

**EMPIRICAL EVALUATION OF FOOD HANDLING PRACTICES AMONG VENDORS IN
SECONDARY SCHOOLS: INSIGHTS FROM JOS NORTH LGA, PLATEAU STATE**

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ABSTRACT

This study assessed the level of compliance with food safety practices among food vendors in secondary schools within Jos North Local Government Area. Using a sample of 30 vendors, various food safety practices such as personal hygiene, food storage, cleaning and sanitizing, and waste disposal were evaluated. Findings revealed moderate compliance generally, with strengths in food storage and waste disposal but significant gaps in personal hygiene, food borne illness awareness, and pest control knowledge. A paired samples correlation test showed no significant relationship between food safety practices and government regulation enforcement, indicating a disconnect between policy and practice. The study underscores the need for enhanced vendor training, strengthened regulatory enforcement, and improved collaboration between schools and regulatory bodies to ensure safer food handling and reduce health risks to students.

Keywords: Food safety practices, Food vendors, Secondary schools, Government regulation, Compliance, Food hygiene, Waste management, Jos North

INTRODUCTION

Food safety represents a serious public health challenge across the globe, with developing nations facing particularly acute difficulties due to inadequate oversight and regulatory frameworks. These shortcomings often result in high rates of food borne diseases, with school children being excessively affected (Afolaranmi et al., 2015; Ezeogu et al., 2014). Within Nigeria's perspective street food vendors operating near educational institutions provide fundamental nutrition services while at the same time creating potential health hazards through variable food preparation and sanitation standards (Kasang, 2015; Frontiers in Food Science and Technology, 2025).

Studies carried out in Plateau State disclose that various vendors operate without proper food safety education and often neglect fundamental hygiene protocols, challenges often rooted in economic constraints and limited educational opportunities (Afolaranmi et al., 2015; Kasang, 2015). Though these food sellers serve significant function in nourishing secondary school pupils all through Jos North Local Government Area (LGA), available data show persistent deficiencies in their food preparation and cleanliness standards (Afolaranmi et al., 2015; Kasang, 2015).

Current research demonstrates that substantial numbers of vendors possess inadequate understanding of core food safety measures and lack sufficient resources to uphold required sanitation levels, thereby exposing students to avoidable diet-related diseases and additional health complications (Ezeogu et al., 2014; Frontiers in Food Science and Technology, 2025).

Evidence from Jos North LGA suggests that structured training initiatives could considerably improve food safety awareness and implementation among vendors, yet such programs remain limited (Ezeogu et al., 2014; Frontiers in Food Science and Technology, 2025). A major void exists in region-specific studies examining food preparation behaviors of school-area vendors in Jos North LGA, despite their crucial contribution to student nutrition. This research seeks to comprehensively assess food handling

methods employed by vendors serving secondary schools throughout Jos North, Plateau State, with the goal of generating evidence-based recommendations to inform local policy development and safeguard student wellbeing.

Objectives

To assess the level of knowledge and practice of food handling and hygiene among food vendors in secondary schools within Jos North Local Government Area, Plateau State.

Research Question

What is level of food handling practices by food vendors in secondary schools, Jos North LGA of Plateau State?

Research Hypothesis

There is no relationship between food safety practice and government regulation in secondary schools in Jos North LGA.

LITERATURE REVIEW

Food safety is a major concern for public health, mainly in developing countries like Nigeria, where food-related illnesses can greatly impact health outcomes and life expectancy (Afolaranmi et al., 2015; Dong, 2015). Factors such as inappropriate handling of food, lack of hygiene standards, and weak regulatory oversight contribute to these issues, especially among children in school environments. Existing research on the food handling habits of vendors in Nigerian schools provides important insights that are Female-related to the current study, which focuses on food vendors in Jos North LGA, Plateau State.

Food Safety Knowledge and Practices among School-Aged Populations

Several studies indicate that understanding and applying food safety measures can vary within school environments.

Emmanuel (2016) conducted a study on food safety knowledge and hygiene habits among senior secondary students in Ile-Ife, Osun State. The findings showed that around 75.8% of participants had a good understanding of food safety, while approximately 65.8% practiced proper hygiene when handling food. The study also found that factors such as parental education influenced students' awareness of food safety, highlighting how education and social environments affect knowledge in this area (Emmanuel, 2016). Although overall knowledge levels were relatively high, there were still inconsistencies in actual behavior, leading to continued health risks.

