

Millet in Odisha: A Culinary Heritage Revival in Contemporary Cuisine

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ABSTRACT

This article explores the resurgence of millets in Odisha, India, as a key player in the culinary landscape, bridging the gap between traditional heritage and contemporary cuisine. Millets, once staples in the region, are experiencing a revival driven by their nutritional benefits and sustainable farming practices. The historical significance of millets in Odia cuisine is discussed, tracing their journey from traditional dishes to innovative creations in modern kitchens. The article highlights the health benefits of millets, their role in sustainable agriculture, and their contribution to preserving the state's rich culinary heritage. Through a harmonious blend of tradition and innovation, millets in Odisha are not only making a comeback on the plate but also fostering a deeper connection to cultural roots.

INTRODUCTION

Odisha, a land steeped in cultural diversity and agricultural heritage, is experiencing a culinary renaissance with the revival of millets. Millets, once staple grains in traditional diets, are making a comeback, not just for their nutritional value but also for their role in preserving the state's rich culinary heritage. Millets, ancient grains

that once formed the backbone of the region's dietary traditions, are making a triumphant return to the forefront of Odia cuisine (Saxena 2020). This resurgence is not merely a gastronomic trend but a reflection of a conscious effort to embrace nutritional richness, sustainability, and the preservation of culinary heritage. In this article, we embark on

a journey through the fields and kitchens of Odisha, unraveling the narrative of millets as they reclaim their place in the hearts and plates of its people.

Historical Significance:

The historical significance of millets in Odisha is deeply rooted in the state's agrarian past, where these small-seeded grains played a vital role in shaping dietary practices, cultural traditions, and sustainable agricultural systems (Sen 2004). Millets, encompassing varieties such as ragi, jowar, and bajra, held a revered position in the culinary and agricultural landscape of Odisha. The historical significance of millets can be explored through several key aspects:

Staple Diet of Ancient Odisha: Millets were a staple in the diets of ancient Odia communities. These grains were cultivated and consumed across various regions, forming the foundation of daily meals. The resilience of millets in diverse agro-climatic conditions made them a reliable source of sustenance for communities across different ecological zones within the state (Kane-potaka & Kumar 2019).

Cultural Rituals and Celebrations: Millets were integral to cultural rituals and celebrations in Odisha. Traditional festivals and ceremonies often featured millet-based dishes as offerings to deities or as part of community feasts. The preparation of special millet-based sweets and savories during festivals reflected the symbolic and cultural importance of these grains (Bandyopadhyay & Patanaik 2024).

Diversity in Culinary Practices: Odia cuisine, known for its diverse and flavorful dishes, prominently featured millets in various culinary preparations. From the famous "Sattu Ladoo" to the savory "Soru Chakuli," millets contributed to a wide array of traditional recipes that showcased the culinary prowess of the region (Chatterjee & Mohanty 2021).

Resilient Agricultural Practices: Millet cultivation in Odisha historically demonstrated the state's commitment to sustainable agriculture. These crops were well-adapted to the local agro-ecological conditions, requiring minimal water and thriving in less fertile soils (Singh *et al.* 2023). The rotation of millet crops with other staples contributed to the preservation of soil fertility and pest control.

Economic Significance: Millets played a significant role in the economic sustenance of rural communities. The cultivation and trade of millets provided livelihoods for farmers and contributed to local economies. The hardiness of millet crops also made them a reliable source of income for agricultural communities facing varying environmental challenges (Lydia pramitha *et al.* 2023).

Traditional Healing Practices: Beyond their role as a staple food, millets were often recognized for their medicinal properties in traditional healing practices. Ancient texts and folk wisdom in Odisha acknowledged the health benefits of millets, attributing them with qualities that promoted overall well-being (Mishra *et al.* 2023).

While the historical significance of millets in Odisha spans centuries, the gradual shift towards rice and wheat as dominant crops led to a decline in the cultivation and consumption of these ancient grains. However, the recent resurgence of millets in the state reflects a renewed appreciation for their cultural and nutritional value, signaling a promising revival of these grains in both traditional and contemporary contexts (Ghosh & Ramana 2023).

