



Tumpeng: Cultural, historical, and nutritional analysis of Indonesia's traditional rice dish

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Abstract

Tumpeng, a traditional Indonesian ceremonial dish characterized by its distinctive conical shape, accompanied by an array of side dishes. *Tumpeng* holds significant cultural, philosophical, and nutritional value within Indonesian society. Despite its prominence in Indonesian culinary traditions, there exists a notable gap in comprehensive literature addressing the multifaceted aspects of *tumpeng*. This review aims to fill this gap by providing a comprehensive examination of *tumpeng*, encompassing its historical evolution, philosophical underpinnings, varieties, and nutritional attributes. The historical evolution of *tumpeng* is rooted in ancient Hinduism in Indonesia which has evolved and adapted, reflecting the dynamic interplay between culture, religion, and tradition in Indonesian society. Philosophically, *tumpeng* embodies the concepts of gratitude, harmony, and community. It serves as a means of expressing gratitude to the divine and fostering communal unity through shared meals and ceremonies. Additionally, *tumpeng* holds symbolic significance in various cultural rituals and celebrations, reflecting the interconnectedness between spirituality, tradition, and everyday life. The review also explores the 15 varieties of *tumpeng*, ranging from traditional ceremonial dishes to modern adaptations for special occasions. Each variation of *tumpeng* carries its own unique cultural significance and culinary characteristics, highlighting the diversity of Indonesian cuisine and culinary traditions. Furthermore, a nutritional analysis reveals the potential health benefits of *tumpeng*, with its balanced combination of staple foods, proteins, vegetables, and other nutritious ingredients. *Tumpeng* offers a rich source of essential nutrients, contributing to overall health and well-being when consumed as part of a balanced diet.

Article History

Received July 26, 2024

Accepted June 19, 2025

Published June 30, 2025

Keywords

Ethnic Food,
Indonesia,
Indonesian
Cuisine, Rice
Dish, *Tumpeng*.

1. Introduction

Indonesia is the world's largest archipelagic nation, with over 17,000 islands and a population of over 270 million people from 1,300 distinct ethnic groups (1). As a result, Indonesia has a variety of traditions. Tradition is valued and plays an important role in representing Indonesia's national identity. One of the islands that are famous for its tradition

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is the island of Java (Figure 1). The Javanese society is steeped in customs and traditions, characterized by their profound values (2). These traditions persist across generations, with all strata of society actively engaged in their preservation and perpetuation. The daily life of the Javanese people is closely related to ceremonies and ritual activities, both related to human life and other special events. Among these customs, traditional cuisine holds a significant place (3).



Figure 1. Map of Indonesia with the location of Java Island filled in red.

Tumpeng is a conical-shaped dish crafted from rice, typically accompanied by an array of side dishes such as vegetables, meat, chicken, and eggs, features prominently in Javanese traditional ceremonies. Served on intricately woven bamboo plates known as *tampah*, *tumpeng* symbolizes the focal point of celebrations and specific traditional rites, including wedding processions (4). Each aspect of *tumpeng*, from the color of the rice forming the cone to the selection of accompanying dishes, bears symbolic significance tied to the respective ceremony. Consequently, *tumpeng* has various shapes and arrangements in various ceremonial contexts, as a means of seeking protection, prosperity, and expressing gratitude towards the environment. Moreover, it serves as a platform for organizers to express their aspirations and desires through the symbolism imbued within the *tumpeng* and its accompanying side dishes (5).

Tumpeng holds a paramount cultural and culinary importance in Indonesia, serving as a quintessential representation of traditional Javanese cuisine and customs. However, to our knowledge, there has been no international scientific publication discussing the various aspects of *tumpeng*. Therefore, the present review aims to elaborate its historical evolution, philosophical meanings, varieties, and nutritional values. This review provides invaluable insight into Indonesia's cultural heritage and culinary traditions, as well as highlight the interactions between food, culture, and society, thus providing a reliable scientific source for further studies about *tumpeng*. Furthermore, this review offers a comprehensive

understanding of *tumpeng*, thereby enriching scientific discourse and fostering a greater appreciation of this unique Indonesian culinary tradition for an international recognition.

2. Methodology

This literature review identified, analyzed, and synthesized essential information from different scientific sources including books, journal articles, and other published materials. The materials were summarized as an overview of the present state of knowledge on *tumpeng*, highlighting the gaps in the existing research and suggesting topics for future research. This literature review focused on the existing research on the history and philosophy of *tumpeng*, their varieties, the nutrient content of *tumpeng*, and the challenges and opportunities of *tumpeng*.

