

AN ASSESSMENT OF AWARENESS OF THE EFFECTS OF FREQUENT CONSUMPTION OF INSTANT NOODLES ON THE HEALTH OF STUDENTS IN TERTIARY INSTITUTIONS IN OSUN STATE

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Abstract

The study assessed the awareness of the effects of frequent consumption of instant noodles on health among students in tertiary institutions in Osun State. Three research questions were raised with their corresponding hypotheses. The population of the study was made up of Students in tertiary institutions in Osun State. Descriptive research design was used for the study. Data were collected from One thousand, two hundred (1,200) respondents through the use of self-designed and validated questionnaire. A multistage random sampling techniques were used in the respondent's selection process. Test-retest method of reliability was used and a reliability coefficient of 0.89 was obtained through Spearman Brown's correlation co-efficient formula. Findings from the study revealed that students in Tertiary Institutions were aware of some of the component of the ingredients used in manufacturing instant noodles. They were aware of the health implications of frequent consumption of instant noodles. Students equally identified ways by which instant noodles could be fortified to be more nutritious. Based on the findings of this study, the following recommendations were made: Instant noodle brands with low-sodium content should be preferred to ones with high sodium. Frequent consumption of instant noodles should be discouraged and that Instant Noodles should be fortified with Eggs, chickens or meat to increase the meals' protein. Leafy greens, chopped vegetables, tofu, should equally be added to improve protein and fiber content.

Key words: Instant Noodles, Tertiary Institutions, awareness, consumption, Nutrition, health implication. fortification.

Introduction

The development of technologically advanced methods to provide substitutes for extremely nutritious natural foods has had a significant negative impact on human nutrition over time. Since its creation in 1958, millions of people worldwide have come to adore instant noodles as a convenient food. With the introduction, widespread use, and celebration of instant noodles among people, particularly young population, and with its resultant severe health consequences. Prudence, aggressive campaign, and education on how to improve human nutrition are necessary to keep the world's population healthy. The study assessed how students at Osun State's tertiary institutions perceived the impacts of frequent consumption of instant noodles on their health. In every stage of life, the globe is accelerating on a global scale. In order to maximize their freedom and pleasure while downplaying or ignoring the potential negative consequences of their acts, people are constantly searching for an easy way out.

Problems Statement/Justification

The development of technologically advanced methods to provide substitutes for extremely nutritious natural foods has had a significant negative impact on human nutrition over time. Since its creation in 1958, millions of people worldwide have come to adore instant noodles as a convenient food. With the introduction, widespread use, and celebration of instant noodles among people, particularly young population, and with its resultant severe health consequences, prudence, an aggressive campaign, and education on how to improve human nutrition are necessary to keep the world's population healthy. Excessive sodium used in instant noodles can lead to issues like renal damage, high blood pressure, and water retention. Instant noodles are not a sustainable source of energy and do not offer enough nutrition. If consumed frequently, the high carbohydrate content of instant noodles can lead to weight gain and obesity. stomach cancer as well as weak immune system, kidney, heart and liver problems could also be linked to frequent consumption of Instant Noodles. The primary goal of this study therefore, was to assess the level of awareness of Students in Osun State tertiary institutions on the impacts of frequent consumption of instant noodles on their health.

Objectives of the Study.

The objectives of the study are to:

- a) assess the level of awareness of component of the ingredients used in manufacturing instant noodles among students in Tertiary Institutions in Osun State.
- b) find out if students are aware of the health implications of frequent consumption of instant noodles.
- c) identify ways by which instant noodles could be fortified to be more nutritious.

Research Questions

1. Are the Students in Tertiary Institutions in Osun State aware of component of the ingredients used in manufacturing instant noodles?

2. Are they aware of the health implications of frequent consumption of instant noodles?
3. Do students in Tertiary Institutions in Osun State identify ways by which instant noodles could be fortified to be more nutritious?

Research Hypotheses

HO1: There is no significant relationship between students' awareness of component of ingredients used in manufacturing Instant Noodles and their perception on its implications on their health.

HO2: Frequent consumption of Instant Noodles does not have any significant relationship with health implications.

HO3: There is no significant relationship between students' identification of ways by which instant noodles could be fortified to be more nutritious and their readiness to comply.

