

Health Implications of Utilizing Non-Professional Dietary Information Sources among Civil Servants in Southeast Nigeria

¹Chiazor Anthonia Chiaghana., ²Walter C. Ihejirika., ³Virginia Benson Eluwa

¹Department of Mass Communication, Nnamdi Azikiwe University Awka, Anambra state, Nigeria

²Department of Mass Communication, University of Port Harcourt, River's state, Nigeria

³Department of Mass Communication, Abia state university, Uturu, Abia state, Nigeria

DOI: <https://doi.org/10.51244/IJRSI.2025.120500124>

Received: 08 May 2025; Accepted: 13 May 2025; Published: 14 June 2025

ABSTRACT

Healthy habits play a fundamental role in enhancing longevity of life and prevention of non-communicable diseases and this raises concerns about the potential consequences of relying on non-professional information sources for dietary decision making particularly in a region like southeast Nigeria where diet related health issues are a growing concern. The overall objective of this study was to investigate the health implications of civil servants in Southeast Nigeria relying on non-professional dietary information sources such as social media, family, peers, and mass media for nutrition guidance. The specific objectives are: To identify the non-professional dietary information sources used by civil servants in southeast Nigeria, and to assess the health implications of relying on non-professional dietary information sources among civil servants in southeast Nigeria. Mixed method design such as survey and in-depth interview was used, data were collected from a representative sample size of 399 of civil servants across various ministries. The study was anchored on Social Cognitive Theory Findings from the study shows that a significant high level of the respondents uses the social media platforms to seek for dietary information from non-professional information sources also findings from the study revealed that majority of the civil servants have not experienced health issues due to non-professional dietary advice, while a substantial minority reported adverse effects. This highlights that although many civil servants appear resilient to potential risks, a significant subset of them may face health challenges tied to non-professional dietary guidance. The study however recommends Improve Access to Professional Dietary Information: Encourage Workplace Nutrition Support Systems, Regulate and Monitor Dietary Content on social media, Enhance Nutrition Literacy Programs among civil servants in the region.

Key words: Health implications, Utilization, Non-professional dietary sources, Diet Information, Civil servants

INTRODUCTION

In recent years, there has been a significant shift in how individuals access information related to health and nutrition. With the widespread use of the internet, social media, and informal communication networks, many people increasingly rely on non-professional sources for dietary advice and guidance. These sources which include social media platforms, blogs, family members, friends, and mass media often lack scientific validation and may promote dietary practices that are misleading or potentially harmful. In the context of Nigeria, where health literacy levels vary widely, the consumption of such unverified information can have serious implications for public health.

Civil servants in Southeast Nigeria, as part of the working population, are expected to maintain good health for optimal work performance. However, they are not immune to the influence of non-professional dietary information sources. The pressures of a busy work life, combined with easy access to social media and other informal channels, can make civil servants vulnerable to adopting unhealthy eating habits based on inaccurate or incomplete information. This trend is particularly concerning in Southeast Nigeria, a region with its own unique socio-cultural and economic factors influencing food choices and health behaviours. However, the increasing reliance on non-professional dietary sources raises concerns about the accuracy of the information

they consume and its subsequent impact on their health. Misinformation about nutrition can lead to poor dietary choices, increased disease risk, and a greater burden on the healthcare system

The implications of relying on non-professional dietary sources go beyond poor nutrition. It may contribute to the rising prevalence of lifestyle-related diseases such as obesity, hypertension, diabetes, and cardiovascular conditions, which are becoming increasingly common among civil servants in Nigeria. Furthermore, misinformation can lead to confusion, inconsistent dietary practices, and the neglect of professional medical advice, thereby worsening health outcomes.

Background of the study

Proper nutrition is essential for maintaining good health, preventing diseases, and enhancing overall well-being. Over the years, the rapid increase of non-communicable diseases (NCDs) related to poor diet has significantly become a social health problem. The concept of healthy living and nutrition has gained significant attention globally due to its impact on overall well-being and disease prevention (World Health Organization, 2022).

This has become a major concern among adults because of the relative increase in the prevalence of diet-related non-communicable diseases (Olatona, Adeniyi, Obrutu & Ogunyemi, 2023). A good diet is a key factor in determining health, and consuming certain healthy balanced diet foods has several positive impacts including a lower chance of mortality (WHO, 2022). The benefits of good diet cannot be over emphasized as it is a cornerstone for healthy lifestyle and prevention of many ill complications such as: heart diseases, diabetes, strokes, some cancers and osteoporosis. The dietary choices people make are often influenced by the information they receive regarding food and nutrition. Ideally, individuals should rely on professional sources such as dietitians, nutritionists, and medical experts for accurate dietary guidance. However, in recent years, there has been a growing reliance on non-professional information sources, including social media, blogs, family, friends, and traditional beliefs, for dietary decisions.

Non-professional dietary information sources can significantly influence adults' dietary behaviour and health choices. This influence can be positive, as individual might find new recipes or adopt healthier lifestyle changes. However, it can also be negative, leading to misinformation, unrealistic expectations, or even harmful practices. Using non-professional dietary information sources can lead to negative health outcomes for adults, such as malnutrition, weight gain and increased risk of chronic diseases. This is because dietary information and advice from non-professionals can be inaccurate, incomplete and even harmful (Quiadoo et al, 2018). Reliance on these sources can result in inadequate nutritional intake which can lead to deficiencies and other health problems. According to Echelon health (2016), healthy diet support immune function, help the digestive system function, help to maintain healthy weight, repair and strengthen muscles.

