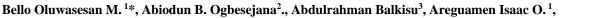




Exploring Northern Nigeria's Spice and Condiment Culture



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ABSTRACT

Northern Nigerians have a unique viewpoint on spices and condiments that is influenced by their traditional, cultural, and medicinal views. The use of spices and condiments is greatly impacted by the diverse ethnic backgrounds of the region's culinary traditions, including the Fulani and Hausa tribes. Together with their ethnomedicinal qualities, these spices varied functional phytochemicals (such as flavonoids, dietary fibers, polyphenols, and vitamins) and mineral constituents demonstrate their multifarious role in traditional medicine and culinary practices, enhancing the general health of the local populace. In addition to their function as macro- and micronutrients, they are recognized as essential resources for conveying a wide range of biological attributes and medicinal properties. However, modern issues and trends like urbanization, changing agricultural methods, and socioeconomic dynamics have an impact on how spices and condiments are produced, traded, and used, which in turn shapes regional culinary customs and dietary habits. To fully appreciate the rich cultural legacy and culinary traditions of Northern Nigeria, one must comprehend the diverse roles that spices and condiments play in the region which is what this review intends to convey.

INTRODUCTION

Northern Nigeria,

Spices and Condiments,

Keywords:

Medicinal.

Perspective.

The perspectives of Northern Nigerians on spices and condiments are varied and extensive, originating from their traditional and cultural customs. The utilization of spices and condiments is significantly impacted by the diverse ethnic backgrounds of the Hausa and Fulani tribes, which influence the region's culinary traditions (Abubakar et al., 2007). As evidenced by the perception and use of traditional medicine in the treatment of a variety of illnesses, spices are consumed in Northern Nigeria not only for culinary purposes but also for traditional medical purposes (Abubakar et al., 2007). This demonstrates the diverse range of uses that seasonings and spices have in the area, catering to both culinary and health needs. Furthermore, the use of spices and condiments in religious festivals and customary activities is indicative of the cultural relevance of these items in Northern Nigeria (Adeola, 1992). The significance of wild animals and their roles in local culture highlights the complex interrelationships among environment, customs, and culinary traditions (Adeola, 1992). Furthermore, the

use of regional food to promote the area as a travel destination emphasizes the potential that spices and condiments have to help promote Northern Nigeria's cultural heritage and tourism sector (Bello et al., 2020; 2022).

Spices and condiments are often defined as the leaves, roots, bark, berries, buds, seeds, and stigma of a plant or flower that are used to cook or enhance the flavor of dishes like meats, sauces, vegetables, and sweets (Opara and Chohan, 2014). Herbs are low-growing, seed-bearing plants without wooden stalks that are utilized in cooking, medicine, and spiritual applications (Kutama et al. 2015). Spices and herbs are essential components of a regular diet (Mann, 2011). Spices are used in cooking and have several medical applications in daily life, such as laxatives, purgatives, expectorants, carminatives, diuretics, and more. Spices have been utilized medicinally for a variety of purposes since ancient times (Bello et al., 2020; 2022; Sachan et al. 2018). Many underutilized plant species are used as blends in spices and condiments in this region (Bello et al., 2018a; 2018b). Aloko et al. (2019) and Bello et al. (2020) have reported the immense therapeutic importance of neglected vegetables, these studies establish this class of plant species as excellent ingredients of spices and condiments. The ethnobotanical study of the plants used by the native tribes in the area as spices and condiments reflects the traditional knowledge and practices around spices and condiments in Northern Nigeria (Navia et al., 2020). This emphasizes the close ties that exist between the indigenous people and the varied flora, which add to the vast variety of flavors seen in Northern Nigerian cuisine. In addition, the region's myths and misconceptions regarding specific foods-like cancer-highlight the cultural significance and beliefs surrounding food and its effects on health and well-being (Sarki & Roni, 2019). This emphasizes how important it is to comprehend the Northern Nigerian cultural context and attitudes toward spices and condiments. Northern Nigeria's traditional, cultural, and medicinal traditions are closely linked to its viewpoint on spices and condiments. Beyond the kitchen, traditional medicine, cultural celebrations, and tourism all make use of spices and condiments. To fully appreciate the rich cultural legacy and culinary traditions of Northern Nigeria, one must comprehend the diverse roles that spices and condiments play in the region.