Literature Review

A form of dish known as "instant noodles," or "instant ramen," is made up of noodles that have been precooked, dried, and flavoured with oil or powder. Mohammed (2023) expressed that within three minutes preparation, instant noodles is ready to be consumed and this has won the heart of people in which 270 million servings are eaten every day. The excessive sodium content in instant noodles, however, can cause a number of health problems. Although sodium is a necessary nutrient, excessive use of it can lead to issues like renal damage, high blood pressure, and water retention. The unusually high sodium level that many brands of quick noodles utilize to boost their flavour according to Toshiro and Mirchi (2023) is one of the six (6) detrimental side effects of eating them. One serving of Maruchan Ramen Noodles soup for instance, has 760 mg of salt, or 32% of the daily allowance.

Bhatt and Adiyanto (2023) equally commented that some instant noodles contain 397–3678 mg of sodium per 100g serving, or higher. The processed flour used to make instant noodles is deficient in important nutrients including fiber, protein, and good fats. They are not a sustainable source of energy and do not offer enough nutrition and frequent consumption can result in inadequacies. For instance, just 29 grams of protein, or 4% of the daily required consumption, are found in one serving of Top Ramen Chicken Flavour.

If consumed frequently, the high carbohydrate content of instant noodles can lead to weight gain and obesity. According to a South Korean study, those who had instant noodles more than twice a week were at an increased risk of developing metabolic syndrome, a group of disorders that includes high blood pressure, high cholesterol, and obesity. For instance, one serving of Nissin Top Ramen Chicken Flavor contains 26g of carbohydrates, or 9% of the daily allowance.

Bisphenol A (BPA), a hazardous chemical used in packaging, is present in instant noodles. Journal of American Oil Chemists Society (2006) and Mikem (2023) expressed that the main preservatives that may be found in the instant noodle packaging are butylated hydroxyanisole (BHA) and t-butyl hydroquinone (TBHQ). These chemicals can double and triple the shelf-life of instant noodles respectively. Regular consumption of quick noodles may raise the chance of developing cancer, particularly stomach cancer. Women who consumed instant noodles more than twice a week were 68% more likely to acquire stomach cancer, according to research. Wang (2018) and Jennifer (2021) cited research that discovered that the quantity of BPA in the packaging of one brand of quick noodles was 140 times higher than that of a comparable soup cooked with fresh noodles.

Instant Noodles might cause digestive difficulties since they are poor in fiber, which is important for optimal digestion. They can cause bloating gas and constipation due to their high sodium content, taking many servings of instant noodle every day for instance might cause stomach pain and irregular bowel movements. Instant noodles may have negative impact on mental health because they are high in sodium which can disrupt the balance of chemicals in the brain.

Eating instant noodles more than 2 times a week according to Mohammed (2023) has been linked to depression, anxiety or other mental health issues. A study for example found that people who eat instant noodles regularly are more likely to have poor mental health compared to those who do not. They conclude that while instant noodles may be a handy and economical dinner alternative, they come with a range of health hazards. It is crucial to consume them in moderation and to supplement the diet with nutrient-dense food such as fruits, veggies and whole grains to avoid the risks of health problems connected with regular intake of instant noodles.

According to Wang (2018), Toshino (2023), Health Line (2024) eating instant noodles like Indomie on a daily basis may have negative health effects because they are frequently high in sodium saturated fats and preservatives, which can lead to conditions like high blood pressure, heart disease, and obesity. They may also be deficient in vital nutrients found in fresh, whole foods. To support general health and well-being, it's crucial to maintain a balanced diet that includes a variety of nutrients from different food groups.

Instant noodles are a popular convenience food eaten all over the world. They are inexpensive and easy to prepare. Consuming instant noodles according to Rachael (2023) in moderation may not cause negative health effects. However, their nutritional value is low, and frequent consumption may be linked to poor diet quality. She advised, therefore, that they should not be used as staple in the diet. Whether or not they have negative health impacts is up for debate. This is because they are heavy in sodium and monosodium glutamate (MSG) and low in other nutrients. Regular consumption is associated with a higher risk of metabolic syndrome and poor diet quality. One serving of Indomie instant noodles has 200 calories, 9g fat, 4g protein, 25g total carbs, and 24g net carbs.