These results are supported by research on food safety knowledge among secondary students in rural Kogi State, which reported similar outcomes.

Over half of the students demonstrated adequate knowledge and safe practices, and the study stressed the need for focused educational efforts to maintain and enhance hygiene behaviors (Oluwole et al., 2019). These findings clearly indicate a link between food safety education and behavioral change, identifying schools as important settings for intervention programs.

Food Handling and Hygiene Practices among Food Vendors in Nigerian Schools

School food vendors play a significant role by providing affordable and accessible meals to students. But many of these vendors lack appropriate food safety knowledge, increasing the risk of foodborne illnesses. Arimi and Adebayo (2024) examined food safety behaviors among secondary school vendors in Ibadan, Oyo State. Their findings indicate that poor practices, such as insufficient handwashing and improper storage, were common. Most vendors were young women, and

notwithstanding government food safety regulations, enforcement and educational efforts were not effective, permitting unsafe practices to continue. These issues add to food poisoning and related medical visits among students who consume street and school food (Arimi & Adebayo, 2024). Similar challenges have been observed in Jos, Plateau State. Afolaranmi et al. (2015) discovered that over 60% of food vendors in school settings had no formal food safety education. Their practices, including poor hygiene and improper food storage, were linked to increased risks of contamination (Afolaranmi et al., 2015). Similarly, Kasang (2015) noted that socio-economic factors, such as inadequate education and lack of sanitation, prevent effective food safety practices among vendors in Jos North LGA. These studies highlight persistent systemic issues that hinder improvements in food safety among school vendors.

Health Implications of Poor Food Handling in Schools

Foodborne diseases have serious health and economic effects, particularly for children, whose immune systems are still developing and make them more susceptible to infections from contaminated food (Dong, 2015). Unsafe food handling by vendors can spread harmful bacteria such as *Escherichia coli*, *Salmonella*, and *Staphylococcus aureus*, which are commonly found in food poisoning cases at Nigerian schools (Afolaranmi et al., 2015; Emmanuel, 2016).

Further studies propose that weaknesses in food safety culture increase these risks. In Nigeria, food safety culture remains underdeveloped, with poor adherence to hygiene standards, limited access to clean water and sanitation, and insufficient training for food handlers (Olumide et al., 2021). These circumstances create an environment where foodborne disease outbreaks are more likely, predominantly in secondary schools where many students frequently eat meals prepared by vendors.

Impact of Educational Interventions and Food Safety Policy

Programs aimed at enhancing food safety knowledge and behaviors have shown positive outcomes in Nigeria. Research in Plateau State shows that targeted educational efforts for food vendors have led to better hygiene practices, improved food preparation methods, and reduced contamination levels (Ezeogu et al., 2014; *Frontiers in Food Science and Technology*, 2025). School-based initiatives that include food safety education for students also inspire better consumer behavior and rise demand for high-quality food services, indirectly pushing vendors to improve their standards (Oluwole et al., 2019).

Nevertheless, sustaining and enforcing food safety regulations remains a challenge. Food safety laws in Nigeria face hindrances such as inadequate funding, limited monitoring capacity, and poor harmonization between regulatory authorities and local communities (Olumide et al., 2021). Without addressing these structural problems, efforts to advance food handling practices in secondary schools and among vendors may only produce limited results.

Research Gaps and Justification for the Study

Although there is growing literature on food safety knowledge and practices in Nigeria, few studies explicitly examine the food handling behaviors of vendors within secondary schools, particularly in Jos North LGA, Plateau State.

Most existing research concentrate on urban areas like Ibadan or general street food environments, creating a gap in understanding food safety within secondary schools in Jos North (Arimi & Adebayo,

2024; Kasang, 2015).

Furthermore, the social and environmental characteristics of Jos North—such as various ethnic groups, economic differences, and distinct weather conditions—can influence vendor practices and associated risks in different ways compared to other regions (Afolaranmi et al., 2015).

This makes it crucial to conduct research based on local conditions to develop targeted interventions and policy recommendations.

Therefore, this study aims to offer a detailed evaluation of food handling practices among food vendors in secondary schools in Jos North LGA, presenting essential information to support public health strategies aimed at reducing foodborne illnesses among students.