The dietary habits of individuals play a vital role in determining their overall health and well-being (Jackson, 2021). Consuming healthy food and avoiding unhealthy options contributes to good health and reduces the likelihood of developing non-communicable diseases (NCDs) such as cardiovascular disease, obesity, type 2 diabetes and some cancers (Federal Ministry of health, 2022). Poor dietary behaviour can cause deficiency related diseases such as scurvy, blindness, anaemia, cretinism, or excessive health threatening dietary conditions. According to Quaidoo, Ohameng & Amankwah-poku (2018) adults who had little to no control over their dietary behaviour adopt unhealthy diet habits such as increased consumption of alcoholic beverages, frequent patronage of fast food and convenience food and low personal meal preparation. The prevalence of chronic diseases in Nigeria has made individuals to rely on a variety of sources for information when making dietary decisions (Bunkechukwu, 2023).

These sources can be broadly categorized into professionals such as health care providers, dieticians and nutritionists and Non-professionals sources like family, friends, social media posts, online forum, the media, blogs and traditional beliefs where individuals share their experiences, opinions and advise people on various aspects of diet and nutrition. Unlike information provided by health care professionals or certified nutritionists, these non-professional sources seem to lack formal validation and oversight.

This study, therefore, seeks to examine the health implications of utilizing non-professional dietary information sources among civil servants in Southeast Nigeria. By understanding the sources they rely on, the nature of the information consumed, and the resulting health effects.

Statement of the Problem

Dietary behaviour has been observed to be important for healthy living. Healthy habits play a fundamental role in enhancing longevity of life and prevention of non-communicable diseases. In Nigeria, due to the prevalence of food related diseases which has been associated with poor dietary choices has significantly become a public health concern. The dietary behaviour of individuals significantly influences their health, productivity, and overall well-being. The increasing accessibility of dietary information through various non-professional sources has led to widespread misinformation and misconceptions about nutrition. Many civil servants rely on social media, word-of-mouth, and unverified online platforms to make dietary choices, often ignoring the advice of health professionals. This trend is concerning because inaccurate or misleading dietary information may result in poor nutritional habits, deficiencies, and an increased risk of non-communicable diseases.

Given the role of civil servants in national development, their health status directly affects productivity and efficiency in the workplace. If they continue to depend on unreliable dietary information, it could lead to increased absenteeism, higher medical costs, and reduced overall workforce effectiveness. Despite these concerns, there is a lack of empirical research assessing the direct health implications of relying on non-professional dietary sources. Against this backdrop, this study, therefore, aims to investigate the health consequences of utilizing non-professional dietary information sources among civil servants in Southeast Nigeria.

Objectives of the study

The primary objective of this study is to investigate the health implications of civil servants in Southeast Nigeria relying on non-professional dietary information sources. The specific objectives of this study are:

- i. To identify the non-professional dietary information sources used by civil servants in southeast Nigeria.
- ii. To assess the health implications of relying on non-professional dietary information sources among civil servants in southeast Nigeria.

Research Questions

- i. What are the non-professional dietary information sources used by civil servants in southeast Nigeria?
- ii. What are the health implications of relying on non-professional dietary information sources among civil servants in southeast Nigeria?

LITERATURE REVIEW

Healthy Diet: An overview

A healthy diet helps to protect against malnutrition in all its forms, as well as non-communicable diseases (NCDs), including diabetes, heart disease, stroke, obesity, and cancer. According to World Health Organization, (2023), a healthy diet is a foundation for health, well-being, optimal growth and development. It protects against all forms of malnutrition. Unhealthy diet is one of the leading risks for the global burden of disease, mainly for non-communicable diseases. Consuming a healthy diet throughout the life course helps to prevent malnutrition in all its forms as well as a range of non-communicable diseases (NCDs) and conditions.

Cena and Calder(2020) defined a healthy diet as one in which macronutrients are consumed in appropriate proportions to support energetic and physiologic needs without excess intake while also providing sufficient micronutrients and hydration to meet the physiologic needs of the body. Macronutrients (i.e., carbohydrates, proteins, and fats) provide the energy necessary for the cellular processes required for daily functioning.

Micronutrients (i.e., vitamins and minerals) are required in comparatively small amounts for normal growth, development, metabolism, and physiologic functioning.

A healthy diet typically includes nutrient-dense foods from all of the major food groups, including lean proteins, whole grains, healthy fats and fruits and vegetables of many colors (Stuart, 2023). The Australian Dietary Guidelines, (2021) provide an update on a healthy diet as eating a wide variety of foods rich in nutrients to the body, promotes good health and can help reduce the risk of diseases- as well as keeping individuals' dietary choices interesting with different dishes. Drawing on the definition by Lynnette et al, (2021) healthy diet is health-promoting and disease-preventing. It provides adequacy, without excess, of nutrients and health-promoting substances from nutritious foods and avoids the consumption of health-harming substances.

The concept of Dietary Lifestyle

Dietary habits include what a person eats, how much a person eats during a meal, how frequently meals are consumed, and how often a person eats out. Other aspects of lifestyle include physical activity level, recreational drug use, and sleeping patterns, all of which play a role in health and impact nutrition (Human nutrition, 2017). In Nigeria, their consciousness of healthy lifestyle living is respectable, Nigerians seeking to live a healthy life, seek for dietary advice on how to live a healthy lifestyle and live a longer life. Some diseases are strongly influenced by individual food choices, as a result of developing eating habits during the life course.

The scientific connection between food and health has been well for many decades with substantial and increasingly robust evidence showing that a healthy lifestyle including following a healthy dietary pattern can help people achieve and maintain good health and reduce the risk of chronic diseases throughout all stages of life span (Dietary guidelines for Americans, 2020). The aim of dietary information or recommendations is to promote health and prevent diseases. It is not intended to contain clinical guidelines for treating chronic diseases. Dietary recommendation is just about everyone no matter their health status in order to better support healthy patterns of living at every life stage from infancy through older adulthood. For individuals at risk of chronic disease, or living with chronic disease, learning the skills to enhance their dietary behaviour through appropriate information sources is central to the concept of self-management of healthy dietary lifestyle (Cash et al., 2015).