Mikem (2023) and Nairaland (2024) itemized reasons why one should not eat Indomie stating that Noodles inhibit absorption of nutrients for the children under five. The ingredient in the instant noodles called “Styrofoam” is a Cancer-causing agent and that Women who are eating Instant Noodles during their pregnancy may have miscarriage, because it affects the development of a foetus. Instant noodles are a junk food that is high in carbohydrates but low in vitamins, fiber and

minerals. Because of this, Indomie Noodles are regarded as junk food. The high sodium content in instant noodles causes kidney damage, hypertension, heart disease, and stroke. Monosodium glutamate is used to improve burning, discomfort, and flushing of the face.

The main cause of obesity is eating noodles. Noodles are high in fat and sodium, which causes the body to rehydrate and undoubtedly contributes to weight gain, which in turn causes heart issues. Digestive systems are negatively impacted by instant noodles. Frequent use of instant noodles results in bloating and erratic bowel movements. Typical thickeners according to Journal of American Oil Chemists Society (2006), Mikem (2023) are guar, gum, Propylene Glycol Alginate (PGA), acetylated phosphate, and the likes emulsifiers has the ability to prevent freezing:

By keeping the noodles moist, this component keeps them from drying out. It impairs our body's immunological system. It is readily absorbed by the body and builds up in the heart and kidney. It damages such areas and results in anomalies. Because instant noodles contain chemicals such as colouring, preservatives, and additives, regular use of them has an impact on the body's metabolism. Vine (2023), Health Line (2024) explained that the optimal frequency is merely two to three times each week and that they shouldn't be eaten exclusively because the dish itself is deficient in important nutrient groups like protein and fiber, which increases the risk of malnutrition if consumed over time. According to Elena (2024), Partway East Hospital (2021) and nutritional noodles facts (2024) quick noodles are also well-known for having a high fat, carbohydrate, and sodium content. However, they are deficient in vital nutrients such as vitamins A, C, B12.

Enhancing instant noodles' nutritiousness according to Koka (2023) and [Shahabinejad, \(2024\)](#) instant noodles are the greatest quick and simple meal or mid-afternoon pick-me-up. There are many ways to increase the nutritional content of instant noodles, and there are also new varieties on the market. Five health benefits of Indomie instant noodles were revealed by Nairaland (2018) and Nairaland Forum (2024). To make instant noodles to be more nutritious Klook (2021 and Slower (2023) advocated adding eggs (poached, fried, or soft-boiled), meat (lean pork or beef), leafy greens, chopped vegetables (broccoli, carrots, bell peppers), edamame, tofu, kimchi, and a protein powder to improve protein and fiber content while adding flavour and texture.

Noodles enriched with egg whites or egg provide substantial amount of riboflavia, niacin, folic acid, iron and thiamin. Sadly, instant noodles have earned a reputation for being a non-healthy snacks option. One can add vegetables or protein or choosing a low-fat or baked noodles. Consume "Rainbow" to boost the intake of vitamins, vegetables, and other colors. Partway East Hospital (2021), Vine (2023) and Koka (2023) also identified six (6) strategies to fortify quick noodles, which include: Eat "Rainbow" for more vitamins; add extra textures instead of extra sodium; to add sweetness without using extra sweet sauces, chop or spiraled vegetables. More food pyramid components may be included, more vegetables that is steamed rather than uncooked, boiled, or stir-fried.

To boost the protein content of the dish, Butler (2020), Mike (2022), Goodfood (2024) and Sarah (2024) suggested adding eggs, shredded chicken, tofu, or lean beef. For extra vitamins and fiber chopped or stir-fried veggies like spinach, broccoli, carrots, or choy as well as a healthy fat like

sesame oil could be added to improve the taste. Racheal (2023) Sarah (2024), Richter & Peter (2024) suggested that instead of depending just on the packet, use low-sodium instant noodle brands and think about adding a reliable spice and Kimchi, a fermented Korean side dish prepared with cabbage containing immune-boosting vitamin C. Carotene is another possible addition that has been found to assist improves digestion by feeding the good bacteria in the gut.