METHODOLOGY

Research Design

The research design adopted for this study is cross-sectional survey research design. Cross sectional survey research design requires that data are collected at a specific time from a sample for the purpose of re-counting at the time (Alexander, 2018). The choice of this design is based on the fact that data collected from representative of the population will be generalized on the whole population of all the food vendors in the 8 public secondary schools who are cooking food for students in Jos North Local Government Area of Plateau State. Cross sectional research design recognized the fact that the situation being studied might change later on and a different result might be obtained at a later period (Cherry, 2019).

Population And Sample

Population: The population of this study includes all the food vendors in the 8 public secondary schools who are cooking food for students in Jos North Local Government Area of Plateau State. The schools have a total population of 14 Principals, 253 teachers, 3,634 students and 46 Food vendors in Jos North Local Government Area as shown in Table 1.

Table 1

Population of all Public Secondary Schools, Principals, Teachers Students and Food Vendors in Jos North Local Government Area

School	Number of Students	Number of Teachers	Number of Food Vendors	Number of Principals	Total
A	900	30	7	2	939
B	787	38	8	2	835
C	240	33	4	2	279
D	246	18	2	2	268
E	370	27	6	2	405
F	180	23	8	1	212
G	650	62	6	2	720
H	261	22	5	1	289
Total	3,634	253	46	14	3,947

Source: Ministry of Education, Area Directorate Office (2023)

3.2.2 Sample: The population for the study consisted of 8 secondary schools. The sample for the study consisted of 360 students, 155 teachers, 46 food vendors and 14 principals. The choice of this sample is based on the fact that survey requires a large sample. The total sample for the study was 575. The distribution of the sample is presented in table 2

Table 2
Distribution sample size frame of Secondary School Students in Jos North Local Government Area of Plateau State

School	Number of Students	Number of Teachers	Number of Food Vendors	Number of Principals	Total
A	89	20	7	2	118
B	78	23	8	2	111
C	24	20	4	2	50
D	24	11	2	2	39
E	37	16	6	2	61
F	18	14	8	1	41
G	64	38	6	2	110
H	26	13	5	1	45
Total	360	155	46	14	575

Sampling Techniques: Proportional stratified sampling technique and simple random sampling technique was used for this study. Proportional stratified sampling are sampling techniques in which different strata in a population are identified and in which the number of elements are drawn from each stratum proportional to the relative number of elements in each stratum. This is to ensure that suitable number of participants from each strata is embodied in the final sample. Simple random sampling is where the researcher randomly selects a sub set of participants. The population is in subsets and large, the reason for the use of simple random sampling technique. The second stage is the selection of teacher, students and vendors. At this stage, Yaro Yamane formula will be used in determining the number of teachers to used, the number of students to use and the vendors to be use. The formula is given as follows:

$$N \frac{N}{1+N(e)^2} \text{ where } N= \text{ is the population, } 1= \text{ is constant } e= \text{ is error margin (Yamane, 1967).}$$

Using the formula, the number of principals sampled is 14, teachers 155, students 360 and vendors 46 were selected for the study making a total of 575 respondents. The reason for using Taro Yamane formula is because the population is large and the need for every element to be included in the sample. The reason for the choice of proportional stratification is that the strata are equal and the need to give every strata equal number of representation in the sample. See appendix B2 for the computation of the sample size using Taro Yamane formula.

A stratified sample techniques will be used in the selection of the teachers and students, for teacher, sampling fraction of ($sf = \frac{n}{N} = \frac{155}{253} = 0.6125$) will be used to allocate a required number of teachers in each school, for students ($sf = \frac{n}{N} = \frac{360}{3634} = 0.099$) will be used to allocate a required number of students in each school as shown appendix B1.

Instruments For Data Collection: Two instruments were used for data collection in this study namely: Students' Food Quality Questionnaire (**SFQQ**) and Food Safety Practices Questionnaire (**FSPQ**) as measuring instrument for this study. The instrument for data collection is presented in Appendix A2 and A3.

Description of the Instruments

a. Students' Food Quality Questionnaire (SFQQ): The Students' Food Quality Questionnaire (SFQQ): SFQQ was designed by the researcher. It was a closed ended questionnaire and it consisted of two sections, A and B. Section a consisted of the personal data of respondents, such as Age and gender, while section B seeks to elicit information on food safety practices.

b. Food Safety Practices Questionnaire (FSPQ): The food safety practices questionnaire contains food quality produced by food vendors (FQPFV), Level of food safety practices by food vendors (LFS), and Standard of food quality (SFQ).

