BloEx - Journal
Britain International of
EXACT Sciences Journal
Publish: | January - May - September |
E-ISSN: 2686-1208
P-ISSN: 2686-1216
http://biarjournal.com/index.php/bioex

Health Implications of Low Vegetables and Local Gin Consumption amongst the Elderly in Ugheli, Delta State, Nigeria

Okadigwe John Chukwujekwu
Department of Home Economics, Nwafor Orizu College of Education Nsugbe in Affiliation with the University of Nigeria Nsukka.
Email: jekwuokad@gmail.com

Abstract:

The study delves into the critical topic of dietary habits and alcohol consumption patterns among the elderly in Ugheli, Delta State, Nigeria. This investigation aims to shed light on the health implications of low vegetable consumption and local gin intake within this aging population. The research addresses the pressing issue of the health and well-being of the elderly in Ugheli, Delta State. Specifically, it focuses on two critical problems: low vegetable consumption and excessive local gin consumption. These issues are of concern due to their potential adverse effects on the health of older adults. Local gin consumption may stem from cultural practices and limited understanding of its health risks. To address these problems, a survey research approach was employed. The sample size included 375 retirees from various communities within Ugheli. This sample size was determined using a stratified non-proportional sampling method. The research findings revealed that low vegetable consumption was associated with health risks such as weight gain, digestive problems, goiter, increased cancer risk, and various chronic conditions. Local gin consumption among the elderly was linked to poor coordination, central nervous system depression, excessive appetite, excessive urination, and low blood glucose levels. This research carries significant implications for the elderly population in Ugheli, Delta State. By highlighting the health risks associated with low vegetable consumption and excessive local gin intake, it underscores the need for tailored interventions, education programs, improved access to fresh produce, and cultural sensitivity in healthcare approaches. Ultimately, this study aims to improve the overall health and quality of life of older adults in the region.

Keywords:
Health implications, low vegetables consumption, local gin consumption, elderly, Ugheli, Delta State.

I. Introduction

The world is experiencing a demographic shift towards an aging population, primarily driven by increased life expectancy and declining birth rates. According to the United Nations, the number of individuals aged 60 and over is expected to more than double by 2050, reaching approximately 2.1 billion people globally (WHO, 2022). This demographic transition poses unique health challenges as older adults often face a higher risk of chronic diseases, reduced mobility, and cognitive decline. Nutrition plays a crucial role in mitigating these challenges and promoting healthy aging.

As the global population ages, the health and well-being of the elderly have become increasingly important topics of concern for healthcare professionals, researchers, and policymakers. Among the various factors influencing the health of older adults, dietary choices play a pivotal role (Chaffee & Ross, 2023). In particular, the consumption of vegetables, or lack thereof, has a profound impact on their nutritional status and overall health.

Simultaneously, the consumption of local gin, a practice prevalent in some regions, can pose health risks when indulged in excessively. A balanced diet rich in fruits and vegetables is essential for people of all ages (Bvenura & Sivakumar, 2017). However, for the elderly, whose bodies may be less efficient at absorbing nutrients, proper nutrition becomes even more critical. Vegetables, in particular, offer a wealth of vitamins, minerals, antioxidants, and dietary fiber, which can have a profound impact on health.

Vegetables are packed with essential nutrients such as vitamins (e.g., vitamin C, vitamin K), minerals (e.g., potassium, magnesium), and phytochemicals. These nutrients are vital for maintaining bone health, supporting the immune system, and preventing chronic diseases like cardiovascular disease and certain cancers (Liu, 2013). High-fiber vegetables contribute to digestive health by preventing constipation and promoting regular bowel movements. Fiber also helps control blood sugar levels and reduces the risk of type 2 diabetes. Many vegetables are rich in antioxidants, which combat free radicals in the body and reduce oxidative stress (Jideani, Silungwe, Takalani, Omolola, Udeh & Anyasi, 2021). This can help protect cells and tissues from damage and may contribute to cognitive health. Vegetables like cucumbers, tomatoes, and zucchinis have high water content, contributing to proper hydration, especially in older adults who may be prone to dehydration. Including vegetables in the diet can aid in weight management by providing satiety with fewer calories (Norman, Kolodziejczyk, Adams, Patrick, & Marshall, 2013). This is particularly relevant for older adults who may need to manage their weight to prevent obesity-related health issues.

