were correctly completed and included in the analysis. Proportional allocation was applied based on estimated population figures of pupils aged 7–10 years in three selected schools.

Sampling Technique

A multi-stage sampling technique was used to ensure representativeness. In the first stage, a list of all government-owned primary schools in the LGA was obtained from the Oyo State Universal Basic Education Board (SUBEB). Three schools; Christ Apostolic Church Basic School 1, Irefin, Community Primary School, Ayekale, and Methodist Primary School 1, Agodi were selected using a simple random sampling method. In the second stage, classes within each selected school were stratified according to grade levels, and pupils aged 7–10 years were identified. In the final stage, eligible pupils were selected using systematic random sampling from class registers until the required number of participants per school was reached.

Ethical Approval

Ethical approval for this study was obtained from the Research and Ethics Committee of Lead City University, Ibadan (Approval No: LCU/REC/25/0040). Permission to conduct the study was also granted by the Oyo State Universal Basic Education Board (SUBEB) and the management of each participating school. Written informed consent was obtained from school principals on behalf of the pupils, and verbal assent was obtained from the children after explaining the study's purpose in child-friendly

language. Participation was voluntary, and pupils could withdraw at any time without any consequences. No names or identifying information were recorded, and all data were handled confidentially. The study involved no invasive procedures and adhered to the ethical principles of autonomy, beneficence, and non-maleficence.

Results

Table 1 shows that the mean age of the respondents was 8.90 ± 1.157 years, with females (55%) slightly more represented than males (45%). The majority of respondents were Christians (55.9%), followed by Muslims (40.3%). Most parents had at least primary or secondary education, although a small proportion had no formal education. Fathers were predominantly artisans (25.6%) and drivers (26.5%), while mothers were mainly businesswomen (44.1%). Most respondents came from nuclear families (68.2%) and lived with both parents (66.8%), indicating relatively stable family structures.

Table 2 presents respondents' nutritional knowledge based on gender. The findings reveal that both male and female respondents demonstrated moderate awareness of nutrition-related oral health concepts, with no statistically significant differences observed across all variables ($p > 0.05$).

Table 1: Socioeconomic Characteristics of the School-Aged Children

Variables	Frequency (N=211)	Percentage (%)
Age in years (Mean ± SD)	**8.90 ± 1.157**	
Sex		
Male	95	45
Female	116	55
Total	211	100
Religion		
Islam	85	40.3
Christianity	118	55.9
Traditional	8	3.8
Total	211	100
Mothers' highest level of education		
No formal education	23	10.9
Primary school	72	34.1
Secondary school	73	34.6
Tertiary	43	20.4
Total	211	100
Fathers' highest level of education		
No formal education	14	6.6
Primary school	56	26.5
Secondary school	86	40.8
Tertiary	55	26.1
Total	211	100
Occupation of father/guardian		
Teaching Job	10	5.2
Artisan	54	25.6
Works in Private Sector	28	13.3
Businessman	44	20.8
Vehicle Driver	56	26.5
Civil Servant	14	6.6
Clergyman	5	2.4
Total	211	100
Occupation of mother/guardian		
Household Type		
Teaching Job	40	19.0
Artisan	58	27.5
Works in a Private Sector	16	7.6
Businesswoman	93	44.1
Vehicle Driver	2	0.9
Civil Servant	2	0.9
Total	211	100
Household Type		
Nuclear	144	68.2
Extended	67	31.8
Total	211	100
Living with		
Alone	6	2.8
Both parent	141	66.8
Mother	34	16.1
Father	18	8.5
Relatives	6	2.8
Caregiver	6	2.8
Total	211	100

Table 2 School-aged Children's Response on Nutritional Knowledge Based on Gender Categorization