The addition of plant protein sources such as peanuts, sprouts, fresh herbs (green onions or cilantro), grated carrots, spring onions, thinly sliced shiitake mushrooms, and pak choy for vegetables along with ginger, chili flakes, miso paste, toasted sesame seeds, some tamari, and vegetable stock powder is equally supported. Better still Guo (2022), Mohammed (2023) and [Shahabinejad, \(2024\)](#) advocated Fresh Wet Noodles which is characterized by freshness, che winess, good tastes and better maintenance of noodle flavour. To avoid spoilage due to high nutrients, seeking effective preservative methods to prolong the shelf-life is a major breakthrough for the industrialization of Fresh Wet Noodles. Microorganisms moisture content, nutrients composition, enzymes and storage temperature are some of the factors identified by Mo hammed (2023) contributing to the spoilage and degradation of FWN.

Methodology

The study assessed how students in tertiary institutions in Osun State perceived the effects of frequent consumption of instant noodles on health. The population for the study was made up of students in tertiary institutions in each of the three senatorial districts in Osun State. The study adopted a descriptive research design that comprises systematic collection, presentation and analysis of data on the perception of students on the consequences of frequent intake of Instant Noodles on their health. This approach aided in generating responses to the structured items created to gather data for the study.

The study employed a multi-stage random sampling technique. Five (5) tertiary institutions in Osun State, five (5) faculties in each institution, and four (4) departments in each faculty were selected using a simple random procedure. This meant that one hundred (100) departments were used for the study. Systematic random sampling technique was used in the selection of Ten (10) respondents from each department using departmental list. Through this process a total number of One thousand (1,000) respondents were selected and used for the study.

A self-designed and validated questionnaire was used to gather data. Professionals in the fields of health education and educational test and measurement validated the instrument. Test-retest method of reliability was used; Spearman Brown's method of dependability yielded a reliability correlation co-efficient of 0.89. The researcher initially visited the study locations to book an appointment for time, date, and best locations for administration of the instrument. On the scheduled day, time, and location, the researcher and two research assistants visited the departments that were selected.

The researcher gave the questionnaire to the respondents and described the reason for the meeting while they were sitting in a well-ventilated hall. After the explanation, the respondents were allowed to respond to the questionnaire items independently. The questionnaires were collected immediately after the completion. Frequency counts and percentages were employed as descriptive

statistical tools to analyze the data, while Chi-square was utilized as an inferential statistic to test the formulated hypotheses at 0.05 Alpha level of significance.

Results

Table 1: Respondent's responses on awareness of component of the ingredients used in manufacturing instant noodles.

S/N	Items	Agreed	Disagreed
1.	Instant Noodles are often high in sodium	950 (95%)	50 (5%)
2.	Fats and refined flour are the main ingredients used in manufacturing Instant Noodles.	880 (88%)	120 (12%)
3.	Instant Noodles contain Monosodium Glutamate	40 (4%)	960 (96%)
4.	Propylene Glycol an anti-freezer property is one of the ingredients.	755 (75.5%)	245 (24.5%)
5.	Styrofoam and Bisplonol are equally used in manufacturing Instant Noodles.	105 (10.5%)	895 (89.5%)

The response in Table One above revealed that majority (95%) of the respondents agreed that Instant Noodles are often high in Sodium while 88% equally agreed that fats and refined flour are the main ingredients used in manufacturing Instant Noodles. Only 4% of the respondents agreed that Instant Noodles contain Monosodium Glutamate while 75.5% agreed that Propylene Glycol an anti-freezer property is one of the ingredients. Majority (89.5) of the respondents, however, disagreed with the statement that Styrofoam and Bisplonol are equally used in manufacturing Instant Noodles.

Table 2: Respondent's responses on awareness of health implications of frequent consumption of instant noodles.