Health implications of poor dietary lifestyle

It is impossible for a society that consists of individuals having inadequacy and unbalanced diets to live on healthy (Demir et al., 2016). There are so many health implications associated with unhealthy dietary lifestyle or behaviour. However, when healthy options are not available, people may settle for foods that are higher in calories and lower in nutritional value, people in low-income countries and some racial and ethnic groups often lack access to healthier foods (National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), 2022). Poor diet is when one does not get enough of the nutrients needed from diet. Health implications may occur when people follow a diet that does not contain a wide variety of healthy, nutritional foods. Poor diet can also be caused by not eating enough (Echelon Health, 2022).

According to Echelon Health, (2024) and NCCDPHP, (2022) some of the effects of poor diet include:

Obesity and Overweight: A poor nutritional diet full of fat and sugar can cause obesity which is a major risk factor for many health conditions. Eating a healthy diet in the right proportions, along with getting enough physical activity and sleep, can help adults grow up healthy and overweight and obesity. Obesity in other words can put an individual at risk of heart disease, type 2 diabetes and some cancers.

Diabetes: Being overweight and inactive, as well as a diet that is high in fat, carbohydrates, sugars and cholesterol, are all type 2 diabetes risk factors. Maintaining a healthy weight and eating a balanced diet that is low in saturated fat and high in fibre found in whole grains can help to reduce the risk of adult developing diabetes.

Cancer: An unhealthy diet can increase the risk of some cancers. Consuming beverages such as sugar-sweetened beverages and highly processed food, with eating red and processed meat can lead to cancer.

Heart disease and Stroke: Two of the leading causes of heart disease and stroke are due to the increase of the blood pressure and high blood cholesterol consuming too much sodium can increase blood pressure and the risk for heart disease and stroke. A healthy diet rich in fruits, vegetables, whole grains and low-fat dairy can help reduce the risk of heart diseases by maintaining blood pressure and cholesterol levels.

High blood pressure: This is also known as hypertension, high blood pressure can be caused by poor diet and can lead to strokes, heart failure and kidney disease if left untreated.

Diet information seeking

Spronk, Kullen & Burdon., (2014) defined diet information seeking as the degree to which individuals have the capacity to obtain, process, and understand nutrition information and skills needed in order to make appropriate nutrition decisions. This definition focuses on possession of nutrition knowledge and skills that have practical relevance to dietary choices. Information seeking can be defined as the purposive acquisition of information from selected information carriers. In the context of health, it takes form in how people sort through external health information and, thereby, determines what is useful and what is not. It includes both the active or passive gathering of health or medical information through a complex network of sources and is a vital process that people can use to achieve good health, to elude health threats (Beaudon & Hong, 2016).

Certainly, individuals will change their diets appropriately when they get accurate information about what they should eat and know the effects of foods consumption on health. Several studies addressed knowledge effects on dietary intake and the broad range of consumer attributes and behaviours related to foods such as attitudes, perceptions, and choices (Scalvedi et al., 2021)

Sources of dietary information

Dietary information can be obtained from various sources, and it's essential to rely on reputable and evidence-based information. Quaidoo et al., (2018) holds that the sources of nutrition information used by adults in a society can be used as an effective tool to disseminate accurate nutrition information to the masses. Information disseminated through old (traditional media) and new (online resources) media play a role in determining nutrition choices as they market ideas and products that have the ability to influence behaviours. Dietary information sources include health professionals such as General Practitioners (GPs), Dietitians, Nurses, Exercise Physiologists, Pharmacists, Naturopaths and Nutritionists as well as Government pamphlets, and non-professional sources such as the media, social media, family, friends and the fitness industry.

Professional dietary information sources: Professional dietary information sources are registered health personnel and these registered dietitians have an important role as professionals who are able to assess, diagnose and treat diet and nutrition problems at an individual and wider public health level. They provide practical advice and support dietary change to promote good health (Whitehead, 2015).

Non-professional information sources: Non-professional dietary information sources are suggestions or advice related to diet, nutrition and eating habits provided by individuals who do not possess formal training, education, or credentials in the fields of nutrition, dietetics, or healthcare. These advices are typically based on personal experiences, anecdotal evidence, cultural beliefs, or information gathered from informal sources, such as social media, friends, or family members. Unlike advice from registered dietitians, nutritionists, or medical professionals, non-professional dietary information may lack scientific rigor, individualized assessment, and evidence-based support, potentially leading to inaccurate or unsafe dietary choices (Quiadoo et al, 2018). It's important to critically evaluate the credibility of the source when considering and implementing non-professional dietary advice. These sources can provide valuable insights into dietary practices, but they can also perpetuate misconceptions or dietary habits that may be less health-conscious.

Empirical literature

Davis, S. (2022). Investigated the association between women's nutrition knowledge level and the sources of diet information they sought and their perception of their dependability. 398 English-speaking women between the ages of 18 and 64 in total. The study's conclusions reveal that 88.4% of participants cited the internet and

reputable dietary sources as their most often used and trustworthy sources of diet information. 67.1% of people get their information from radio, TV, or newspapers. These were thought to be the least trustworthy sources; also, the results indicate that friends and family were cited as sources of diet information less frequently (28.6% and 27.4%, respectively). The participants concluded by saying they regularly used the internet to obtain dietary information from reputable sources.

Oliveira, L., Poinhos, R., Afonso, C., Almeida, M.V., (2020). examine the dietary information sources on the healthy eating among community living older adults, the researchers utilized data on the preferred dietary information sources of older adults. The aim of the research is to study the perceived need and preferences regarding sources of information about healthy eating among older adults and to relate them with sociodemographic characteristics. Results from the study show that out of 602 participants aging from 65-74 years, 87.5% (females) and 69.3% (males) would like to receive information on healthy diet and how to go about it.