Variables	Gender		Total (N=211)	p-value
	Male (N=95)	Female (N=116)		
Sugar that causes the most tooth decay				
Milk sugar	33 (48.5)	35 (51.5)	88(100)	
Table sugar	32 (41.6)	45 (58.4)	77 (100)	
Malt sugar	24 (48.0)	26 (52.0)	50 (100)	0.740
I don't know	6 (37.5)	10 (62.5)	16 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Helps prevent tooth decay the most				
Xylitol	32 (53.3)	28 (46.7)	60 (100)	
Aspartame	12 (46.2)	14 (53.8)	26 (100)	
Saccharine	26 (35.6)	47 (64.4)	73 (100)	0.213
I don't know	25 (48.1)	27 (51.9)	52 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Foods that can protect the teeth				
Milk	46 (45.1)	56 (54.6)	102 (100)	
Cheese	27 (47.4)	30 (52.6)	57 (100)	
Nuts	14 (37.8)	23 (62.2)	37 (100)	0.725
I don't know	8 (53.3)	7 (46.7)	15 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Food that helps keep teeth healthy and strong				
Fish and fibrous foods like fruits and vegetables	60 (41.7)	84 (58.3)	144 (100)	
Liquid foods like soup	14 (53.8)	12 (46.2)	26 (100)	
Hard and sticky foods like candies	15 (51.7)	14 (48.3)	29 (100)	
I don't know	6 (50.0)	6 (50.0)	12 (100)	0.548
Total	95 (45.0)	116 (55.0)	211 (100)	
Nutrient deficiencies that can cause problems in your mouth				
Vitamin C and B12 deficiency	23 (39.7)	35 (60.3)	58 (100)	
Iron deficiency	34 (47.9)	37 (52.1)	71 (100)	
Both A and B	25 (48.1)	27 (51.9)	52 (100)	0.767
I don't know	13 (43.3)	17 (56.7)	30 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Learning about healthy eating can help prevent tooth problems				
Yes	58 (41.4)	82 (58.6)	140 (100)	
No	8 (50.0)	8 (50.0)	16 (100)	
Maybe	11 (55.0)	9 (45.0)	20 (100)	0.517
I don't know	18 (51.4)	17 (48.6)	35 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Tooth damage can happen if something keeps touching the teeth for a long time				
Yes	50 (43.1)	66 (56.9)	116 (100)	
No	17 (48.6)	18 (51.4)	35 (100)	
Maybe	8 (47.1)	9 (52.9)	17 (100)	0.937
I don't know	20 (46.5)	23 (53.5)	43 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Nutrient that can stop tooth decay				
Fluoride	34 (47.2)	38 (52.8)	72 (100)	
Calcium	36 (39.1)	56 (60.9)	92 (100)	
Iodine	11 (52.4)	10 (47.6)	21 (100)	0.439
I don't know	14 (53.8)	12 (46.2)	26 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Drinking certain drinks can harm the teeth				
Yes	51 (47.2)	57 (52.8)	108 (100)	
No	33 (40.7)	48 (59.3)	81 (100)	
Maybe	7 (63.6)	4 (36.4)	11 (100)	0.443
I don't know	4 (36.4)	7 (63.6)	11 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Eating too many sweets or sugary foods can cause tooth decay				
Yes	75 (43.4)	98 (56.6)	173 (100)	
No	12 (57.1)	9 (42.9)	21 (100)	
Maybe	2 (40.0)	3 (60.0)	5 (100)	0.657
I don't know	6 (60.0)	6 (50.0)	12 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Nutrient that is good for strong teeth and bones				
Calcium and vitamin E	38 (40.0)	57 (60.0)	95 (100)	
Selenium and vitamin D	3 (37.5)	5 (62.5)	8 (100)	
Calcium and vitamin D	22 (46.8)	25 (53.2)	47 (100)	0.462
Iron and vitamin B	32 (52.5)	29 (47.5)	61 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	

Figure 1 illustrates the overall nutritional knowledge level of the respondents. The distribution indicates that a larger proportion of the children had poor (41.71%) to fair (39.81%) knowledge, while only a minority demonstrated good knowledge (18.48%).