The sources were collected from databases and search engines for academic research, namely Google Scholar, ScienceDirect, and Scopus. The inclusion criteria were studies published in peer-reviewed journals/proceeding/books, studies that focus on history and philosophy, varieties, and the nutrient content of *tumpeng*. The exclusion criteria were studies not available in English and Indonesian.

Additionally, a focus group discussion was held by inviting two local culture experts specializing in traditional Javanese culture, a food expert, a university professor in Indonesian Traditional Food Development, a local Javanese Islamic religious leader, and two Javanese local *tumpeng* producers. The discussion took place through an online meeting platform (Zoom) on 25 January 2024. The discussion was mainly directed towards obtaining information regarding the cultural, historical, ethnic perspectives, and current development of *tumpeng* in the Javanese society.

3. History of Tumpeng

The identity of *tumpeng* traces its origins to ancient Hinduism in Indonesia. Following the introduction of Hinduism to the island of Java in the 6th century, the cone shape of *tumpeng* was made to imitate Mount Mahameru located in East Java, revered as a sacred abode of the Gods (6). It is believed that this mountain serves as the abode of the Gods. *Tumpeng*, therefore, serves as a means for Indonesian people to honor and glorify the mountain as the abode of Sang Hyang or ancestral spirits (6).

In addition to Mount Mahameru, various sources affirm that *tumpeng* is closely associated with the ancient Javanese religion known as Bhairawa Tantra (7). Such a religion emerged as the predominant religious practice within Javanese society in the 6th century, representing a syncretic fusion of Shiva-Buddhist beliefs aimed at upholding the ruler's authority (8). This religion centered from its veneration of Lord Shiva from Hinduism, who, within the Trimurti. The Trimurti epitomizes the Hindu highest divinity trinity, symbolizing the cosmic functions of creation (Brahma), preservation (Vishnu), and destruction (Shiva) through a triad of deities (9). Worship of Shiva is always accompanied by supplications, and hopes, and filled with great fear (10). The practices of Bhairawa Tantra culminated in unconventional rituals, including human sacrifices in desert regions, wherein offerings were arranged in a conical fashion, thus giving rise to the term "tumpeng." Devotees of Bhairawa Tantra engaged in ritualistic dances as part of their offerings, marking the religion as one of the most divergent from contemporary societal norms (11).

The fall of the Hindu-Buddhist empire and the arrival of Islam in Indonesia during the 15th century marked a significant transformation in this deeply rooted traditions (7). The Wali

Songo, a group of nine revered Islamic saints, played a pivotal role in this transition by promoting *dakwah* (Islamic propagation) through cultural adaptation rather than confrontation (12). Among them, Sunan Bonang was particularly influential in guiding the transformation of existing practices, such as *tumpeng* that were based on Bhairawa Tantra into Islamic cultural norms (13). This involved replacing alcoholic beverages with water and substituting mantras with prayers of gratitude to God, a method that preserved the familiar ritual form while fundamentally altering its spiritual core. Through this process of acculturation, the meaning of *tumpeng* which was once associated with pre-Islamic rituals was successfully re-signified as an expression of gratitude to God (7,14).

This transformation emphasizes a broader pattern in Indonesian history, where religious change often involves integrating and reinterpreting previous beliefs rather than outright rejection. The evolution of *tumpeng* from a Tantric offering to an Islamic symbol of gratitude demonstrates how ritual practices can preserve cultural significance while adopting new theological meanings.

4. Philosophical Meaning of *Tumpeng*

Tumpeng holds an integral part within the *slametan* tradition observed in Javanese society. *Slametan* constitutes a ritual aimed at beseeching divine protection across all spheres of life, representing the cornerstone rite of Javanese cultural practices (14). It serves as a way for fostering interpersonal relationships within the community, as well as establishing a connection between individuals and the surrounding environment, acknowledging the external forces that govern human existence. *Slametan* rituals are conducted at various junctures of human life, such as at 7 months of pregnancy (*mitoni*), childbirth, 35 days post-birth (*selapanan*), birthdays, weddings, and funerals. This cultural tradition finds validation in literary works such as Arjuna Wijaya and Kidung Harsa Wijaya, as well as in *Serat Centhini* (15).