S/N	Items	Agreed	Disagreed
6.	Frequent consumption of Instant Noodles may lead to nutritional deficiencies.	990 (99%)	10 (1%)
7.	Consumption of Instant Noodles more than two times a week could lead to depression, anxiety, Cancer or miscarriage in women and digestive problems.	945 (94.5%)	55 (5.5%)
8.	Sodium Saturated fats and preservatives in Instant Noodles can contribute to health issues such as high blood pressure, heart disease, obesity and high risk of metabolic syndrome	60 (6%)	940 (94%)
9.	Consumption of Instant Noodles cannot be done away with among students' population.	78 (7.8%)	922 (92.2%)

10.	Weak immune system, kidney, heart and liver problems could be linked to frequent consumption of Instant Noodles.	966 (96.6%)	34 (3.4%)
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Responses in the above Table showed that majority (99%) agreed that frequent consumption of Instant Noodles may lead to nutritional deficiencies while 94% equally agreed that consumption of Instant Noodles more than two times a week could lead to depression, anxiety and digestive problems. While only 6% agreed that Sodium Saturated fats and preservatives in Instant Noodles can contribute to health issues such as high blood pressure, heart disease, obesity and high risk of metabolic syndrome, 7.8% of the respondents equally agreed that frequent consumption of Instant Noodles may not be linked to Cancer or miscarriage in women. Majority (96.6%) of the respondents however agreed that weak immune system, kidney heart and liver problems could be linked to frequent consumption of Instant Noodles

Table 3: Respondent's responses on ways by which instant noodles could be fortified to be more nutritious.

S/N	Items	Agreed	Disagreed
11.	Additional nutritious food items are essential for healthy consumption of Instant Noodles.	977 (97.7%)	23 (2.3%)
12.	Eggs, Chickens or lean meat will increase the meals' protein.	99 (99.4%)	06 (0.6%)
13.	Protein of plant sources like mushrooms, carrots, onions etc. may not necessarily needed for Instant Noodles consumption.	60 (6%)	940 (94%)
14.	Low-Sodium Instant Noodles are not readily available in the market.	887 (88.7%)	113 (11.3%)
15.	Instant Noodles should not be consumed without adding ginger, chili flakes, toasted sesame seed or vegetable stock powder.	24 (2.4%)	976 (97.6%)

The table above revealed that majority (97.7%) of the respondents agreed that additional nutritious food items are essential for healthy consumption of Instant Noodles while 99.4% equally agreed that eggs, Chickens or lean meat will increase the meals' protein. Only 6% of the respondents

agreed that protein of plant sources like mushrooms, carrots, onions etc. may not necessarily be needed for Instant Noodles consumption, 88.7% agreed that low-Sodium Instant Noodles are not readily available in the market and 97.6% disagreed with the statement that Instant Noodles should not be consumed without adding ginger, chili flakes, toasted sesame seed or vegetable stock powder.

Hypotheses Testing

Table 4

Chi Square (X^2) Analysis on the relationship between students' awareness of component of the ingredients used in manufacturing Instant Noodles and their perception on its implications on their health.

Table Value	Level of Significance	Df	Calculated Value	Decision
9.49	0.05	4	3,386.50	Rejected

The table above presented a higher calculated value of 3,386.50 while the Table value was 9.49 under the Degree of freedom of 4 and at 0.05 level of significance. This resulted into the rejection of the hypothesis which stated that there is no significant relationship between students' awareness of component of the ingredients used in manufacturing Instant Noodles and their perception on its implications on their health. The result implied that a significant relationship exists between students' awareness of component of the ingredients used in manufacturing Instant Noodles and their perception on its implications on their health.

Table 5: Chi Square (X^2) Analysis on the relationship between students' awareness of frequent consumption of Instant noodles and its implications on their health.

Table Value	Level of Significance	Df	Calculated Value	Decision
9.49	0.05	4	4,0646.37	Rejected

Table 5 showed a higher Calculated value of 4,0646.37 while the Table value was 9.49 under the Degree of freedom of 4, indicating the rejection of the Hypothesis which stated that there is no relationship between students' awareness of frequent consumption of Instant noodles and its implications on their health. This means that a significant relationship exists between students' awareness of frequent consumption of Instant noodles and its implications on their health.

Table 6: Chi Square (X^2) Analysis on the relationship between students' identification of ways by which Instant Noodles could be fortified to be more nutritious and their readiness to comply.