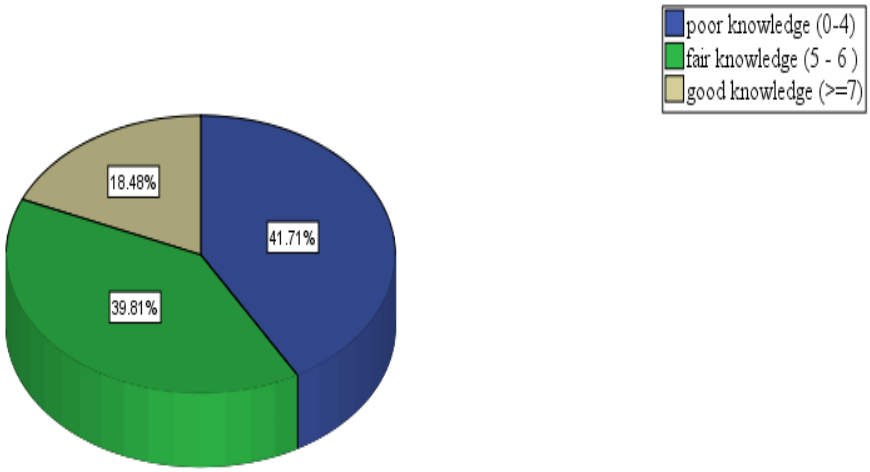

Figure 1: Nutritional Knowledge Level among the Respondents

Figure 2 shows the sources of information about healthy eating among the respondents. The findings suggest that female children primarily obtained information from media platforms (18.01%), school (16.59%), and informal sources such as family members (10.90%); while male children primarily obtained information from informal sources such as schools (14.69%), family members (11.85%), and possibly media platforms (9.95%).

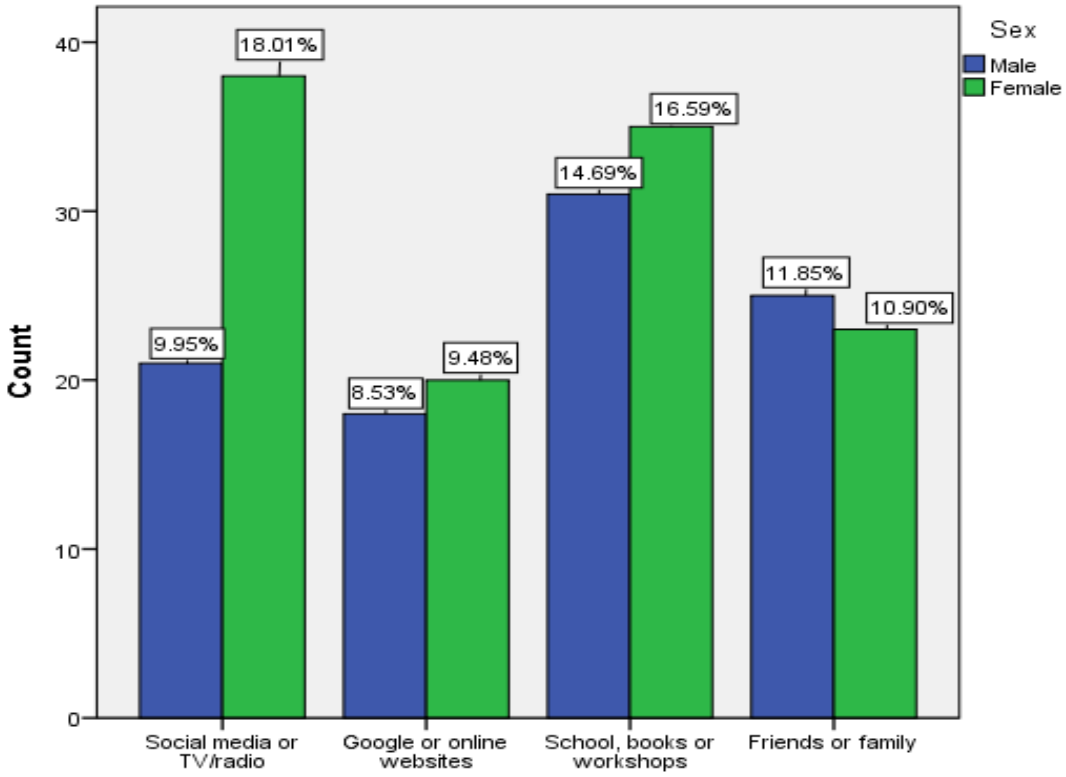

Figure 2: Source of Information about Healthy Eating

Table 3 shows that the most notable oral hygiene practice among respondents was brushing once daily (55.9%), while only 35.5% brushed twice daily as recommended. Most respondents brushed before meals (50.7%), and over half (58.8%) reported rinsing their mouth after meals. The use of toothpicks was the predominant interdental cleaning method (57.3%), with very few using dental floss (11.4%). Less than half of the respondents (40.3%) had ever visited a dental clinic, and only 37.9% reported changing their toothbrush every three months as recommended. Overall, these findings indicate suboptimal oral hygiene practices among the children, with no statistically significant gender differences observed ($p > 0.05$).