Tumpeng originates from the abbreviation "tumapaking penguripan-tumindak platetumuju Pangeran," which signifies the orientation towards the notion that humans must align with God's path (16). Traditional Javanese culture have a belief that there are supernatural forces outside of humans that can affect their lives (17). Consequently, there exists a perceived necessity among the Javanese to cultivate and maintain a symbiotic relationship with these forces to ensure equilibrium in their lives. In Javanese Islamic tradition, *tumpeng* is interpreted as an acronym for "yen metu kudu sing mempeng" conveying the principle that actions should be purposeful and consequential (18).

Tumpeng constitutes a rice cone dish accompanied by an assortment of side dishes, arranged on a winnowing tray crafted from woven bamboo. The conical structure of *tumpeng* embodies a series of concentric circles gradually tapering towards pointed ends. This configuration symbolizes the gathering of people, while the taper signifies reverence towards the Almighty. Additionally, the conical shape of *tumpeng* conveys a sense of security, often served during occasions where safety is sought (19). The towering, pointed form of *tumpeng* also serves as a metaphor for the relationship between humanity and the divine, with God symbolically positioned at the apex overseeing the entire universe, manifested through the conical body culminating in a compressed rice base. Furthermore, the conical shape symbolizes the incremental progression towards perfection. In the context of Islam, the higher the level of perfection, the fewer people who are able and meet the requirements (20).

The conical shape of *tumpeng* also mirrors the microstructure of a *Gunungan*, a dish composed of rice, long beans, fruits, and sticky rice cakes (21) which is used as a national ceremony in the *Garebeg* ceremony (22). *Garebeg* is one of the communal feast that is still performed by the Yogyakarta palace. Throughout the year, three *Garebeg* ceremonies are conducted, namely *Garebeg Maulud* commemorating the birth of Prophet Muhammad SAW, *Garebeg Syawal* honoring the fasting month, and *Garebeg Besar* celebrating Eid al-Adha (23).

In addition to the *Garebeg* ceremony, *tumpeng* is linked to the concept of *kayon* in *wayang kulit*, a traditional Indonesian shadow puppetry. The term "kayon" originates from the Kawi language "Kayun," meaning will, combined with the Arabic word "Hayu," signifying life (24). *Kayon* represents a puppet resembling a mountain, featuring two distinct sides (Figure 2). One side depicts a palace gate guarded by two giants wielding swords and shields, symbolizing the entrance to the palace, while atop the mountain rests a tree of life entwined by a dragon (25). The tree's branches are adorned with various forest animals, such as tigers, bulls, monkeys, and birds, depicting wilderness scenarios and symbolizing the world and its inhabitants. Conversely, the other side portrays a raging fire, symbolizing chaos and hell (26).



Figure 2. *Kayon*, a visualization of *tumpeng* in *wayang kulit*.

4.1. The Arrangement and Color of Tumpeng

The arrangement of *tumpeng* extends beyond mere visual appeal, as each placement holds significant symbolic meaning. Consequently, *tumpeng* must adhere to a specific arrangement pattern known as *sandikala* or light pattern (Figure 3) (27,28). *Tumpeng* positioned on the winnowing tray, follow a sequential arrangement based on the time loop, divided into five directional parts: *Purwa* (East direction) featuring rooster meat; *Dakisna* (South direction) comprising various fresh vegetables; *Pasima* (West direction) containing processed dishes such as fried chili sauce, parsley, and fried tempeh; the North direction showcasing processed meat items such as carp, catfish, salted fish, shrimp, anchovies, and meat; and *Madya* (Centre) represented by yellow or white rice sculpted into a mountain, crowned with a chicken egg (29). This arrangement pattern serves as a depiction of the quality

of light (time and age) impacting human existence, along with stages of societal development (civilization) (19).