Historical Background

It is crucial to examine the historical background of the area to comprehend the relevance of spices and condiments in Northern Nigerian cuisine. Northern Nigeria's culinary character has been shaped over the ages by the exchange of spices and culinary traditions made possible by trade routes that cross the Sahara Desert. Northern Nigeria's traditional, cultural, and medicinal practices are intricately linked to the historical foundation of the region's perception of spices and condiments (Souza et al., 2005). The Hausa and Fulani tribes in Northern Nigeria have a rich history of using traditional medicine, which includes the use of spices and condiments to cure a variety of diseases (Isikhuemen et al., 2020). Furthermore, the use of spices and condiments in religious festivals and customs highlights the cultural relevance of these ingredients and highlights the complex between local cuisine, customs, interplay and environment (Saidu & Buij, 2018). The use of regional cuisine to promote the area as a travel destination draws attention to the potential role that spices and condiments can play in advancing the cultural legacy and tourism sector of Northern Nigeria. Northern Nigeria's traditional, cultural, and medicinal traditions are intricately linked to its historical perspective on spices and condiments. Beyond the kitchen, traditional medicine, cultural celebrations, and tourism all make use of spices and condiments (Singab and Eldashan, 2015). To fully appreciate the rich cultural legacy and culinary traditions

of Northern Nigeria, one must comprehend the diverse roles that spices and condiments play in the region.

Traditional Spice Blends and Diversity

The cuisine of Northern Nigeria is influenced by the exceptional range of spices found there, each of which adds a distinct flavor character. Northern Nigerian cuisine frequently contain spices like ginger, cloves, and cavenne pepper, which range in intensity from the blazing heat of suya spice to the earthy warmth of yaji. Dried peppers, fragrant herbs, and native spices are among the meticulously chosen local ingredients that go into creating these age-old concoctions. The cultural and traditional customs of Northern Nigeria are fundamental to the region's variety of traditional spice blends. One important component of the region's legacy has been the belief in and application of traditional medicine in treating a variety of illnesses, including the use of spices and condiments, especially among the Hausa and Fulani tribes (Abubakar et al., 2007). Piper guineense and Piper umbellatum are two examples of plants whose phytochemical and mineral constituents have been evaluated. These findings have implications for ethnomedicine because these plants are used as flavoring and spicing condiments in regional cuisine (Isikhuemen et al., 2020).

Furthermore, the diversity and cultural views related to spice blends in the region are highlighted by crosscultural sensory and emotional evaluations of spice blends, including chicken-spice blends, by consumers from various cultural backgrounds (Andaleeb et al., 2023). The historic use of plant resources for seasoning and spicing in Northern Nigerian cuisine is reflected in the usage of leaves as condiments, as demonstrated by histopathological investigations on the toxicity of Ocimum gratissimum leaf extract (Effraim et al., 2010). Furthermore, the usage of hibiscus leaves in regional specialties, such as the salad "Kwadon Yakuwa," demonstrates the variety of ways that traditional Northern Nigerian meals employ seasonings and sauces (Yaradua et al., 2019). The rich cultural legacy and customs of Northern Nigeria are reflected in the variety of traditional spice mixes and preparations. The region's traditional medical and culinary customs both heavily incorporate the use of spices and condiments, underscoring the diverse functions that these ingredients play in Northern Nigerian civilization (Isikhuemen et al., 2020).

Condiment Traditions and Culinary Influences:

Northern Nigeria's culinary scene is influenced by a diverse range of cultures, such as Arab, Berber, and Hausa-Fulani customs (Isikhuemen et al., 2020). The region's use of spices and condiments reflects these influences; cumin, cloves, and cinnamon, for example, give dishes like *miyan kuka* (baobab tree leaves' soup) and masa (rice cakes) additional depth and flavor. *Miya*

kuka, well-known for its unique sour taste, gives food a welcome burst of acidity and is frequently paired with mainstays like masa or tuwo shinkafa. "Yaji" or "suya spice," a delectable concoction of ground peanuts, ginger, garlic, cayenne pepper, and other spices, is another well-In Northern Nigerian cuisine, liked condiment. condiments are essential components that give meals richness and complexity. Condiments like miya kuka and maggi seasoning cubes are essential parts of Northern Nigerian cuisine, as is the tart kick of tamarind sauce and the creamy richness of sesame paste (known as tahini) (Yaradua et al., 2019). More than just flavor enhancers, condiments are essential to the region's culinary legacy and sense of self. Condiments, such as the rich, aromatic blends of suya spice or the tangy appeal of tamarind sauce, are essential for bringing out the tastes of traditional foods and deepening the culinary experience. Meats are marinated with this adaptable seasoning to give them a smokey and spicy taste before being grilled over open flames. People from all areas of life in Northern Nigeria love suya, a famous street meal (Omorodion et al., 2017; Akinola et al., 2019). A plethora of culinary influences, including indigenous ingredients, regional trade routes, and cultural interactions, have molded the condiment traditions of northern Nigeria. The historical influence of Arab traders who traveled the Sahara Desert and introduced unique flavors to the area is seen in the usage of spices like cardamom, cloves, and cinnamon. Furthermore, the Fulani people, who are well-known for their agricultural prowess, have added dairy-based condiments like "fura da nono," a cool beverage made with fermented milk and millet flour, to Northern Nigeria's culinary scene.