Table 3: School-Aged Children's Response on Oral Health Based on Gender Categorization

Variables	Gender		Total (N=211)	p-value
	Male (N=95)	Female (N=116)		
When teeth is brushed				
After meals	20 (46.5)	23 (53.5)	43 (100)	
Before meals	53 (49.5)	54 (50.5)	107 (100)	
In between meals	9 (47.4)	10 (52.6)	19 (100)	0.229
Before and after meals	13 (31.0)	29 (69.0)	42 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
No of times teeth is brushed in a day				
Once	54 (45.8)	64 (54.2)	118 (100)	
Twice	34 (45.3)	41 (54.7)	75 (100)	
Thrice	5 (35.7)	9 (64.3)	14 (100)	0.906
More than once	2 (50.0)	2 (50.0)	4 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Rinsed mouth after meal				
Yes	54 (43.5)	70 (56.5)	124 (100)	
No	41 (47.1)	46 (52.9)	87 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	0.607
How often is mouth rinsed				
Once a day	16 (41.0)	23 (59.0)	39 (100)	
Twice a day	24 (41.4)	34 (58.6)	58 (100)	
Sometimes a week	14 (51.9)	13 (48.1)	27 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	0.616
Teeth picking				
Tooth pick	50 (41.3)	71 (58.7)	121 (100)	
Match stick	28 (50.0)	28 (50.0)	56 (100)	
Dental floss	14 (58.3)	10 (41.7)	24 (100)	0.277
Interdental brush	3 (30.0)	7 (70.0)	10 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Brush/rinse mouth after sugary food intake				
Yes	46 (41.1)	66 (58.9)	112 (100)	
No	37 (48.1)	40 (51.9)	77 (100)	
Maybe	3 (37.5)	5 (62.5)	8 (100)	0.351
I don't know	9 (64.3)	5 (35.7)	14 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Use mouth wash as an alternative to brushing				
Yes	32 (36.0)	57 (64.0)	89 (100)	
No	47 (51.1)	45 (48.9)	92 (100)	
Maybe	5 (62.5)	3 (37.5)	8 (100)	0.137
I don't know	11 (50.0)	11 (50.0)	22 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Visited dental clinic				
Yes	31 (36.5)	54 (63.5)	85 (100)	
No	50 (47.6)	55 (52.4)	105 (100)	
Maybe	4 (66.7)	2 (33.3)	6 (100)	0.080
I don't know	10 (66.7)	5 (33.3)	15 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	
Change toothbrush				
Less than 3 months	24 (48.0)	26 (52.0)	50 (100)	
Every 3 months	31 (38.8)	49 (61.2)	80 (100)	
6 months	13 (56.5)	10 (43.5)	23 (100)	0.434
>= 1 year	27 (46.6)	31 (53.4)	58 (100)	
Total	95 (45.0)	116 (55.0)	211 (100)	

Figure 3 shows that the majority of respondents (76.78%) had moderate practices and only a very small proportion (1.90%) poor oral hygiene practices, while 21.33% demonstrated exhibited good oral hygiene practices.