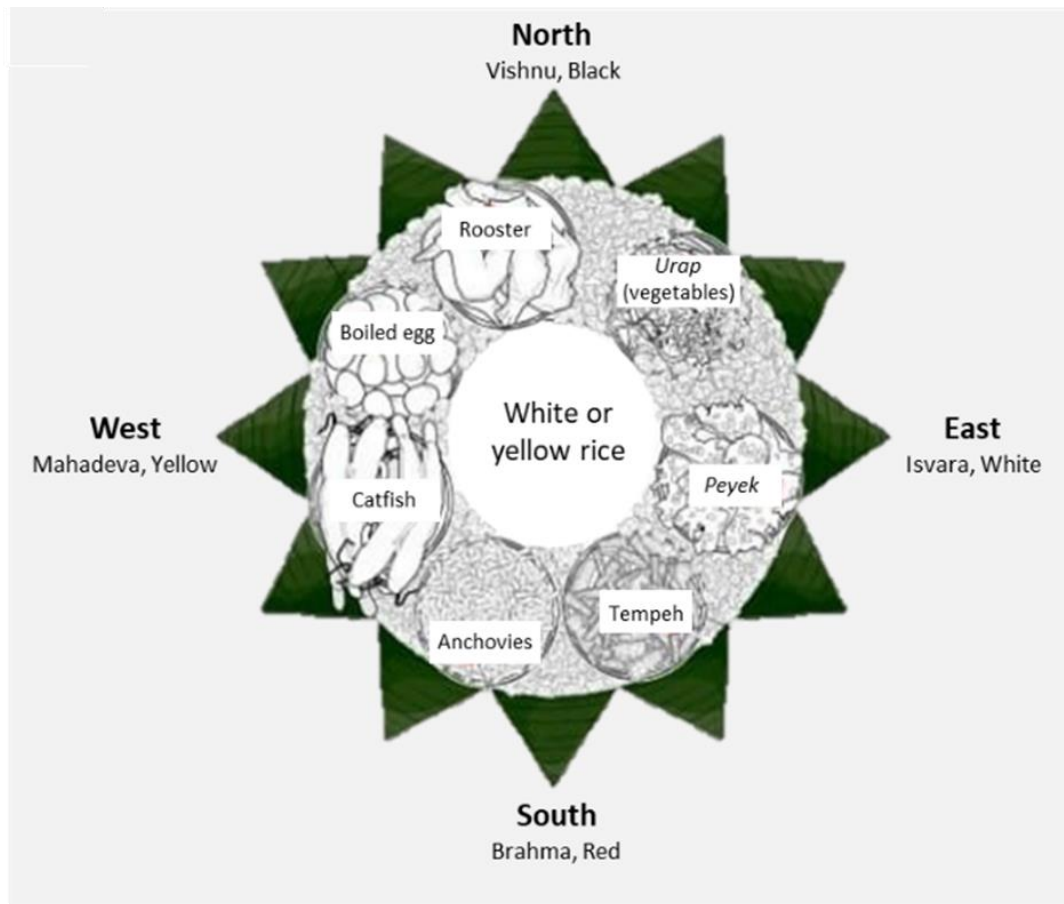


Figure 3. The orientation of *tumpeng*'s elements.

4.2. The Color of Tumpeng

The color of *tumpeng* adheres to the concept of *Dewata Nawa Sangha*, representing the nine rulers in each cardinal direction according to Hindu Dharma in Bali. These nine rulers comprise Lord Shiva surrounded by his eight aspects and symbolize the Majapahit kingdom (30,31). Within *tumpeng*, the *Dewata Nawa Sangha* manifest as follows: *Sang Hyang* Shiva embodies the central light; *Sang Hyang* Iswara represents *Purwa*, symbolizing white light; *Sang Hyang* Brahma signifies *Daksina*, denoting red light; *Sang Hyang* Mahadewa represents *Pasima*, symbolizing yellow light; and *Sang Hyang* Vishnu symbolizes the North, symbolizing black light (Figure 4) (32). These five colors constitute integral components of *tumpeng*, each serving distinct symbolic purposes: Iswara (*Purwa*, East, White) denotes sunrise and the dawn of human civilization, symbolized by a chicken which reflecting early human life; Brahma (*Daksina*, South, Red) symbolizes the sun at its zenith and the peak of human prosperity, marked by agricultural and plantation products; Mahadewa (*Pasima*, West, Yellow) signifies the sun's descent and the decline of human glory, symbolized by long-lasting processed foods like tempeh; Vishnu (North, Black) represents sunset and the collapse of human civilization, marked by meat-based side dishes; Shiva (*Madya*, Center) signifies the restoration of life to its original state by the ruler of time, marked by the placement of an egg atop the *tumpeng* (33).