Despite the clear benefits of vegetable consumption, studies have consistently shown that many elderly individuals do not meet recommended daily intake levels. Several factors contribute to this concerning trend. As people age, they may experience dental problems or digestive issues that make it challenging to consume and process raw or fibrous vegetables (Dreher & Ford, 2020). Some older adults may face barriers to accessing fresh, affordable vegetables, particularly if they live in food deserts or have limited mobility. Changes in taste perception can lead to a decreased appetite for vegetables. Some older individuals may find vegetables less appealing due to altered taste buds. Cooking and meal preparation can become more difficult with age, leading to reliance on processed and convenience foods, which are often lacking in vegetables (Diamantis, Emmett & Taylor, 2023). Many older adults may not fully understand the importance of vegetables in their diets or how to incorporate them into their meals effectively.

In addition to concerns about low vegetable intake, some elderly populations engage in the consumption of local gin or other alcoholic beverages. While moderate alcohol consumption has been associated with certain health benefits, excessive or irresponsible drinking can have detrimental effects on older adults' health (Naik, Lee, Wu, Washburn & Ramadoss, 2022). Excessive alcohol consumption can lead to a range of health problems, including liver damage, cardiovascular issues, and increased risk of falls and fractures, and exacerbation of chronic conditions such as diabetes and hypertension (Herrera, Campos-Romero, Szabo, Martínez, Guajardo & Rojas, 2021). Many older adults take multiple medications, and alcohol can interact negatively with certain drugs, potentially reducing their effectiveness or causing adverse reactions. Heavy alcohol consumption can impair cognitive function and may contribute to the development or exacerbation of conditions like dementia (Howard, Perrotte, Flores, Leong, Nocito & Howard, 2022). While moderate alcohol consumption can be a social activity, excessive drinking can lead to social isolation, as it may contribute to strained relationships and withdrawal from social interactions.

There exists a significant research gap in the understanding of low vegetable consumption and local gin consumption among the elderly population in Ugheli, Delta State, which demands attention and investigation. First, regarding low vegetable consumption, the region is marked by health disparities, limited healthcare access, and distinct dietary habits. Despite these unique factors, there is limited specific research focusing on the elderly in this area. This gap hinders the development of targeted interventions to address the dietary challenges that elderly individuals in Ugheli face. It's essential to study low vegetable consumption because it can lead to nutrient deficiencies, exacerbating age-related health issues, including the increasing prevalence of chronic diseases such as cardiovascular conditions, diabetes, and obesity. Furthermore, cultural and socioeconomic factors often play a significant role in dietary choices, making it crucial to explore these influences within the context of Ugheli, Delta State.

Similarly, there's a pronounced gap in research concerning the impact of locally produced gin on the health of the elderly population in this region. Local gin consumption is a prevalent practice, but its specific risks, prevalence among the elderly (Akpata, Adeniyi, Enwonwu, Adeleke & Otoh, 2016), and its unique effects on their health remain largely unexplored. Investigating this issue is vital as locally produced alcoholic beverages may lack quality control and safety standards, potentially harming the health of the elderly population. Such research can shed light on the patterns, frequency, and quantity of local gin consumption among the elderly, along with the associated risks, particularly regarding liver damage and cognitive impairment. Moreover, understanding local gin consumption within its cultural and social context is crucial to identifying contributing factors and designing culturally sensitive interventions. Overall, addressing these gaps in research is imperative to improve the health and well-being of the elderly in Ugheli, Delta State, considering their vulnerability to various health issues influenced by dietary choices and alcohol consumption.

1.1 Statement of the problem

The elderly population in Ugheli, Delta State, faces a growing concern regarding their health and well-being, which is associated with specific dietary and lifestyle choices. Two critical issues of concern within this demographic group are the low consumption of vegetables and the consumption of locally produced gin. These issues raise significant health implications that warrant thorough investigation and analysis. Low vegetable consumption among the elderly in Ugheli, Delta State, presents a pressing problem for several reasons. First, vegetables are a vital source of essential nutrients, vitamins, and antioxidants that contribute to overall health and well-being. The low consumption of vegetables can result in nutritional deficiencies and a lack of dietary fiber, potentially leading to various health complications, such as cardiovascular diseases, diabetes, and obesity. Understanding the health implications of this dietary pattern is crucial for developing effective intervention strategies to improve the health outcomes of the elderly population.