Contemporary Revival:

In recent years, there has been a growing awareness of the nutritional benefits of millets, coupled with a desire to preserve and celebrate local culinary traditions. As a result, millets have found their way back into Odia kitchens,

breathing new life into traditional recipes and inspiring innovative, contemporary dishes. Millets are traditional, nutrient-rich grains that were once staple foods in many parts of India but gradually lost prominence with the advent of rice and wheat. However, in recent years, there has been a renewed focus on millets due to their nutritional benefits, environmental sustainability, and resilience in diverse agro-climatic conditions. Several factors contribute to the contemporary revival of millets in Odisha and other parts of India:

Nutritional Value: Millets are rich in essential nutrients like iron, calcium, fiber, and antioxidants. They are gluten-free and have a lower glycemic index compared to rice and wheat, making them suitable for people with certain dietary restrictions and conditions like diabetes (Arya & Bisht 2022).

Climate Resilience: Millets are known for their adaptability to diverse agro-climatic conditions, including regions with low rainfall. In states like Odisha, where agriculture is largely rain-fed, millets can be a more resilient crop compared to water-intensive crops like rice.

Biodiversity and Sustainability: Growing millets contributes to agricultural biodiversity, promoting sustainable farming practices. Millets typically require fewer inputs like water and fertilizers, making them environmentally friendly and sustainable (Arulmanikandan & Roy 2022).

Promotion by Government: The government of India, through various initiatives and schemes, has been promoting the cultivation of millets. These initiatives aim to increase awareness among farmers about the benefits of growing millets and provide them with the necessary support.

Consumer Awareness: Increased awareness among consumers about the nutritional benefits of millets has led to a growing

demand for these grains. This demand, in turn, encourages farmers to cultivate millets. **Diverse Uses:** Millets are versatile and can be used in various culinary applications, from traditional dishes to modern recipes. This versatility makes them appealing to a wide range of consumers.

Health Benefits of Millets:

Millet grains are a powerhouse of nutrients, offering a range of health benefits. They are rich in fiber, protein, vitamins, and minerals, making them an excellent choice for those seeking a wholesome and nutritious diet. There are several types of millets, including pearl millet, finger millet, foxtail millet, and sorghum. Here are some of the health benefits of including millets in your diet:

Rich in Nutrients: Millets are a good source of essential nutrients, including vitamins (B-complex vitamins, especially niacin and B6), minerals (iron, magnesium, phosphorus, zinc), and antioxidants. These nutrients play crucial roles in various bodily functions.

High in Fiber: Millets are rich in dietary fiber, which aids digestion, helps maintain a healthy weight, and contributes to overall gut health. The fiber content also helps regulate blood sugar levels, making millets a good choice for individuals with diabetes.

Gluten-Free: Millets are naturally gluten-free, making them a suitable option for individuals with gluten sensitivity or celiac disease. This makes millets a versatile grain for those who need to avoid gluten-containing cereals like wheat, barley, and rye.

Low Glycemic Index: Millets generally have a lower glycemic index compared to some other grains. Foods with a lower glycemic index can help regulate blood sugar levels, making them beneficial for individuals with diabetes or those at risk of developing diabetes.

Heart Health: Millets contain heart-healthy nutrients such as magnesium and potassium. These minerals play a role in maintaining normal blood pressure levels, reducing the risk of cardiovascular diseases.

Weight Management: The high fiber content in millets can contribute to a feeling of fullness, which may help in weight management by reducing overall calorie intake. Additionally, the complex carbohydrates in millets provide sustained energy. **Antioxidant Properties:** Millets contain various antioxidants, such as polyphenols, that help neutralize free radicals in the body. Antioxidants play a role in reducing oxidative stress and inflammation, which are associated with various chronic diseases. **Bone Health:** Millets are a good source of essential minerals like phosphorus and magnesium, which are important for maintaining healthy bones and teeth. These minerals contribute to bone density and overall skeletal health.