Findings from the study show that there were significant differences in the preference for different sources of information with most of the participants preferring to receive diet information through audio visual materials or leaflets. Participants in the study with higher level of education prefer to get diet information from professionals and participants with a higher level of independence prefer to get diet information from non-professionals, family and friends.

Cash, T., Desbrow, B., Leveritt, M., Ball, L., (2015). investigated the utilization and preference of diet information sources of individuals living on the Gold Coast, Australia as well as perceptions of trustworthiness, credibility and effectiveness of those sources. The study used a cross-sectional online survey in order to determine the nutrition information sources and factors affecting individuals' choice of nutrition information in their dietary behaviour. It also investigated how credible, effective and trustworthy individuals perceive the diet information received from those sources. Data were collected from ninety-four residents of the Gold Coast, Australia. Results from the study show that dietitians, nutritionists and general medical practitioners were the three most preferred sources and were perceived to be most trustworthy, credible and effective. However, findings from the study show that the most utilized diet information sources were the internet (62.9%), friends (59.8%) and magazines (57.7%). 30% of the respondents according to their findings reported that time is a barrier to access their most preferred diet information sources. Results also show that between 32% and 60% of the respondents reported neutral perception of the most frequently utilized diet information sources in relation to trustworthiness, credibility and effectiveness.

Conclusively, individuals frequently receive diet information from sources that are not their most preferred and sources that they do not perceive as trustworthy, credible or effective. Thus, the study suggested further research on the impact of these discrepancies on the overall diet or nutrition –related literacy and behaviour.

Kim, S.U., Yeon, (2016). In survey research examined the ways in which college students perceive the credibility and usefulness of diet information on facebook depending on the topic sensitivity. Based on their findings which were carried out through an online survey from two universities. 351 respondents were used for the analysis. The respondents tend to consider diet information with low sensitivity levels as significantly more credible and useful than high sensitivity levels on face book. Also, respondents reported that professional diet information sources as more credible and useful than the non-professional sources on facebook. However, among non-professional diet information sources, they prefer an experienced person over family when it comes to serious health issues. The study concluded that female students tend to trust highly sensitive diet information sources more than male students.

Theoretical Framework

Social Cognitive Theory (SCT)

Social Cognitive Theory: Social cognitive theory is a learning theory developed by psychologist Albert Bandura. It emphasizes the learning that occurs within a social context where people are active agents who can both influence and are influenced by their environment. This theory provides a framework for understanding

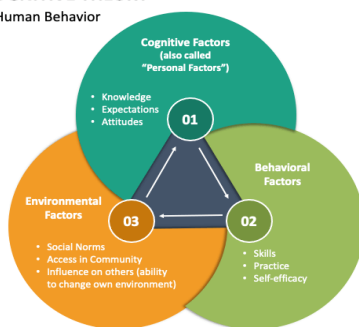
how people actively shape and is shaped by their environment. In particular, the theory details the processes of observational learning and modeling, and the influence of self-efficacy on the production of behaviour (Viney, 2019). The theory posits that individuals learn not only through direct experiences but also by observing others and the consequences of their actions. It is an extension of social learning that includes the effects of cognitive processes such as conceptions, judgment, and motivation on an individual's behaviour and on the environment that influences them. Rather than passively absorbing knowledge from environmental inputs, social cognitive theory argues that people actively influence their learning by interpreting the outcomes of their actions, which, in turn, affects their environments and personal factors, informing and altering subsequent behaviour (Nickerson, 2023).

The Social Cognitive Theory is relevant to the study as it highlights the significance of observational learning, where individuals learn by observing others. In the context of dietary behaviour, adults may observe and model their dietary choices based on information obtained from non-professional sources, such as friends, family, social media or the media.

The theory emphasizes that Individuals often model their behaviour after those they perceive as credible or similar to themselves. In the case of dietary behaviour, adults may be influenced by the dietary choices and practices of people in their social networks or those portrayed in media. SCT suggests that individuals are motivated to engage in behaviours when they anticipate positive outcomes.

SOCIAL COGNITIVE THEORY

Determines Human Behavior



Source: Dr Choi's integral leader

METHOD

Convergent mixed methods design will be adopted in this study. This design allows a simultaneous collection of both quantitative and qualitative data. According to George (2021) convergent mixed methods combines elements of quantitative and qualitative data to gain a more complete picture of the study than a stand-alone quantitative and qualitative study as it integrates benefits of both methods. It entails the use of a survey research design and in-depth interviews since in a study of this nature the opinions of people would contribute to the primary data collection. With this design, the study delves into identifying the potential health implications associated with the reliance on non-professional information sources for dietary guidance.

Population of Study

The population of this study comprise the entire civil servants in different five state government ministries in the southeast geopolitical zone of Nigeria. The population of these civil servants is estimated at 176,700, according to data from the information ministries of the various states in the Southeast region.

Table 1: Population Distribution by states

S/N	State	Total Number of Civil Servants
1.	Abia State	37,421

2.	Anambra State	37,424
3.	Ebonyi State	22,550
4.	Enugu State	38,305
5.	Imo State	41,000
	Total N=	176,700

Sample Size and Sampling Techniques

The sample size for this study was 399. This was determined using Slovin's formula (Ellen, 2020). Slovin's Formula: $n = N / (1 + Ne^2)$. Whereas:

n = sample size

N = population

e = margin of error (0.05)

Therefore, for the population of 176,700 the sample size was calculated thus:

$$n = 176700 / (1 + 176700 \times 0.05^2)$$

$$176700 / 1 + 176700 \times 0.0025$$

$$176700 / 1 + 441.75$$

$$176700 / 442.75$$

$$n = 399.09655562$$

Based on the Slovin's formula for determining sample size, we have a sample size of 399. This is slightly above the sample size of 384 for a population at infinity as suggested by Meyer (1973). And, according to Minsel (2021), a representative sample size of 300 respondents, with a margin of error of .05 and a confidence level of 95 percent, is within an acceptable margin of error and confidence level for a population that is above a million.