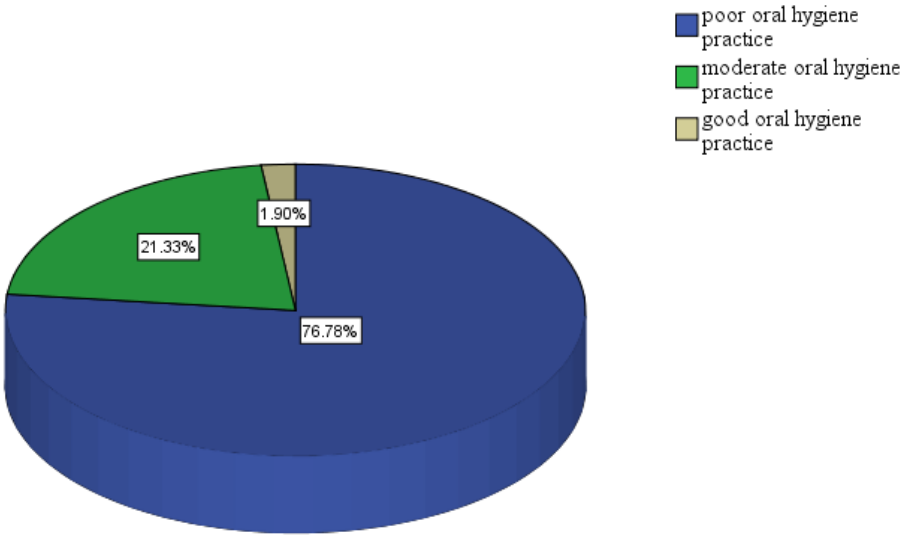

Table 4 shows that 41.7% of the respondents had poor nutritional knowledge, 39.8% had fair knowledge, and only 18.5% had good knowledge. Although a higher proportion of good knowledge was observed among older children aged 10 years (20.2%) and females (20.7%) compared to males (15.8%), these differences were not statistically significant. Similarly, no significant association was found between nutritional knowledge and religion or parental education levels ($p > 0.05$).

Table 4: Association between Knowledge Score and Sociodemographic Characteristics of the School-aged Children

Variables	**Nutritional Knowledge**			**p-value**
	Poor (N=88)	**Fair (N=84)**	**Good (N=39)**	
Age				
7	16 (47.1)	12 (35.3)	7 (17.6)	
8	19 (43.2)	18 (40.9)	7 (15.9)	
9	19 (50.0)	13 (34.2)	6 (15.8)	0.506
10	34 (36.2)	41 (43.6)	19 (20.2)	
Total	88 (41.7)	84 (39.8)	39 (18.5)	
Sex				
Male	41 (43.2)	39 (41.1)	15 (15.8)	
Female	47 (40.5)	45 (38.8)	24 (20.7)	
Total	88 (41.7)	84 (39.8)	39 (18.5)	0.659
Religion				
Islam	31 (36.5)	38 (44.7)	16 (18.8)	
Christianity	53 (44.9)	43 (36.4)	22 (18.6)	
Traditional	4 (50.0)	3 (37.5)	1 (12.5)	0.735
Total	88 (41.7)	84 (39.8)	39 (18.5)	
Mothers' highest level of education				
No formal education	13 (56.5)	5 (21.7)	5 (21.7)	
Primary school	26 (36.1)	28 (38.9)	18 (25.0)	
Secondary school	30 (41.1)	34 (46.6)	9 (12.3)	
Tertiary	19 (44.2)	17 (39.5)	7 (16.3)	0.241
Total	88 (41.7)	84 (39.8)	39 (18.5)	
Fathers' highest level of education				
No formal education	8 (57.2)	3 (21.4)	3 (21.4)	
Primary school	17 (30.4)	22 (39.3)	17 (30.4)	
Secondary school	37 (43.0)	37 (47.0)	12 (14.0)	0.099
Tertiary	26 (47.3)	22 (40.0)	7 (12.7)	
Total	88 (41.7)	84 (39.8)	39 (18.5)	

Table 5 reveals a weak positive correlation between nutritional knowledge and oral hygiene practices ($r = 0.071$). However, this relationship was not statistically significant ($p = 0.301$), indicating that higher nutritional knowledge did not significantly translate into better oral hygiene practices among the respondents.

Table 5: Relationship between Nutritional Knowledge and Oral Hygiene Practices among School-aged Children

		Nutritional Knowledge	Oral Hygiene Practice
Nutritional Knowledge	Pearson Correlation	1	0.071
	Sig. (2-tailed)		0.301
	N	211	211
Oral Hygiene Practice	Pearson Correlation	0.071	1
	Sig. (2-tailed)	0.301	
	N	211	211

Discussion

Oral health and nutrition are closely linked components of child health, particularly during the formative years of 7–10 years when lifelong dietary and hygiene habits are established [27]. Poor nutrition, especially high sugar consumption, is a major risk factor for dental caries, while inadequate oral hygiene further exacerbates oral health problems [28]. The findings of this study indicate that the respondents were predominantly from modest socioeconomic backgrounds, with varying levels of parental education and largely informal occupations. Such environments may influence children's exposure to proper nutritional guidance and oral health practices.