The consumption of locally produced gin among the elderly population in Ugheli, Delta State, is a significant concern due to its potential adverse health effects. Local gin often contains high levels of alcohol and may lack quality control measures, raising concerns about its safety and impact on health. Excessive and frequent local gin consumption can lead to various health problems, including liver damage, cognitive impairment, and mental health issues. Investigating the health impact of local gin consumption is essential for understanding the extent of the problem and developing targeted interventions to mitigate its adverse effects on the elderly population.

1.2 Purpose of the study

The major purpose of this study was to assess the health implications of low vegetables and local gin consumption amongst the elderly in Ugheli, Delta State. The study specifically aimed to:

1. investigate the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State
2. assess the impact of local gin consumption on the health of the elderly population in Ugheli, Delta State

1.3 Research questions

1. What are the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State?
2. What are the health implications of local gin consumption amongst the elderly in Ugheli, Delta State?

1.4 Research hypotheses

H01: There is no significant difference in the mean scores on the responses on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State.

H02: There is no significant difference in the mean scores on the responses on the health implications of local gin consumption amongst the elderly in Ugheli, Delta State.

II. Reserach Methods

The research employed a blend of experimental and survey techniques to fulfill its research objectives. These objectives revolved around the health implications of low vegetables consumption amongst the elderly as well as assess the impact of local gin consumption on the health of the elderly population. The rationale for selecting this research methodology stemmed from the need to involve both elderly individuals and nutrition experts in the study process. The study was conducted in the Ughelli North local government area of Delta State, Nigeria. This area is recognized for its diverse ethnic composition, initially inhabited by the Urhobo community and subsequently settled by various Nigerian ethnic groups, including the Igbo and Edo. Ughelli plays a significant role in manufacturing and agriculture within Delta State. The study's population consisted of the 24 Kingdoms that make up Ughelli, hosting a total of 19,235 retirees, representing the elderly demographic. Using data from the Delta State Ministry of Labour in 2021, it was estimated that there were 19,235 retirees in this region. To form the study sample, 375 retirees were selected from these 24 Kingdoms, employing a stratified non-proportional sampling method.

Given the challenge of accurately estimating the total number of retirees across all Kingdoms, a sampling strategy was applied. Data collection involved the use of self-structured questionnaires, which underwent evaluation by three senior staff members at the Rivers State University Teaching Hospital in Port Harcourt. To ensure the reliability of the questionnaires, a trial test was conducted involving 15 elderly individuals and 15 medical practitioners over a two-week period. This resulted in Cronbach Alpha reliability scores of .876, .896, and .957 for different sets of questionnaires. Five research assistants received training in questionnaire administration. A total of 375 questionnaires were distributed to retirees, and 275 were distributed to healthcare professionals through direct interaction. The study achieved a high response rate, with a total of 368 questionnaires collected, including 198 from male retirees, 170 from female retirees, 140 from male healthcare professionals, and 130 from female healthcare professionals. Data collection encompassed a 24-hour dietary recall method, prompting participants to recall their food and beverage intake from the previous day.

III. Results and Discussion

Table 1. 24 Hour dietary recall of elderly persons in Ugheli

Drinks	**n=198 Males**		**n=170 Females**	
	F	**%**	**F**	**%**
No consumption of any drink	78	39.3	61	35.8
Coke and any other minerals	69	34.8	80	47.0
Any juice	45	22.7	64	37.6
Gin	138	69.6	99	58.2
Malt drink	12	6.0	28	16.4
Vegetables				
None consumption of vegetables	95	47.9	87	51.1
Consume various types of vegetables	103	52.0	83	48.9

Keys: F=frequency; %=percent

Table 1 reveals that while 47.9% of men and 51.1% of women did not eat vegetables, 52.1% and 48.8% of men and women, respectively, ate a variety of vegetables. There were almost 40 percent of men and 35 percent of women who didn't drink anything save water. Between 6 and 47 percent of men and women, respectively, drank beverages containing minerals, juice, or malt. Gin consumption was high overall, with men drinking far more of it (69.9%) than women (58.2%).