Since our population is 176,700 (below a million) and our statistically determined sample size is 399, we can safely say we are within the bounds of good scholarship to use a sample size of 399.

In order to proportionally determine the sample units per state, we used the formula: $X = n/N \times 399/1$

Where X = number selected from a state

n = population of civil servants of the state

N = total population of civil servants in the 5 selected states.

Mixed sampling technique was used in our study. This consist of the single stage cluster sampling, where the ministries' form clusters for random selection, and opportunity sampling technique where members of the population from the ministries are selected based on availability. Table 2 shows the distribution of the sample units.

Table 2: Distribution of sample units

S/N	State	Civil Servants
1.	Abia	84
2.	Anambra	85
3.	Ebonyi	51
4.	Enugu	86
5.	Imo	93
Total		399

Analysis

Table 3 Demographic Variables

Variables	Items	Frequency	Percentage
Gender	Male	125	32%
	Female	263	68%
Total		388	100%
Age Bracket	18-24	20	5.2%
	25-34	70	18.0%
	35-44	81	20.9%
	45-54	114	29.4%
	55-60	103	26.5%
Total		388	100%
Educational qualification	Primary Education	35	9%
	Secondary Education	78	20%
	Tertiary Education	275	71%
Total		388	100%

The result in table 3 is on the demographic details of the respondents. From the section on the gender of the respondents, the result reveal that the number of female respondents were higher than that of the male respondents.

As regards to the age of the respondents, the result reveals that the bulk of the respondents fall within the older age brackets, with 29.4% between 45-54 years, and 26.5% aged 55-60 years. Followed by 5.2% in the 18-24 age bracket, 18.0% in the 25-34 range, and a slightly higher 20.9% in the 35-44 age group.

Table 4 Respondents' view on the most commonly used non-professional dietary information source.

S/n	Index	Ratings	Score (x)	Frequency (F)	%	Fx
1	Social media platforms	SA	5	240	62	1200
		A	4	42	11	168
		FA	3	20	5	60
		D	2	66	62	330
		SD	1	20	5	20
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1778$
	Mean score =	4.58 (significant) = 92%				
	Friends and family	SA	5	38	10	190
		A	4	254	65	1016
		FA	3	35	9	105
		D	2	31	10	62
		SD	1	30	8	30
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1403$
	Mean score =	3.62 (significant) = 73%				
	Online forums/blogs	SA	5	86	22	430
		A	4	42	11	168
		FA	3	220	57	660
		D	2	20	5	40
		SD	1	20	5	20
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1318$
	Mean score =	4.14 (significant) = 83%				

Table 4 shows the Respondents' views on the most commonly used non-professional dietary information source. Mean scores of 4.58, 3.62, and 4.14 were obtained representing 92%, 73% and 83% of the respondents who used different sources of non-professional dietary information sources. Data presented in this table indicates that majority of the respondents obtain diet information from non-professional sources via social media platforms. While other respondents indicate that they are convinced through referrals and recommendations by family, friends and online blogs.

Table 5 Respondents view on health issues experienced as a result of utilizing dietary advice from non-professional sources

Variables	Frequency	Percentage
Yes	124	32%
No	264	68%
Total	388	100%

Analysis in table 5 indicates that majority of the respondents 68% have not experienced health issues due to dietary advice from non-professional sources also a substantial minority 32% of the respondents have experienced health issues, indicating that advice from non-professional sources does carry some risk. The implication of the foregoing is that majority of civil servants in south-east do not have any health issues based on the dietary advice from non-professional sources and 32% of them who reported issues suggest that non-professional advice can potentially lead to adverse health effects. This could be due to a lack of knowledge about nutrition science, misinformation, or inappropriate recommendations for individual health needs.

Table 6: Respondents' view on health issues that they have experienced and believe may be linked to the dietary information received from non-professional sources

S/n	Index	Ratings	Score (x)	Frequency (F)	%	Fx
1	Weight gain	SA	5	66	17	330
		A	4	42	11	168
		FA	3	20	5	60
		D	2	240	62	480
		SD	1	20	5	20
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1058$
	Mean score =	2.72 (not significant) = 54%				
	Nutrient deficiencies	SA	5	230	59	1150
		A	4	42	11	108
		FA	3	20	5	60
		D	2	76	20	152
		SD	1	20	5	20
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1088$
	Mean score =	2.80 (not significant) = 56%				
	Digestive problems	SA	5	86	22	430
		A	4	42	11	168
		FA	3	20	5	60

		D	2	220	57	440
		SD	1	20	5	20
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1118$
	Mean score =	2.88 (not significant) = 58%				
	Fatigue and low energy	SA	5	66	17	330
		A	4	52	13	208
		FA	3	20	5	60
		D	2	200	52	400
		SD	1	30	8	30
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1028$
	Mean Score	2.65 (not significant)= 54%				
	No health issues	SA	5	254	65	1270
		A	4	38	10	152
		FA	3	35	9	105
		D	2	31	10	62
		SD	1	30	8	30
		Total	N = 5	$\Sigma f = 388$	100	$\Sigma fx = 1619$
	Mean Score	4.17 significant)=83%				

Table 6 shows Respondents' view on health issues that they have experienced and believe may be linked to the dietary information received from non-professional sources. 83% (mean score: 4.17) of the respondents reported that they have not experienced any health issues linked to the dietary information received from non-professional sources. 58% (mean score: 2.88) reported to have experienced digestive problems, while 54% reported to have experienced fatigue and low energy. A portion of the respondents with mean score of 2.80 (56%) reported that they have experienced nutrient deficiencies that may be linked to the dietary information received from non-professional sources. The above finding implies that majority of the respondents report no health issues, suggesting that while some individuals face adverse effects, a significant portion feels unaffected by non-professional dietary advice.