Nutritional knowledge among the respondents was generally poor to fair, with only a small proportion demonstrating good knowledge. Although many children recognized the general importance of healthy eating in preventing oral diseases, their understanding of specific nutrients and their roles remained limited. This aligns with previous studies reporting inadequate oral health knowledge among school-aged children, particularly regarding dietary causes and prevention of dental problems [28, 29]. The absence of significant gender differences suggests that the knowledge gap is uniformly distributed among both male and female children.

The study further showed no statistically significant association between nutritional knowledge and sociodemographic variables such as age, sex, religion, and parental education. Although slightly better knowledge was observed among older children and those with more educated parents, these differences were not significant. This finding suggests that parental education alone may not directly influence children's knowledge, and that factors such as parental involvement and home practices may be more important determinants of children's understanding [30].

Dietary habits observed in this study raise important concerns. The frequent consumption of sugary foods and beverages, particularly carbonated drinks, was common among the children, while the intake of fruits was inconsistent. These patterns increase the risk of dental caries and are consistent with previous reports linking high sugar intake to poor oral health outcomes [31]. Although some children consumed fruits such as oranges and mangoes, the limited diversity of fruit intake suggests possible constraints related to accessibility and affordability, which may affect overall nutritional quality [32].

Oral hygiene practices among the respondents were largely inadequate, with the majority exhibiting poor practices. Most children brushed only once daily, and the use of appropriate interdental cleaning methods such as dental floss was minimal. Additionally, many had never visited a dental clinic and did not adhere to recommended toothbrush replacement intervals. These findings are consistent with studies in similar settings, where poor oral hygiene practices have been linked to limited access to oral health services and inadequate supervision [33].

Importantly, the study found no statistically significant relationship between nutritional knowledge and oral hygiene practices ($r = 0.071$, $p > 0.05$). This indicates that knowledge alone does not necessarily translate into healthy behavior. Similar findings have been reported, showing that children's health knowledge often does not result in improved practices without reinforcement through parental guidance or school-based interventions [34, 35].

Conclusion

In conclusion, this study revealed that school-aged children demonstrated generally poor to fair nutritional knowledge and predominantly inadequate oral hygiene practices, despite having some basic awareness of healthy behaviors. The frequent consumption of sugary foods and suboptimal hygiene practices indicate an increased risk of oral health problems among this population. Notably, no significant association was found between nutritional knowledge and oral hygiene practices, suggesting a gap between knowledge and actual behavior. These findings highlight the need for integrated, school-based and family-centered interventions that focus not only on health education but also on practical behavioral reinforcement. However, this study has some limitations. The cross-sectional design restricts the ability to establish causal relationships, and the use of self-reported data may introduce recall and social desirability bias. Additionally, the study was limited to selected public schools within one local government area, which may affect the generalizability of the findings to other populations.

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Conflict of Interest Declaration

The authors declare no conflicts of interest related to this manuscript.

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Code of Ethics
This study was conducted in accordance with established ethical principles guiding research involving human participants. Ethical approval was obtained from the Research and Ethics Committee of Lead City University, Ibadan. Permission was also sought and obtained from the authorities of the selected schools prior to data collection. Informed consent was obtained from the school authorities, while assent was obtained from all participating children after clearly explaining the purpose and procedures of the study in an age-appropriate manner. Participation was entirely voluntary, and respondents were informed of their right to withdraw from the study at any point without any consequences.

Authorship Declaration
We hereby declare that all authors have read, approved, and agree with the submission of the final version of the manuscript titled "Nutritional Knowledge, Diet, and Oral Health Practices of 7–10 Year Olds in Government Primary Schools, Ibadan, Oyo State" to the IPS Journal of Nutrition and Food Science. Olanike Olubunmi Balogun and Eniola Rebecca Adewusi contributed to the conception and design of the study and participated in data collection. Olanike Olubunmi Balogun and Olajumoke Precious Olaniran were involved in statistical analysis and interpretation of the study findings. Igbagboyemi A. Deniran and Oluwadamilola B. Adekolujo were involved in the review and editing of the manuscript. All authors participated actively in drafting, reviewing, and revising the manuscript for important intellectual content. They collectively accept full responsibility for the integrity, accuracy, and originality of the work and agree to be accountable for all aspects of the study.

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