Table 2. Average Daily Nutrient intake of the elderly in Ugheli

	Energy (Kcal)	**CHO (g)**	**Protein (g)**	**Fat (g)**	**Calcium (mg)**	**Phosp-horus (mg)**	**Iron (mg)**	**Thia-mine (mg)**	**Ribof-lavin (mg)**	**Niacin (mg)**	**Vit C (mg)**
Males	2044	388.3	27.7	42.2	568.9	684.9	20.9	1.2	0.7	8.8	24.6
%DRI	97.2	298.3	49.5	72.8	47.4	97.8	261.3	100	53.9	55.0	27.3
Females	1805.2	353.1	23.0	33.4	653.7	674.1	20.1	1.2	0.7	8.9	17.5
%DRI	100.3	271.6	50.9	66.8	54.5	96.3	251.3	109	63.6	63.6	23.3
Sig(2-tailed)	0.014*	0.00*	0.049*	0.092*	0.021*	0.785*	0.816*	0.962*	0.897*	0.775*	0.056*

Keys: Kcal=kilocalories; g= grammes; mg=miligrammes; DRI= Dietary Reference Intakes (used to assess reference intakes of healthy people); %=percent
*Statistically significant at 95% confidence interval

Analysis of the nutrient intake data shown in Table 2 demonstrates that males had a considerably (p 0.05) greater mean consumption of energy (2044 Kcal/day), carbohydrates (388.3g), protein (27.7g), and fat (42.2g) than women do. Also, males consumed more phosphorus, iron, thiamine, riboflavin, niacin, and vitamin C than women did, whereas women consumed more calcium.

Research Question 1: What are the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State?

Table 3. Mean and Standard Deviation on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State

	n=140 Males			n=130 Females					
	$\overline{X}$	SD	RMK	$\overline{X}$	SD	RMK	AM	ASD	RMK
Low vegetables consumption:									
1. causes nutrient deficiencies	2.75	.622	A	2.71	.668	A	2.74	.643	A
2. increases the risk of obesity	2.94	.741	A	2.94	.736	A	2.94	.738	A
3. causes cardiovascular problems	2.82	.714	A	2.93	.640	A	2.87	.682	A
4. increases the risk of digestive problems	2.84	.905	A	2.86	.706	A	2.85	.817	A
5. causes weight gain risk	2.92	.766	A	2.89	.742	A	2.90	.754	A
6. causes depression	2.81	.632	A	2.81	.632	A	2.81	.632	A
7. metabolic disorders	2.83	.678	A	2.90	.709	A	2.87	.692	A
8. digestive problems	2.95	.876	A	2.03	.877	A	2.99	.876	A
9. leads to poor vision/eye problems	2.77	.653	A	2.88	.688	A	2.82	.671	A
10. lower blood pressure	2.65	.590	A	2.77	.620	A	2.71	.606	A
11. increases the risk of stroke	2.89	.705	A	2.89	.734	A	2.89	.717	A
12. increases the risk of cancer	2.91	.689	A	2.86	.676	A	2.89	.682	A
13. increases the risk of osteoporosis	2.85	.849	A	2.90	.851	A	2.87	.849	A
14. increases the risk of goiter	3.01	.905	A	3.14	.880	A	3.07	.895	A

Keys: $\overline{X}$ = mean; SD=Standard Deviation; n=no of sample; A=Agree; AM= Average Mean; ASD= Average Standard Deviation; RMK=Remark

As you can see from Table 3e, the elderly in Ugheli, Delta State, rated the health risks associated with a diet deficient in vegetables less favorably than younger generations. According to the statistics, items 1-14 were supported by a mean score of 2.50 or above, which indicated consensus. Between.632 and.895 was the average standard deviation's range. Item 14 had the greatest average mean score, at 3.07, while item 1 had the lowest, at 2.71, as seen in the table.

Research Question 2: What are the health implications of local gin consumption amongst the elderly in Ugheli, Delta State?