Demographic Distribution of In-Depth Interview (IDI) Respondents

Fifteen participants were purposively chosen from five states, with three individuals selected from each state: Anambra, Abia, Imo, Ebonyi, and Enugu. The group consists of both male and female respondents. In terms of age distribution, two participants are between 18 and 24 years old, one is in the 25 to 34 age range, three are aged 35 to 44, five fall within the 45 to 54 range, and four are between 55 and 60 years old. This indicates that the entire age spectrum is represented among the 15 respondents. The foregoing demographic distribution of the respondents is presented in table below.

State	Designation	Gender	Age
Anambra	Respondent 1	Male	56

	Respondent 2	Female	40
	Respondent 3	Female	38
Abia	Respondent 4	Female	54
	Respondent 5	Male	27
	Respondent 6	Male	50
Imo	Respondent 7	Female	43
	Respondent 8	Male	59
	Respondent 9	Female	44
Ebonyi	Respondent 10	Female	34
	Respondent 11	Female	52
	Respondent 12	Male	55
Enugu	Respondent 13	Male	23
	Respondent 14	Male	45
	Respondent 15	Female	53

Preferred non-professional dietary information sources used by civil servants in southeast Nigeria.

Research question one measured the main non-professional dietary information sources used by civil servants in southeast Nigeria. The respondents were also asked the questions on what are the main sources of dietary information that they consult. Respondents 4, (Female, 54yrs, Abia) 3 (Female, 38yrs, Anambra) and 12 (Male, 55yrs, Ebonyi) specifically pointed out that they consult friends, family members, social media platforms, online blogs and even traditional herbalists. While respondent 9 (Female, 44yrs, Imo) said that she relies heavily on professional dietary information sources

Respondent 4 stated that:

"I mainly ask family members or friends for diet tips. I also watch cooking shows on TV and follow a few food bloggers on Instagram. You know family if I must say are always there to render help to each other like when I had the experience of high cholesterol level, one of my aunties advised me to avoid too much oil in my food and that I should add lime to warm water and drink after each meal. I tried it and the cholesterol level came down when I checked. You see, these non-professional diet information sources have a say when it comes to dietary information for healthy living" (Female, 54yrs, Abia)

Respondent 3 submitted thus:

"I rely on advice from elders in the community and occasionally talk to herbalists or traditional healers. You know they say that when you clock 40 years, you watch what you eat and you know as one gets old, the organs need healthy diet for sustainability. I learn a lot from elders especially on diet. Ndi okenye ga asi gi were utazi mere abubo eji eri ji or use bitter leaf that it helps one with high blood pressure to be stable" (Female, 38yrs, dents Anambra).

Also, respondent 12 stressed that:

"I mostly use social media platforms, online forums for quick dietary tips, but I also check blogs and websites for detailed information." Most of these online forums are not professionals" (Male, 55yrs, Ebonyi).

Respondent 9 stated that she does not rely on non-professional and she stressed that:

"I rely heavily on professional websites, online courses, and sometimes medical journals. Occasionally, I check YouTube channels run by certified dietitians. When you come to social media, there are lots and lots of dietary information by uncertified professionals and the authenticity of such information might not be a fact. So, I don't usually make use of such information. I rather take dietary information from a professional"

Health implications of relying on non-professional dietary information sources among civil servants in southeast Nigeria.

Research question two, measured the potential health implications associated with the utilization of non-professional information sources among civil servants in south-east Nigeria. Respondents were asked three questions to find out whether they have experienced any noticeable health effects, positive or negative, as a result of following non-professional dietary advice, whether there are any specific examples of non-professional dietary practices that they believe could have significant health implications and whether they think reliance on non-professional sources could impact the overall health of civil servants in Southeast Nigeria. Majority of the respondents said that they did not experience any health implications in terms of utilizing the dietary information from non-professional sources but respondents 15, 4 and 14 said otherwise

Respondent 15 stated that:

"Yes, I've had mostly positive results. Drinking bitter leaf and scent leaf juice as recommended by my neighbour helped reduce my blood sugar levels. But I've also seen people develop stomach problems from overusing herbal remedies I ma mmiri onugbu na eme na afo ma inu ya nnukwu."(Female, 53yrs, Enugu)

Respondents 4

"Yes, I've had some positive effects. A friend recommended drinking warm water with lemon first thing in the morning to improve digestion, and it's been helpful. But there was a time I followed advice to avoid carbohydrates completely, and it made me feel constantly tired and moody."(Female, 54yrs, Abia)

Respondent 14

" I've experienced both. On the positive side, I followed a colleague's advice to incorporate smoothies with vegetables and fruits into my breakfast routine, and it's improved my energy levels. On the negative side, I once tried a 'detox juice cleanse' I saw on Instagram, and it left me feeling weak and nauseous."(Male, 45yrs, Enugu)

Further probe on whether there are any specific examples of non-professional dietary practices that they believe could have significant health implications. Respondents 10, 6 and 2 affirmed that:

Respondent 10

" The trend of skipping meals for weight loss, like skipping breakfast or extreme fasting, can be harmful. Many people end up with low energy levels or even gastritis because they don't do it properly."(Female, 34yrs, Ebonyi)

Respondent 6

"Skipping entire food groups like carbs or fats can be dangerous. I've seen colleagues do it, and some even develop headaches or lose too much weight too quickly, which isn't healthy."(Male, 50yrs, Abia)

Respondent 2

" People taking herbal remedies for serious conditions like diabetes or hypertension without consulting a doctor can have dangerous outcomes. They might delay proper treatment and make their health worse. I have this

experience when my mother started losing weight seriously, we went for a test and the doctor discovered that she has diabetes but we went back home to take some herbal medications for a while until it deteriorates and we could not manage it anymore " (Female, 40yrs, Anambra)

On whether they think reliance on non-professional sources could impact the overall health of civil servants in Southeast Nigeria. Respondents 1, 5 and 12 submitted thus:

Respondent 1

"It could lead to a lot of misinformation and unhealthy practices. While some people may find tips that improve their health, others might adopt unsafe practices that worsen chronic conditions or lead to nutrient deficiencies." (Male, 56yrs Anambra).