Table Value	Level of Significance	Df	Calculated Value	Decision
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9.49	0.05	4	3,410.87	Rejected
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Table 6 presented a Table value of 9.49 which is lower than the Calculated value of 3,410.87 under the Degree of freedom of 4. The Hypothesis which stated that there is no significant relationship between students' identification of ways by which Instant Noodles could be fortified to be more nutritious and their readiness to comply was rejected, meaning that a significant relationship exists between students' identification of ways by which Instant Noodles could be fortified to be more nutritious and their readiness to comply.

Discussion of Findings

Majority (95%) of the respondents agreed that Instant Noodles are often high in Sodium while 88% equally agreed that fats and refined flour are the main ingredients used in manufacturing Instant Noodles. These findings are in agreement with the comments made by Toshiro (2023), Mirchi (2023) and [Shahabinejad, \(2024\)](#) that many brands of quick noodles utilize unusually high sodium level to boost their flavour and that this is one of the six (6) detrimental side effects of eating them. Instant Noodles might cause digestive difficulties since they are poor in fiber, which is important for optimal digestion. They can cause bloating gas and constipation due to their high sodium content, taking many servings of instant noodle every day for instance might cause stomach pain and irregular bowel movements.

According to Mirchi (2023) and [Shahabinejad, \(2024\)](#) one serving of Maruchan Ramen Noodles soup, for instance, has 760 mg of salt, or 32% of the daily allowance. Bhatt, (2023) and Adiyanto (2023) equally commented that some instant noodles contain 397–3678 mg of sodium per 100g serving, or higher. Only 4% of the respondents agreed that Instant Noodles contain Monosodium Glutamate. This was in line with the affirmation made by Nairaland (2024) that Monosodium glutamate, or MSG, is used to improve burning, discomfort, and flushing of the face. This can lead to kidney damage, hypertension, heart disease, and stroke.

Majority (75.5%) of the respondents agreed that Propylene Glycol an anti-freezer property is one of the ingredients. The finding was in consonance with the claims made by Journal of American Oil Chemists Society (2006), Vine (2023) and Health Line (2024) that Propylene Glycol, which has the ability to prevent freezing: By keeping the noodles moist, this component keeps them from drying out. It impairs our body's immunological system. It is readily absorbed by the body and builds up in the heart, kidney, and kidney. It damages such areas and results in anomalies.

Majority (89.5%) of the respondents disagreed with the statement that Styrofoam and Bisphenol are equally used in manufacturing Instant Noodles. This was equally supported by Journal of American Oil Chemists Society (2006), Mikem (2023) and Nairaland (2024) that one of the ingredients in the instant noodles called “Styrofoam” is a Cancer-causing agent and that Women who are eating Instant Noodles during their pregnancy causes miscarriage, because it affects the development of a foetus. Majority (99%) agreed that frequent consumption of Instant Noodles may lead to nutritional deficiencies. This was in agreement with Adiyanto (2023) and [Shahabinejad,](#)

[\(2024\)](#) who commented that the processed flour used to make instant noodles is deficient in important nutrients including fiber, protein, good fats and that they are not a sustainable source of energy and do not offer enough nutrition, and frequent consumption can result in inadequacies.

Majority (94%) of the respondents agreed that consumption of Instant Noodles more than two times a week could lead to depression, anxiety and digestive problems. This was in agreement with the claims made by Journal of American Oil Chemists Society (2006), Jenniffer (2021) and Mikem (2023) that A (BPA), a hazardous chemical used in packaging, is present in instant noodles and that regular consumption of quick noodles may raise the chance of developing cancer, particularly stomach cancer. She further explained that women who consumed instant noodles more than twice a week were 68% more likely to acquire stomach cancer.

Only 6% agreed that Sodium Saturated fats and preservatives in Instant Noodles can contribute to health issues such as high blood pressure, heart disease, obesity and high risk of metabolic syndrome. This was in line with the submissions of Wang (2018), Elena (2024), Partway East Hospital (2021), and Nutritional Noodles Facts (2024) that quick noodles are also well-known for having a high fat, carbohydrate, and sodium content. Instant Noodles might cause digestive difficulties since they are poor in fiber, which is important for optimal digestion. They can cause bloating gas and constipation due to their high sodium content, taking many servings of instant noodle every day for instance might cause stomach pain and irregular bowel movements. Also 7.8% of the respondents agreed with the statement that frequent consumption of Instant Noodles cannot be done away with among students' population while majority (96.6%) of the respondents equally agreed that weak immune system, kidney, heart and liver problems could not be linked to frequent consumption of Instant Noodles