A wide variety of spices and herbs are used in Northern Nigerian condiment traditions and cuisine, which add to the distinctive tastes and cultural significance of the food in the area. The use of these condiments highlights the diverse roles that spices and herbs play in Northern Nigerian culinary traditions by reflecting traditional knowledge, culinary practices, and geographical variations in spice composition. In addition, preparing and sharing condiments is a group activity that strengthens familial ties and promotes social cohesiveness in communities. Northern Nigeria's rich cultural past and culinary diversity are physical expressions of its condiment traditions, which may be found in activities like grinding spices with a traditional mortar and pestle or sharing meals with loved ones. (Olatokunbo et al., 2018).

Medicinal and Nutritional Significance

Northern Nigerian spices and condiments have substantial nutritional and therapeutic benefits in addition to their gastronomic appeal. The use of different spices and herbs is a fundamental part of Northern Nigeria's condiment customs and culinary influences. Because of their potent antioxidant qualities, foods like ginger, garlic, and turmeric are frequently employed in traditional medicines to advance health and well-being (Olatokunbo et al., 2018). In a similar vein, condiments with high protein content and umami flavor profile, including locust bean (dawadawa) and African locust bean (iru), are prized. The presence of flavonoids, tannins, and saponins in the majority of the spices identified by phytochemical screening of condiment-use spices in Kano, North Western Nigeria, highlighted the spices' varied chemical composition (Ali, 2018).

Further demonstrating the significance of these spices for ethnomedicine and highlighting their varied use in both traditional medicine and culinary arts is the analysis of the phytochemical and mineral components of Piper guineense and Piper umbellatum (Isikhuemen et al., 2020). The study conducted by Omorodion et al. (2017) highlights the traditional use of Uziza leaves as a local spice in Nigeria and their potential health implications. The study also examined the histopathological effect of crude extract of Piper guineense (Uziza) leaves on the liver of Wistar rats and on Pseudofolliculitis barbae in humans. Leafy vegetables, such as Ocimum canum (curry) and Vernonia amygdalina (bitter leaf), are used as staples, tastes, and condiments, and they significantly improve people's nutritional and therapeutic needs. Furthermore, due to their multifarious roles in the region, spices such as Parkia biglobosa (African locust bean) are highly valued for their nutritional, economic, industrial, and therapeutic significance (Omorodion et al., 2017; Akinola et al., 2019; Ehigie et al., 2019). Figure 1 shows some secondary metabolites that are renowned for functional and medicinal values in the literature (Agrawal et al., 2023). Due to their nutritional and therapeutic properties, the seeds of Onodora myristica (African nutmeg) and cumin are widely used, demonstrating the variety of applications of spices in the area (Akise et al., 2020). For instance, ginger, a common spice in the area, has digestive and anti-inflammatory qualities. It is frequently used to treat nausea and gastrointestinal problems. Comparably, cloves, another well-liked spice, are high in antioxidants and have been used for centuries treat respiratory problems and toothaches. to Additionally, cloves have antimicrobial qualities, which makes them useful for oral health.