Table 4. Mean and Standard Deviation on the health implications of local gin consumption amongst the elderly in Ugheli, Delta State

	n=140 Males			n=130 Females					
	$\overline{X}$	SD	RMK	$\overline{X}$	SD	RMK	AM	ASD	RMK
Consumption of local gin causes:									
1. Causes distorted hearing	2.89	.705	A	2.81	.667	A	2.82	.687	A
2. Poor vision	2.63	.561	A	2.65	.615	A	2.64	.586	A
3. Poor coordination	2.91	.745	A	2.91	.737	A	2.91	.740	A
4. Altered emotions	2.81	.632	A	2.89	.624	A	2.84	.628	A
5. Depresses the central nervous system	2.88	.729	A	2.88	.697	A	2.88	.713	A
6. Causes low blood glucose (sugar)	2.95	.878	A	3.04	.847	A	2.99	.864	A
7. Causes seizures	2.80	.707	A	2.94	.728	A	2.87	.719	A
8. Causes nutrition problems in the older adults	2.76	.620	A	2.75	.645	A	2.76	.6A	
9. Excessive urination	2.91	.643	A	2.73	.665	A	2.82	.659	A
10. Loss of weight	2.96	.822	A	2.89	.813	A	2.93	.817	A
11. Excessive appetite for food	2.91	.842	A	2.84	.709	A	2.87	.783	A

Keys: $\overline{X}$ = mean; SD=Standard Deviation; n=no of sample; D=Disagree; AM= Average Mean; ASD= Average Standard Deviation; RMK=Remark

The average ratings and standard deviation of the potential risks associated with local gin intake among the elderly in Ugheli, Delta State, were displayed in Table 4. If the mean score of an item was 2.50 or above, as was the case for items 1-11, then we may infer that they were all broadly accepted. Within that band, the average standard deviation was.586 to.864. The chart also revealed that item 6 had the highest mean score, at 2.99, while item 1 had the lowest, at 2.64. (item 2).

$H0_1$: There is no significant difference in the mean scores on the responses on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State.

Table 5. Analysis of Variance on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.055	1	.055	.101	.751
Within Groups	203.294	373	.545		
Total	203.349	374			

Key: Sig=p-value; df= degree of degree; F=F Statistics
Reject H_0 if ($p<0.05$), otherwise retain

Table 5 revealed the Analysis of Variance on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State. The p-values is greater than .05 ($p>.751$). The $H0_3$ was retained afterwards. The implication is that the responses of the male and female respondents were similar on the health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State.

$H0_2$: There is no significant difference in the mean scores on the responses on the health implications of local gin consumption amongst the elderly in Ugheli, Delta State.

Table 6. Analysis of Variance on the health implications of consumption of local gin amongst the elderly in Ugheli, Delta State

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.149	1	.149	.279	.598
Within Groups	199.520	373	.535		
Total	199.669	374			

Key: Sig=p-value; df= degree of degree; F=F Statistics
Reject H_0 if ($p<0.05$), otherwise retain

Table 6 revealed the Analysis of Variance (ANOVA) on the health implications of consumption of local gin amongst the elderly in Ugheli, Delta State. The p-value is greater than .05 ($p>.598$). The $H0_4$ was subsequently retained. The implication is that the responses of the male and female respondents were similar on the health implications of local gin consumption amongst the elderly in Ugheli, Delta State.

3. 1 Discussion of the Findings

The results showed that health implications of low vegetables consumption amongst the elderly in Ugheli, Delta State includes weight gain risk, increases the risk of digestive problems, increases the risk of goiter, increases the risk of cancer, and digestive problems. Low vegetable consumption among the elderly in Ugheli, Delta State, Nigeria, poses significant health implications that warrant attention and intervention. The region's dietary habits, which may be influenced by cultural, economic, or accessibility factors, can contribute to adverse health outcomes for older adults. Insufficient vegetable intake can lead to an imbalanced diet, often high in calorie-dense foods but low in essential nutrients (Cunningham & Egeth, 2018). This imbalance according to Sharma, Mittal, Aggarwal & Chauhan (2020) can contribute to weight gain and obesity, which are risk factors for various chronic conditions, including heart disease, diabetes, and joint problems. Low vegetable consumption can result in constipation and other digestive issues, causing discomfort and potential long-term complications (Lorimer, Traviss-Turner, Hill, Baker, Gilbody & Peckham, 2023). Inadequate intake of vegetables, especially those rich in iodine, can increase the risk of goiter, an enlargement of the thyroid gland. Iodine deficiency, often associated with low vegetable consumption, is a contributing factor to goiter prevalence in some regions (Bvenura & Sivakumar, 2017). A diet lacking in vegetables may deprive individuals of essential antioxidants, vitamins (e.g., vitamin C and beta-carotene), and phytochemicals that help protect cells from damage and reduce the risk of cancer. Insufficient vegetable consumption has been linked to a higher incidence of various cancers. The fiber content in vegetables aids in maintaining healthy digestion by promoting regular bowel movements and preventing issues like diverticulosis (Jideani, Silungwe, Takalani, OmololaUdeh & Anyasi, 2021). A lack of vegetables in the diet can lead to gastrointestinal discomfort and an increased risk of digestive disorders.