Versatility in Cooking: Millets can be used in a variety of dishes, from porridge and bread to salads and pilafs. Their versatility makes it easy to incorporate them into different meals, providing a diverse range of nutrients. It's worth noting that while millets offer numerous health benefits, a balanced and varied diet is essential for overall well-being (Ahirwar *et al.* 2023).

Odia Millet Delicacies:

The revival of millets in Odisha has led to the resurgence of traditional dishes that were once overshadowed by more mainstream options. Some popular millet-based delicacies gaining prominence include

Millet Porridge (Khichdi): Millet grains can be cooked into a porridge with a mix of vegetables, spices, and sometimes lentils. This is a wholesome and nutritious dish often enjoyed as a comfort food.

Millet Pilaf (Pulao): Millet can be used as a substitute for rice in pilaf recipes. Cook millet with aromatic spices, vegetables, and sometimes nuts for a flavorful and hearty millet pulao.

Millet Salad: Millets like pearl millet or foxtail millet can be used as the base for salads. Toss cooked millet with a variety of fresh vegetables, herbs, and a vinaigrette dressing for a healthy and refreshing salad.

Millet Bread: Millet flour can be used to make bread. You can experiment with a combination of millet flour and other gluten-free flours to create a nutritious and gluten-free bread.

Millet Pancakes or Crepes: Millet flour can be used to make pancakes or crepes. Mix millet flour with water or milk, add your favorite sweeteners or flavorings, and cook them on a griddle for a delicious breakfast.

Millet Idli and Dosa: Millet grains or millet flour can be incorporated into traditional South Indian idli and dosa recipes, providing a healthier twist to these fermented rice and lentil-based dishes.

Millet Upma: Millet grains can be used in the preparation of upma, a savory and spicy dish made with semolina or coarse rice flour. Millet upma is a nutritious alternative to the traditional semolina upma.

Millet Snacks: Millet flour can be used to make various snacks like murukku, chakli, or savory cookies. These snacks can be flavored with spices and herbs according to your preference.

Millet Soup: Millet grains can be added to soups for a heartier texture and added nutritional value. Combine millets with vegetables, herbs, and broth to create a comforting and nutritious soup.

Millet Pudding: Millet can be used to make a creamy and delicious pudding. Cook millet with milk, sweeteners, and flavorings to create a satisfying dessert.

Innovative Millet Creations:

Contemporary chefs and home cooks alike are experimenting with millets to create innovative dishes that cater to modern tastes while preserving the essence of Odia culinary heritage. Millet salads, millet biryanis, and millet-based desserts have become popular choices, showcasing the versatility of these grains. Millet is a versatile and nutritious grain that can be used in various creative ways in the kitchen (Tiwari *et al.* 2023). Here are some innovative millet creations that go beyond traditional recipes:

Millet Sushi Rolls: Use cooked and seasoned millet as a filling for sushi rolls instead of traditional sushi rice. Combine it with colorful vegetables like avocado, cucumber, and bell peppers for a unique twist.

Millet Pizza Crust: Replace or mix millet flour with other gluten-free flours to create a delicious and nutritious pizza crust. Top it with your favorite pizza toppings for a healthy and gluten-free alternative.

Millet Stuffed Bell Peppers: Prepare a filling using cooked millet, sautéed vegetables, beans, and spices. Stuff bell peppers with this mixture, bake until tender, and enjoy a wholesome and flavorful dish.

Millet Granola Bars: Combine millet flakes with oats, nuts, seeds, and dried fruits to make homemade granola bars. Sweeten them with honey or maple syrup for a nutritious and portable snack.

Millet Breakfast Bowl: Create a breakfast bowl with cooked millet as the base. Top it with fresh fruits, yogurt, nuts, and a drizzle of

honey for a nutritious and visually appealing morning meal.

Millet and Vegetable Patties: Make savory millet patties by combining cooked millet with grated vegetables, breadcrumbs, and spices. Pan-fry or bake them for a delicious and healthy alternative to traditional patties.

Millet Popsicles: Blend cooked millet with your favorite fruits, yogurt, and a sweetener of your choice. Pour the mixture into popsicle molds and freeze for a refreshing and nutritious treat.