Validity and Reliability of Instruments

Validity

A (SFQQ): The content was used to determine the validity of the questionnaire. Two experts from the Unit of Home Economics in the Department of Science and Technology and one from the Research Measurement and Evaluation Unit in the Department of Educational Foundations, Faculty of Education, University of Jos, scrutinized the questionnaire items. Kendall's coefficient of concordance was used to judge the agreement among the experts. This was because, according to Gay (2017), a validity index above 0.64 is adjudged acceptable. The experts critically scrutinized whether the items in the instrument adequately measured the content they were designed to measure. The three experts were given an instrument evaluation guide prepared in the form of a scale, which they used to make their judgments. They were also required to comment on the quality and appropriateness of the items in the questionnaire. Construct validity was established for the SFQQ scale using factor analysis, which determined the extent to which each statement in each subscale on the instrument measured the intended factors. The instrument was then subjected to a pilot study (see Appendix BIII).

B. Food Safety Practices Questionnaire(FSPQ): The content was used to determine the validity of the questionnaire. Two experts from the Unit of Home Economics in the Department of Science and Technology and one from the Research Measurement and Evaluation Unit in the Department of Educational Foundations, Faculty of Education, University of Jos, scrutinized the questionnaire items. Kendall's coefficient of concordance was used to judge the agreement among the experts. This was because, according to Gay (2017), a validity index above 0.64 is adjudged acceptable. The experts critically scrutinized whether the items in the instrument sufficiently measured the constructs they were designed to measure. The three experts were given the instrument evaluation guide prepared in the form of a scale, which they used to make their judgments. They were also required to comment on the quality and appropriateness of the items in the questionnaire. Construct validity was established for the FSPQ scale using factor analysis, which determined the extent to which each statement in each subscale on the instrument measured the factors in the instrument. The instrument was then subjected to a pilot study.

Reliability

- a. **Students' Food Quality Questionnaire (SFQQ):** Cronbach's Alpha was used to evaluate the reliability of the SFQQ after it was administered during the pilot study to a sample of teachers, students, and vendors who were not included in the main study. The reliability index was interpreted using the decision rule based on the benchmark suggested by Gall, Gall, and Borg (2007), who suggested that 0.50 is poor, 0.65 is the lowest level of acceptance, 0.70 is an acceptable level, and 0.80–0.90 is a preferably acceptable level of reliability. The analysis produced a Cronbach's Alpha of 0.970 which shows a high level of internal consistency.
- b. **Food Safety Practice Questionnaire (FSPQ):** Cronbach's Alpha was used to estimate the reliability of the FSPQ after it was administered during the pilot study to a sample of teachers, students, and vendors who were not involved in the main study. The data obtained were used in assessing the reliability of the instrument. Using the decision rule based on the benchmark by Gall, Gall, and Borg (2007), the reliability index was interpreted accordingly. The analysis produced a Cronbach's Alpha of 0.970 which shows a high level of internal consistency.

Procedure for Data Collection: The researcher got an introductory letter from the Head of Department of Science and Technology Education, Faculty of Education, University of Jos in order to visit the schools that were selected for the pilot study for the purpose of soliciting permission of the school authorities to use their schools for the study. The sample of such letter is shown in appendix A1. Having obtained permission from the schools' authorities, the researcher personally visit each school and administer the questionnaire on the Students' Attitude and Safety with the help of eleven research assistants who organized the students in their various intact classes. The Students' Food Quality Questionnaire (SFQQ) will be administered to the sample of 140 students and Food Safety Practices Questionnaire (FSPQ) will be administered on Food Vendors in the schools that will participate in the study.

Training of Research Assistants : The researcher trained eleven secondary school teachers to serve as research assistants from each school. They were teachers with a minimum qualification of B.Ed./PGDE. The eleven research assistants were trained for one-week on how to administer the research instrument and make observation, administration and collection of the filled questionnaire.

Administration of the Instrument: With the necessary consent sought from the competent authorities that is the principals of the various schools that were used for the study, the researcher and with the assistant of the research assistants administered the instrument to the food vendor first and secondly to the students in the selected schools before breaks periods.