The results also showed that the health implications of local gin consumption amongst the elderly in Ugheli, Delta State includes Poor coordination, Depresses the central nervous system, excessive appetite for food, excessive urination, and causes low blood glucose (sugar). Local gin consumption among the elderly in Ugheli, Delta State, Nigeria, can have profound and detrimental health implications. Traditional alcoholic beverages, including locally brewed gins, are often consumed in social, cultural, or ritual contexts (Lentz, 2013). Local gin, typically having a high alcohol content, can impair motor skills and coordination. For elderly individuals, already at risk of balance and mobility issues, alcohol-induced poor coordination can lead to an increased risk of falls, liver failure and other injuries (King, Nephew, Choudhury, Poirier, Lim & Mandrekar, 2020). Alcohol is a central nervous system depressant, meaning it slows down brain function. Among the elderly, who may already be experiencing age-related cognitive changes, excessive alcohol consumption can exacerbate memory problems and impair cognitive function. Local gin consumption may stimulate excessive appetite for high-calorie foods, often leading to overeating and weight gain (White, Orosz, Powell & Koob, 2023). This, in turn, can increase the risk of obesity and related health conditions. Alcohol acts as a diuretic, causing increased urination. In elderly individuals, who may be prone to dehydration, this can lead to further fluid loss and electrolyte imbalances, potentially exacerbating existing health issues. Alcohol can interfere with blood sugar regulation, leading to hypoglycemia (Ding & Yang, 2021). For elderly individuals with diabetes or other metabolic conditions, this can be particularly dangerous and may result in confusion, dizziness, or even loss of consciousness.

A significant portion of both males and females reported no beverage consumption, raising concerns about hydration and nutrition. Females showed a preference for cola and juice, while males had higher gin consumption, reflecting gender-specific patterns. Vegetable

intake was alarmingly low, with about half reporting no vegetable consumption. The results emphasize the need for interventions to promote hydration, healthier beverage choices, and increased vegetable consumption among the elderly in Ugheli to improve their overall nutritional well-being.

IV. Conclusion

In conclusion, the study on the health implications of low vegetable consumption and local gin consumption among the elderly in Ugheli, Delta State, highlights the pressing need for targeted interventions and increased awareness to address the unique challenges faced by this vulnerable population. The findings of this research have revealed that low vegetable consumption among the elderly in Ugheli is associated with a range of adverse health effects, including weight gain, digestive problems, goiter, increased cancer risk, and various chronic conditions. These health implications underscore the importance of incorporating a variety of vegetables into the diets of older adults to ensure adequate intake of essential nutrients, antioxidants, and dietary fiber. Addressing the barriers to vegetable consumption, such as accessibility and taste preferences, is crucial to improving the overall health and well-being of the elderly in this region.

Similarly, the study has shed light on the health risks associated with local gin consumption among the elderly. Excessive alcohol intake, particularly in the form of locally produced gin, can lead to poor coordination, central nervous system depression, excessive appetite for food, excessive urination, and low blood glucose levels. These findings emphasize the need for awareness campaigns and interventions to promote responsible alcohol consumption and reduce the health risks posed by local gin. Furthermore, this research has highlighted the importance of considering cultural, economic, and accessibility factors when designing interventions for the elderly in Ugheli. Tailored approaches that respect local traditions and address specific challenges are essential for effectively improving the dietary and lifestyle choices of older adults in this region.