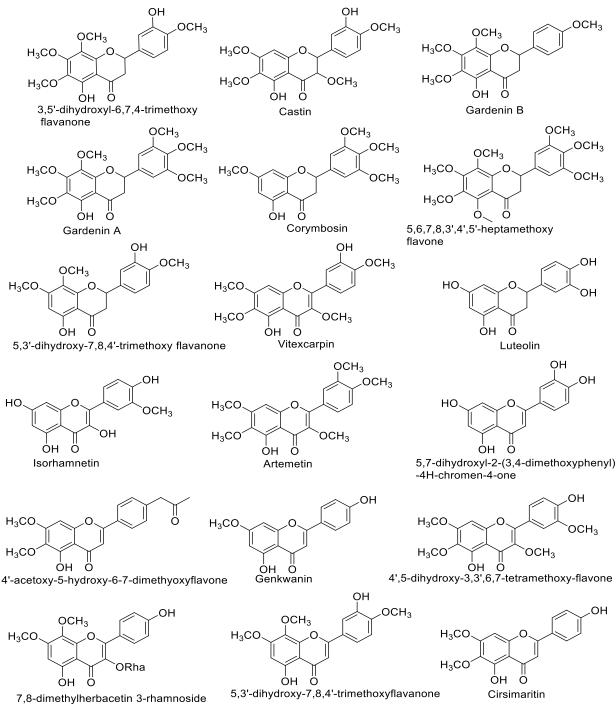


Figure 1: Secondary Metabolites Identified from Some Spices and Condiments

The sour condiment called tamarind, which is often used in Northern Nigerian cuisine is said to have cooling effects and can help with fever and digestion. Iron and vitamin C are among the many vitamins and minerals that are abundant in it. Spices and condiments give nutritional value to Northern Nigerian foods in addition to their therapeutic qualities (Chakrabarty & Islam, 2017; Malik et al., 2019). Antioxidants and micronutrients are abundant in many spices, including cinnamon, cumin, and turmeric, and they are essential for maintaining general health and well-being. The use of spices and condiments in Northern Nigerian cuisine also enhances the flavor and palatability of dishes, encouraging the consumption of nutrient-rich foods such as vegetables, legumes, and whole grains (Chakrabarty & Islam, 2017; Malik et al., 2019; Isikhuemen et al., 2020). The spices and condiments in Northern Nigeria play a crucial role in providing both nutritional and medicinal benefits to the local population. The diverse phytochemical and mineral constituents of these spices, along with their ethnomedicinal properties, highlight their multifaceted significance in traditional medicine and culinary practices, contributing to the overall well-being of the people in the region. Moreover, ground peanuts are a good source of protein and healthful fats, and they are frequently included in condiments like "suya spice" (Isikhuemen et al., 2020). Niacin, folate, and magnesium are just a few of the vitamins and minerals that peanuts are high in. In addition to improving flavor and palatability, the use of spices and condiments in Northern Nigerian cuisine promotes the consumption of nutrientrich foods such as whole grains, legumes, and vegetables (Chakrabarty & Islam, 2017; Malik et al., 2019; Isikhuemen et al., 2020). In Northern Nigeria, the native people benefit greatly from the nutritional and therapeutic properties of the spices and condiments used there. These spices' varied mineral and phytochemical compositions, in addition to their ethnomedical qualities, demonstrate their multifarious use in traditional medicine and cooking, enhancing the general health of the local populace.

Contemporary Trends and Challenges

The spice and condiment culture of Northern Nigeria is facing new challenges and developments in the current period. Globalization, rapid urbanization, shifting food tastes, shifting agricultural methods, and socioeconomic dynamics have all had an impact on how much spice and condiment use has changed in the area. According to Ibrahim et al. (2020), urban agriculture is becoming more and more popular as a practical method of reducing poverty for the urban poor in developing countries like Nigeria. The production and use of spices and condiments are facing opportunities as well as challenges due to this trend, which will affect regional culinary customs and dietary habits. Furthermore, the dynamics of cattle rustling and the violence it causes in the Lake Chad Basin Area present modern problems that have an impact on the region's traditional livestock-based economy as well as the availability and sale of spices and condiments (Ahmadu, 2019).

Furthermore, the research conducted on the characteristics of cattle rustling in pastoral communities in Gombe State emphasizes the continued significance of cattle rustling as a major criminal activity in contemporary societies, which may affect the agricultural and economic sectors associated with the production and trade of spices (Atman & Abubakar, 2019). The health risk assessment also highlights the current issues with food safety and agricultural practices, which may have an impact on the region's production and use of spices and condiments. These issues include polyaromatic

hydrocarbons (PAHs), and carcinogenic and noncarcinogenic heavy metal exposure from hibiscus leaf cultivation in Katsina State (Yaradua et al., 2019; Oganezi et al., 2022). The production, trading, and use of spices and condiments are impacted by these trends and difficulties, which in turn shape culinary traditions.

CONCLUSION

Northern Nigerians have a very traditional, cultural, and medical perspective on spices and condiments. Beyond their basic use in Northern Nigerian cuisine, spices and condiments are essential elements that showcase the region's cultural richness, inventive cooking, and ingrained customs-gastronomic uses, including customary medicine, travel, and cultural events. The use of spices and condiments is greatly impacted by the diverse ethnic backgrounds of the region's culinary traditions, including the Fulani and Hausa tribes. These elements, which range from traditional spice blends to medicinal herbs, are important for ceremonies, festivities, and daily living in addition to adding flavor and scent to food. protecting and honoring its spice culture will continue to be crucial for protecting culinary uniqueness and advancing cultural heritage as Northern Nigeria continues to change and adopt new culinary trends.

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