Respondent 5

"It's a double-edged sword. On one hand, local remedies can be effective for minor issues. On the other hand, reliance on unverified sources might lead to widespread health problems, especially if people ignore professional advice for critical conditions." (Male, 27yrs, Abia)

Respondent 12

"It can go both ways. Some people might find quick and easy solutions to their health concerns, but for others, it could lead to serious health problems if they rely too much on unverified advice instead of professional care." (Male, 55yrs, Ebonyi).

DISCUSSION OF FINDINGS

The first research question sought to find out the preferred sources of non-professional dietary information sources used by civil servants in southeast Nigeria. Findings from the study shows that a large proportion of the respondents rely on social media platforms to obtain dietary information from non-professional sources. This finding agrees with the findings of Quaidoo et al (2018) that majority of the respondents seek for diet information from the social media because they believe that they get a lot of information on diet via social media and that it is a prominent platform where individuals seek dietary information due to the abundance of accessible content. This aligns with the present study's findings in Table 4, where majority of the respondents confirmed using social media to access dietary information from non-professional sources. This shared observation emphasizes the role of social media as a modern, convenient medium for dietary information. The interview revealed that majority of the civil servants get their diet information from the social media like Instagram, TikTok, WhatsApp and bloggers and even some Tv programs about health and word of mouth from their communities, family or friends. In conclusion, it was found that civil servants in south-east come across diet information from social media, friends, family, bloggers.

Research question two sought to find out the health issues experienced by civil servants in southeast Nigeria as a result of utilizing dietary advice from non-professional sources. The findings revealed that majority of the civil servants 83% have not experienced health issues due to non-professional dietary advice, while a substantial minority reported adverse effects. This shows that while many civil servants seem able to handle risks, some of them may still have health problems because they follow dietary advice from non-professionals. The interview data tend to affirm this position whereby majority of the interviewees reported that they have no health implications from non-professional dietary information sources. Another finding in this work revealed as presented in table 6, that a greater number of the respondents do not have health issues while some of the respondents who experienced health problems, mentioned weight gain, nutrient deficiencies, digestive problems, fatigue and low energy as health implications they have experienced and believe may be linked to the dietary information they have received from non-professional sources. Additionally, interview findings corroborated this, with five out of fifteen interviewees reporting similar issues, such as stomach problems, fatigue, weakness, and nausea.

The interviews highlighted a consensus that while non-professional advice can sometimes be useful, professional dietary guidance is critical, especially for managing chronic conditions or critical health issues. However, the findings in this study, align with the Social Cognitive Theory (SCT), which emphasizes the role of observational learning and social modelling in shaping behaviour. Civil servants may adopt dietary behaviours based on advice from non-professional sources, such as family, friends, or media, especially when these sources are perceived as credible or relatable. The theory explains that individuals anticipate positive outcomes from modelled behaviours, which may drive their reliance on non-professional dietary advice.

However, SCT also suggests that empowering individuals with skills to critically evaluate information (as seen in the preference for educational programs) can mitigate the risks of observational learning from unreliable sources. This aligns with respondents' recommendations for professional advice, public health campaigns, and educational initiatives to reduce the health risks associated with dietary misinformation. The study highlights the duality of dietary advice from non-professional sources. While many civil servants report no adverse effects, the experiences of those facing health challenges point to the need for improved access to professional dietary information and education.

CONCLUSION / RECOMMENDATIONS

The study used relevant research questions to establish the health implications of utilizing non-professional dietary information sources among civil servants in southeast Nigeria. The study reveals a prevalent reliance on non-professional dietary information sources such as social media, family, friends, and internet platforms. While civil servants often view these non-professional sources as reliable and trustworthy, there remains an undercurrent of uncertainty about the accuracy of the information. The study also highlights a complex interplay between convenience and credibility. Although many respondents believe they can assess the credibility of dietary information to some extent, their confidence is limited. This duality aligns with prior research that acknowledges the high usage of informal sources despite professional sources being deemed more credible. Moreover, social media influencers and bloggers in South-East Nigeria are particularly influential, echoing similar trends observed in other global contexts with celebrity chefs and lifestyle gurus.

Health implications of relying on non-professional dietary information were not widespread, but a notable minority reported adverse effects, underscoring the need for caution. This suggests that while most civil servants appear resilient, a subset remains vulnerable to health risks tied to unverified dietary advice.

In conclusion, the findings underscore the importance of addressing barriers to professional dietary consultations while promoting awareness of the risks associated with over-reliance on non-professional sources. Policies and interventions aimed at enhancing access to credible dietary information and improving nutrition literacy among civil servants in South-East Nigeria are essential to fostering healthier dietary behaviours.

Recommendations

Based on the conclusions of the study, the following recommendations were made';

- i. **Improve Access to Professional Dietary Information:** Government and health organizations should establish accessible and affordable channels for civil servants to consult professional dietitians and nutritionists. This could include subsidized health services or workplace nutrition programs.
- ii. **Enhance Nutrition Literacy Programs:** Initiatives should be introduced to educate civil servants on how to critically evaluate dietary information from both professional and non-professional sources. Workshops, seminars, and digital campaigns can improve their ability to distinguish credible information from unreliable sources.
- iii. **Regulate and Monitor Dietary Content on social media:** Authorities should collaborate with social media platforms to ensure that dietary information shared by influencers and bloggers is accurate and evidence-based. Certification programs for dietary influencers could also be introduced to improve the quality of information disseminated.