Scoring of Students' Food Quality Questionnaire (SFQQ): The SFQQ were administered to the all the SSS 1-3 students who are the respondents in Jos North Local Government Area of Plateau State who will be selected from twelve selected secondary schools and this will be done in a classroom setting. This exercise was carried out by the research assistants and was supervised by the researcher. The data collected from the questionnaire was scored and entered into Microsoft excel. The responses from Section B is on Attention Paid on Student Food Quality consisting 3 items on the SFQQ will be scored on a 5-point scale of "1= very poor to", ..., "5 = Excellent", 3 - point scale of "1= Low to", ..., "3= High", and 5-point scale of "1= strongly disagreed to", ..., "5 = Strongly agreed", (Appendix A2).

Scoring of Food Safety Practices Questionnaire (FSPQ) : The FSPQ were administered to the all the food vendors who sell food in the government secondary schools in Jos North Local Government Area of Plateau State who were selected from twelve selected secondary schools and this was done

outside the classroom setting. This exercise was carried out by the research assistants and was supervised by the researcher. The data collected from the questionnaire was scored and entered into Microsoft excel. The responses from Section B are on Food Safety Practices by food vendors which consists of 3 items on the FSPQ will be scored on a dichotomous scale of "1= very poor to", ..., "5 = Excellent", 3 - point scale of "1= Low to", ..., "3= High", and 5-point scale of "1= strongly disagreed to", ..., "5 = Strongly agreed", (Appendix A2).

Method Data Analysis: Both descriptive and inferential statistics were used in the study. The descriptive statistics was used to answer the research questions, while inferential statistics was employed in testing the hypotheses at 0.05 level of significance. The data were analyzed with Statistical Package for Social Sciences (SPSS) version 27.0. Research questions 1 to 6 utilizing simple percentages, means, and standard deviation to summarize the data. Furthermore, research question 2, 3 and 4 were further examined using range to provide additional insights. Hypotheses 1 and 2 will be tested with independent sample t-test, hypothesis 3 was tested with Analysis of variance (ANOVA), while hypothesis 4 was tested using paired sample correlation test.

4.0 RESULTS

Table 3. Level of compliance to food safety practices by food vendors in secondary schools

											Range	Mean	SD
Low	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	10(33.3)	2.00	3.20	1.21
											2.00	3.36	1.13
Moderate	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	13(43.3)	2.00	3.30	1.24
											2.00	3.20	1.29
High	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	7(23.3)	2.00	2.86	1.25
											2.00	3.03	1.37
											2.00	2.96	1.33
											2.00	3.40	1.49
											2.00	3.33	1.45

No.: 30. Source: *Field Assessment*

The information from Table 3 shows how food vendors in secondary schools handle food, with each practice rated as "Low," "Moderate," or "High." It also gives the range, average, and standard deviation for each practice, helping to understand the general level of compliance and how responses vary.

Personal hygiene has an average of 3.20, which is in the "Moderate" to "High" range. However, 33.3% of vendors rated it as "Low," showing that personal hygiene practices are not the same across all vendors. Food storage knowledge has an average of 3.37, meaning vendors generally know how to store food properly. Cleaning and sanitizing scored 3.30, suggesting they follow cleaning practices at a moderate to high level. Safe food handling techniques had an average of 3.20, indicating a generally moderate to high level of compliance. Awareness of foodborne illnesses was lower, with an average of 2.87, putting it closer to "Moderate." Pest control knowledge had an average of 3.03, indicating moderate understanding. Awareness of food allergens scored 2.97, showing moderate compliance. Proper waste disposal had the highest average at 3.40, meaning vendors do it well, but 43.3% still rated it as "Low," showing inconsistency. Waste management had an average of 3.33, showing overall good compliance, but with 30% rating it as "Low" and 23.3% as "High," there is still room for improvement.

The results show that some areas need more training and action to improve food safety. The overall range of 2.00 shows similar performance across these areas, which means there is a need for more training and support to help vendors follow food safety standards better.

Hypothesis

There is no relationship between food safety practice and government regulation in secondary schools in Jos North LGA.