Millet Energy Bites: Mix millet flour with nut butter, honey, seeds, and dried fruits to form energy bites. Roll them into small balls and refrigerate for a quick and nutritious snack.

Millet Tabouleh Salad: Replace bulgur with cooked and cooled millet in a traditional tabouleh salad. Combine it with chopped tomatoes, cucumbers, parsley, mint, and a lemony dressing for a refreshing side dish.

Millet Pancake Tacos: Make savory or sweet millet flour pancakes and use them as taco shells. Fill with your favorite taco ingredients for a creative and gluten-free twist. Millet Pudding Parfait: Layer cooked millet pudding with fresh fruits and yogurt to create a parfait.

The Role of Millets in Sustainable Agriculture:

Apart from their culinary significance, millets play a crucial role in sustainable agriculture. Being hardy and resilient crops, millets require less water and thrive in diverse climatic conditions. By reintegrating millets into the agricultural landscape, Odisha is not only preserving its culinary heritage but also contributing to sustainable farming practices. Millets play a crucial role in sustainable agriculture due to their unique characteristics and ability to thrive in diverse agro-climatic

conditions. Here are some key aspects of the role of millets in sustainable agriculture:

Biodiversity and Crop Rotation: Millets contribute to crop rotation, which helps maintain soil fertility and reduce the risk of pests and diseases. Including millets in crop rotations enhances overall biodiversity in agricultural ecosystems.

Drought Tolerance: Many millet varieties, such as pearl millet and finger millet, are well-adapted to arid and semiarid regions. They have a remarkable ability to withstand drought conditions, making them suitable for cultivation in areas with limited water availability.

Low Input Requirements: Millets are generally hardy crops with low input requirements. They thrive in poor soils and don't require excessive amounts of water, fertilizers, or pesticides. This characteristic makes millets a sustainable option for farmers with limited resources.

Soil Conservation: The root systems of millets help prevent soil erosion, enhance water retention, and improve soil structure. This contributes to overall soil conservation and reduces the environmental impact of agriculture.

Climate Resilience: Millets are known for their adaptability to diverse climatic conditions, including both high and low temperatures. This resilience makes them a valuable crop in the face of climate change, where extreme weather events are becoming more frequent.

Water Use Efficiency: Millets are generally more water-efficient compared to major cereals like rice and wheat. They can be cultivated with lower water inputs, making them a sustainable choice in regions facing water scarcity or where rain-fed agriculture is prevalent.

Nutrient-Rich Grains: Millets are nutritionally dense, containing essential nutrients such as iron, calcium, phosphorus, and B-complex vitamins. Cultivating millets can contribute to improving the nutritional status of communities and addressing issues related to malnutrition (Chauhan 2023).

Diversification of Diets: Including millets in agricultural systems encourages dietary diversity. Millets provide a good source of complex carbohydrates, proteins, and dietary fiber, contributing to more balanced and diverse diets.

Support for Small-Scale Farmers: Millets are often well-suited for small-scale and subsistence farming. By promoting millet cultivation, sustainable agricultural practices can be enhanced among smallholder farmers, contributing to food security and poverty reduction (Dayakar *et al.* 2021).

Crop Genetic Diversity: The cultivation of various millet varieties contributes to crop genetic diversity. This diversity is important for breeding programs, helping develop more resilient and adaptable crops in the face of changing environmental conditions.

Promoting millets in sustainable agriculture aligns with the principles of agroecology and supports the development of resilient and environmentally friendly farming systems.

CONCLUSION:

The resurgence of millets in Odisha's culinary landscape reflects a broader movement towards reconnecting with traditional, locally-sourced ingredients. This revival not only enhances the nutritional quality of the cuisine but also contributes to the preservation of Odia culinary heritage. As millets continue to gain popularity in contemporary kitchens, they stand as a testament to the harmonious blend of tradition and innovation in the rich tapestry of Odia cuisine. The journey of millet in

Odisha's contemporary cuisine serves as a compelling example of how food can be a powerful medium for cultural expression, environmental responsibility, and gastronomic innovation. It is a testament to the fact that, in the ever-evolving world of gastronomy, the past can indeed inspire a flavorful and sustainable future.

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