Majority (97.7%) of the respondents agreed that additional nutritious food items are essential for healthy consumption of Instant Noodles while 99.4% equally agreed that eggs, Chickens or lean meat will increase the meals' protein. These findings were in consonance with the ones made by Nairaland (2018) and the Nairaland Forum (2024) that there are many ways to increase the nutritional content of instant noodles, and there are also new varieties on the market. To make instant noodles to be more nutritious Klook (2021) and Slower (2023) further advocated adding eggs (poached, fried, or soft-boiled), meat (lean pork or beef), leafy greens, chopped vegetables (broccoli, carrots, bell peppers), edamame, tofu, kimchi, and a protein powder to improve protein and fiber content while adding flavour and texture. To boost the protein content of the dish, Butler (2020), Mike (2022), Goodfood (2024), and Sarah (2024) equally suggested adding eggs, shredded chicken, tofu, or lean beef.

Only 6% of the respondents agreed that protein of plant sources like mushrooms, carrots, onions etc. may not necessarily be needed for Instant Noodles consumption This was in contrast to the claims made by Sarah (2024), Richter & Peter (2024) that the addition of plant protein sources such as peanuts, sprouts, fresh herbs (green onions or cilantro), grated carrots, spring onions, thinly sliced shiitake mushrooms, and pak choy for vegetables,

Majority (88.7%) of the respondents agreed that low-Sodium Instant Noodles are not readily available in the market. This was in line with the suggestions made by Racheal (2023) that instead of depending just on the packet, use low-sodium instant noodle brands and think about adding a

reliable spice. Finally, 97.6% disagreed with the statement that Instant Noodles could not be consumed without adding ginger, chili flakes, toasted sesame seed or vegetable stock powder. Sarah (2024), Richter & Peter (2024), however, advised that ginger, chili flakes, miso paste, toasted sesame seeds, some tamari, and vegetable stock powder could be added to improve the nutritional quality of Instant Noodles.

Conclusion.

Based on the findings of this study the following conclusions were reached:

Students are aware that Instant Noodles are often high in Sodium. Monosodium Glutamate and Propylene Glycol an anti-freezer property and that fats and refined flour are some of the ingredients used in manufacturing Instant Noodles which can contribute to health issues such as high blood pressure, heart disease, obesity and high risk of metabolic syndrome.

Instant noodles is deficient in important nutrients such as fiber, protein, good fats and that they are not a sustainable source of energy and do not offer enough nutrition, frequent consumption can, therefore, result in inadequacies like bloating gas and constipation due to their high sodium content. Frequent servings of instant noodles may cause stomach pain and irregular bowel movements.

Consumption of Instant Noodles more than two times a week could lead to depression, anxiety and that hazardous chemical used in packaging instant noodles may raise the chance of developing cancer, particularly stomach cancer as well as weak immune system, kidney, heart and liver problems could also be linked to frequent consumption of Instant Noodles

Additional nutritious food items are essential for healthy consumption of Instant Noodles. Eggs (poached, fried, or soft-boiled), chickens or meat (lean pork or beef) will increase the meals' protein. Leafy greens, chopped vegetables (broccoli, carrots, bell peppers), edamame, tofu, kimchi, and a protein powder could be added to improve protein and fiber content.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Instant noodle brands with low-sodium content should be preferred to ones with high sodium.
2. Frequent consumption of instant noodles should be discouraged as it can lead to a vast array of health complications
3. Instant Noodles should be fortified with Eggs (poached, fried, or soft-boiled), Chickens or meat (lean pork or beef) to increase the meals' protein. Leafy greens, chopped vegetables (broccoli, carrots, bell peppers), tofu, should equally be added to improve protein and fiber content.

4. Government and Non-governmental Organizations should intensify efforts in sensitizing students who are the major consumer of Instant Noodles on the harmful effects of its indiscriminate consumption.
5. School authorities should equally engage students in symposium, seminars and debates on what makes up of a balanced diet and to practice it.

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