References

Akpata, E. S., Adeniyi, A. A., Enwonwu, C. O., Adeleke, O. A., & Otoh, E. C. (2016). Association between alcohol consumption and periodontal disease among older N igerians in plateau state: a preliminary study. Gerodontology, 33(3), 386-394.

Bvenura, C., & Sivakumar, D. (2017). The role of wild fruits and vegetables in delivering a balanced and healthy diet. Food Research International, 99, 15-30.

Chaffee, O., & Ross, C. F. (2023). Older adults' acceptance of ready-to-eat meals in relation to food choice and sensory ability. Journal of Food Science.

Cunningham, C. A., & Egeth, H. E. (2018). The capture of attention by entirely irrelevant pictures of calorie-dense foods. Psychonomic bulletin & review, 25, 586-595.

Diamantis, D. V., Emmett, P. M., & Taylor, C. M. (2023). Effect of being a persistent picky eater on feeding difficulties in school-aged children. Appetite, 183, 106483.

Ding, S., & Yang, J. (2021). The effects of sugar alcohols on rheological properties, functionalities, and texture in baked products–A review. Trends in Food Science & Technology, 111, 670-679.

Dreher, M. L., & Ford, N. A. (2020). A comprehensive critical assessment of increased fruit and vegetable intake on weight loss in women. Nutrients, 12(7), 1919.

Herrera, P. A., Campos-Romero, S., Szabo, W., Martínez, P., Guajardo, V., & Rojas, G. (2021). Understanding the relationship between depression and chronic diseases such

as diabetes and hypertension: a grounded theory study. International journal of environmental research and public health, 18(22), 12130.
Howard, J. T., Perrotte, J. K., Flores, K., Leong, C., Nocito, J. D., & Howard, K. J. (2022). Trends in binge drinking and heavy alcohol consumption among pregnant women in the US, 2011 to 2020. JAMA Network Open, 5(8), e2224846-e2224846.
Jideani, A. I., Silungwe, H., Takalani, T., Omolola, A. O., Udeh, H. O., & Anyasi, T. A. (2021). Antioxidant-rich natural fruit and vegetable products and human health. International Journal of Food Properties, 24(1), 41-67.
King, J. A., Nephew, B. C., Choudhury, A., Poirier, G. L., Lim, A., & Mandrekar, P. (2020). Chronic alcohol-induced liver injury correlates with memory deficits: Role for neuroinflammation. Alcohol, 83, 75-81.
Lentz, C. (2013). Alcohol consumption between community ritual and political economy: Case studies from Ecuador and Ghana. In Changing Food Habits (pp. 155-179). Routledge.
Liu, R. H. (2013). Health-promoting components of fruits and vegetables in the diet. Advances in nutrition, 4(3), 384S-392S.
Lorimer, B., Traviss-Turner, G., Hill, A., Baker, S., Gilbody, S., & Peckham, E. (2023). Factors associated with low fruit and vegetable consumption among people with severe mental ill health. Social psychiatry and psychiatric epidemiology, 1-5.
Naik, V. D., Lee, J., Wu, G., Washburn, S., & Ramadoss, J. (2022). Effects of nutrition and gestational alcohol consumption on fetal growth and development. Nutrition Reviews, 80(6), 1568-1579.
Norman, G. J., Kolodziejczyk, J. K., Adams, M. A., Patrick, K., & Marshall, S. J. (2013). Fruit and vegetable intake and eating behaviors mediate the effect of a randomized text-message based weight loss program. Preventive medicine, 56(1), 3-7.
Sharma, A., Mittal, S., Aggarwal, R., & Chauhan, M. K. (2020). Diabetes and cardiovascular disease: inter-relation of risk factors and treatment. Future Journal of Pharmaceutical Sciences, 6(1), 1-19.
White, A. M., Orosz, A., Powell, P. A., & Koob, G. F. (2023). Alcohol and aging–An area of increasing concern. Alcohol, 107, 19-27.
WHO (2022). Ageing and health. Retrieved 10/09/2023 from https://www.who.int/news-room/fact-sheets/detail/ageing-and-health#:~:text=By%202050%2C%20the%20world's%20population,2050%20to%20reach%20426%20million.