Table 4
Paired Samples Correlation Test on Food Safety Practice and Government Regulation in Secondary Schools in Jos North LGA

	N	Mean	SD	Df	t	P.val	Dec.
Food safety practices	30	18.33	5.47	29	28.960	.227	Accept H ₀
Government regulation	30	21.50	4.06	29	28.960	.228	

The results in Table 4 show the findings from a paired samples correlation test that looked at how food safety practices and government regulations are connected in secondary schools in Jos North Local Government Area. The study used a sample of 30 food vendors. On average, they gave food safety practices a score of 18.33 and government regulations a score of 21.50. This suggests that, overall, the vendors think government regulations are better or more consistent than their own food safety practices. When looking at how much the scores varied, food safety practices had a standard deviation of 5.47, meaning there was more spread in how people rated them. Government regulations had a standard deviation of 4.06, which shows that people's opinions about them were more similar. For both variables, the degrees of freedom were 29 because there were 30 participants. The test statistic, or T-

value, for both groups was 28.960, which shows how different the two sets of scores are. However, even though the mean scores were different, the P-values for food safety practices and government regulations were 0.227 and 0.228, which are both higher than the usual significance level of 0.05. This means the differences we saw are not big enough to be statistically significant. Since the P-values are above 0.05, we don't have enough evidence to reject the null hypothesis. This tells us there's no strong connection between food safety practices and government regulations in this context. In other words, the differences between the two groups aren't strong enough to say one affects the other. So, we accept the null hypothesis.

DISCUSSIONS

The findings of this study are similar to findings from other studies conducted in various locations. These studies dependably highlight comparable challenges in adhering to food safety guidelines and stress the importance of enhanced training and stricter oversight. Leslie et al. (2021) studied food safety and hygiene practices among vendors in public primary schools in Ogun State, Nigeria. They discovered that most vendors had modest to high levels of knowledge about food safety, which aligns with our findings. But there were differences in personal hygiene and waste management practices, which entail continual attention. We also recognized the need for more training and better enforcement, which is consistent with their findings Hassan and Fweja (2020) studied street food vendors in Zanzibar and discovered that in general, they adhered to safety guidelines to a moderate extent. They emphasized key weaknesses in environmental cleanliness. Their research also disclosed that increased education and training improved compliance, which agrees with the idea that targeted education programs could help improve food safety practices among vendors in secondary schools.

In terms of government regulations and food safety, several studies highlight the importance of these rules in ensuring food safety. However, they also frequently point out that these rules are not consistently followed. A review by SmrtrSolutions (2024) stated that simply having rules is not sufficient—there must be proper monitoring and support, which aligns with our findings. A study in Ethiopia also found that vendors had poor personal hygiene and waste management practices, indicating the need for better food safety education and stronger regulations. This is in consonance with the issues we observed in this study. These studies demonstrate that while there is knowledge and existing regulations, ensuring constant adherence remains a challenge in many contexts. Common issues include inadequate resources, inadequate training, and weak enforcement. These findings clearly indicate the need for improved education for vendors and stronger government oversight.

CONCLUSION

This study discovered that food vendors in secondary schools generally follow food safety practices to a moderate level. They perform reasonably well in areas such as proper food storage and waste management. However, there are clear issues in personal hygiene, understanding of foodborne illnesses, and knowledge about pest control. Notwithstanding the existence of government regulations, we did not find a strong link between these regulations and the actual compliance of vendors with food safety practices. This indicates a gap between policy and practice, likely as a result of problems related to enforcement, training, and limited resources. The findings highlight the need for focused strategies to enhance the reliability and effectiveness of food safety practices in schools, with the ultimate goal of protecting student health.

RECOMMENDATIONS

- **Enhanced Training Programs:** Food vendors should constantly participate in comprehensive training sessions that focus on personal hygiene, understanding foodborne illnesses, effective pest control strategies, and suitable waste management practices.
- **Strengthened Government Oversight:** Regulatory bodies must intensify their monitoring and enforcement efforts to make sure that food safety regulations are constantly upheld by vendors.
- **Collaboration Between Schools and Regulators:** Schools should work closely with local health and regulatory agencies to assist vendors in sustaining high standards of food safety, including regular assessments and constructive feedback.
- **Availability of Essential Resources:** It is vital to guarantee that vendors have access to critical resources such as clean water, proper sanitation facilities, and pest control supplies to effectively implement recommended safety measures.
- **Ongoing Awareness Campaigns:** Regular awareness initiatives targeting both food vendors and the school community can emphasize the importance of food safety and inspire adherence to established guidelines.

By employing these recommendations, food safety practices among secondary school vendors can be enhanced, leading to a reduction in foodborne illness cases and the creation of a safer environment within schools.

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