- iv. Encourage Workplace Nutrition Support Systems: Employers, particularly in government ministries, should incorporate nutrition education and support into workplace wellness programs. This could include periodic talks by nutrition professionals, distribution of credible dietary resources, and on-site dietitian services to make professional advice more readily available.

Limitations of the study

The researchers during this research encountered difficulties in reaching out to the respondents used in the survey study considering the geographical spread of the area of study. Also because of the economic situation of the country, the respondents do not come to work every day due to high cost of transportation fare and this, to some extent affects the accuracy of health implications reported. However, the researcher consulted contact persons who provided information on how to locate them.

REFERENCES

1. Australian Dietary guideline: Eat for health. Retrieved from <https://www.eatforhealth.gov.au>
2. Bany, H., Elmor, A. A., Ebrahim, B. K., Ayoub, A., Ahmed, M., Alarachi, M. R., Abedalqader, L., Amer, R., Mohammad, A., Alyousef, S., Alhajah, Y. F., Alyoussef, A., Ahmed, H., Ahmed, M., Elsayed, M. M., Desouky, E. D. El, Salem, H. K., & Salem, M. R. (2023). Exploration of the nutrition knowledge among general population: Multi — national study in Arab countries. 1–9. <https://doi.org/10.1186/s12889-023-15791-9>
3. Beaudoin, C.E & Hong, T. (2011). Health information seeking, diet and physical activity: An empirical assessment by medium and critical demographics. *International Journal* 80(8):586-95. Doi: 10.1016/j.ijmedinf.2011.04.003
4. Cash, T., Desbrow, B., Leveritt, M., & Ball, L. (2015). Utilization and preference of nutrition information sources in Australia. *Health Expectations*, 18(6), 2288–2295. <https://doi.org/10.1111/hex.12198>
5. Cena, H., & Calder, P. C. (2020). Defining a Healthy Diet: Evidence for the Role of Contemporary Dietary Patterns in Health and Disease. *Nutrients*, 12(2), 334. <https://doi.org/10.3390/nu12020334>
6. Davis, S. (2022). Exploring the relationship of sources of nutrition information sought and perceived reliability with nutrition knowledge level among women. Rutgers, The state university of New Jersey. New Brunswick, New Jersey. <https://rucore.libraries.rutger.edu>
7. Dietary Guidelines for Americans (2020). USDA Publication, Department of Health & Human Services USA.
8. Echelon health. (2016). Retrieved from <https://www.echelonhealth.com>
9. Ellen, S. (2020). Slovin's formula for sample size. <https://sciencing.com/slovins-formula-sampling-techniques-5475547.html>
10. Hamidianshirazi, M., Ekramzadeh, M., & Nouri, M. (2022). Sources of Nutritional Information among Adults. *International Journal of Nutrition Sciences*, 7(2), 90–95. <https://doi.org/10.30476/IJNS.2022.95548.1188>
11. Lowie, V., Proesmans, J., Vermeir, I., Backer, C. De, & Geuens, M. (2022). Food Media and Dietary Behavior in a Belgian Adult Sample: How Obtaining Information from Food Media Sources Associates with Dietary Behavior. 67(May), 1–9. <https://doi.org/10.3389/ijph.2022.1604627>
12. Lynnette, M., Hendriks, S., & Hugas, M. (2021). Healthy Diet: A Definition for the United Nations Food Systems Summit. The Scientific Group for the UN Food Systems Summit <https://sc-fss2021.org/>
13. National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Retrieved <https://www.cdc.gov>
14. Nickerson, C. (2023). Albert Bandura's Social Cognitive Theory. *Simple Psychology journal* <https://www.simplypsychology.org>
15. Olatona, F.A., Adeniyi, D.B., Obrutu, O.A., Ogunyemi, A. . (2023). Nutritional Knowledge, dietary habits and nutritional status of adults living in urban communities in Lagos state. *African Health Sciences*. <https://doi.org/10.4314/ahs.v23i1.76>
16. Oliveira, L., Poínhos, R., Afonso, C., & Vaz Almeida, M. D. (2021). Information Sources on Healthy Eating Among Community Living Older Adults. *International Quarterly of Community Health Education*, 41(2), 153–158. <https://doi.org/10.1177/0272684X20915362>

17. Quaidoo, E. Y., Ohemeng, A., & Amankwah-Poku, M. (2018). Sources of nutrition information and level of nutrition knowledge among young adults in the Accra metropolis. *BMC Public Health*, 18(1), 1–8. <https://doi.org/10.1186/s12889-018-6159-1>
18. Scalvedi, M. L., Gennaro, L., Saba, A., & Rossi, L. (2021). Relationship Between Nutrition
19. Knowledge and Dietary Intake: An Assessment Among a Sample of Italian Adults. 8(September), 1–13. <https://doi.org/10.3389/fnut.2021.714493>
20. Spronk, I., Kullen, C., Burden, C.A., & O'Connor, H. (2014). Relationship between nutrition knowledge and dietary intake. *The British Journal of nutrition*. DOI: 10.1017/S0007114514000087.
21. Stuart C.C. (2023). What are the benefits of eating healthy. *Medical News Today* Retrieved from <https://www.medicalnewstoday.com>
22. Wagner, M. G., Kim, Y., & Rhee, Y. (2018). Healthy and Unhealthy Dietary Behaviors among Adults : A Cross-Sectional Healthy and unhealthy dietary behaviors among adults : a cross-sectional study. January. <https://doi.org/10.14367/kjhep.2017.34.5.83>
23. Whitehead, K. (2015). Changing dietary behaviour: the role and development of practitioner communication. National Library of Medicine. <https://pubmed.ncbi.nlm.nih.gov>