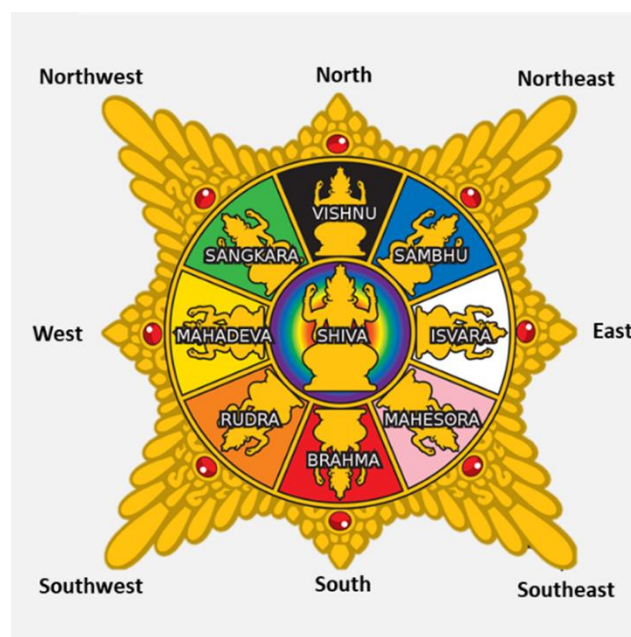


Figure 4. *Dewata Nawa Sangha*.

4.3. The Philosophy of Tumpeng's Ingredients

The main ingredient of *tumpeng* is rice, serving as a symbol of prosperity and well-being (34). The predominant colors of rice featured in *tumpeng* are white and yellow (Figure 5). In Hinduism, white symbolizes Indra, the God of the Sun (35) while the yellow color of the *tumpeng* rice symbolizes majesty and offerings or respect to the Almighty (36). *Tumpeng* should be accompanied by a minimum of seven assorted side dishes. In Javanese culture, the number seven, referred to as "pitu" signifying mutual assistance among individuals (37).



Figure 5. (A) yellow rice *tumpeng*; (B) white rice *tumpeng*.

The side dishes incorporated into the *tumpeng* must contain four elements. These include the earth element, comprising produce grown or rooted in the soil, such as potatoes, sweet potatoes, peanuts, and soybeans. The above-ground elements from vegetation, such as kale, long beans, and spinach, are essential. Animal elements sourced from land, such as chicken or beef, along with eggs. Lastly, aquatic animal elements like catfish, anchovies, shrimp, and salted fish contribute to the comprehensive array of side dishes (38).

The side dishes usually found in *tumpeng* are *ingkung* rooster (Figure 6A), *balado* egg (Figure 6B), *orek* tempeh (Figure 6C), *urap* (Figure 6D), *perkedel* (Figure 6E), *balado* potato (Figure 6F), and dried anchovies with peanut (Figure 6G). The description of each side dishes is shown in Table 1. The *Ingkung* rooster serves as a symbol of tranquillity and spiritual

devotion, as the side dish it accompanies is often perceived as an offering to the Divine God (39). This food is called *ingkung*, from the word *manengkung*, which means praying to God with a devout heart. The egg symbolizes the restoration of life and the cyclical nature of existence. It represents renewal, fertility, and the potential for growth. The egg serves as a metaphor for the rejuvenation of human civilization and the perpetuation of life itself (40).

Table 1. Description of each side dishes of *tumpeng*.

Side dishes	Description
<i>Ingkung</i> rooster	A Javanese dish where chicken, typically a rooster, is cooked with various herbs and spices until tender. The dish is often associated with traditional Javanese ceremonies and celebrations. The chicken is usually marinated in a mixture of herbs and spices such as turmeric, garlic, shallots, ginger, and lemongrass before being slow-cooked until it is flavorful and tender.
<i>Balado</i> egg	A hard-boiled eggs that are then peeled and fried until they are golden brown and crispy. They are then tossed in a <i>balado</i> seasoning consisting of spicy chili paste made from chili peppers, garlic, shallots, tomatoes, and other seasonings. The result is a flavorful and spicy egg dish that is often served as a side dish.
<i>Orek</i> tempeh	A traditional Indonesian dish made from tempeh, which is a fermented soybean cake. The tempeh is sliced thinly and then stir-fried with a sweet and savory sauce made from <i>kecap manis</i> (sweet soy sauce), garlic, shallots, and other seasonings. <i>Orek</i> tempeh is often served as a side dish or as a protein component in a larger meal.
<i>Urap</i>	A traditional Indonesian salad made from mixed steamed vegetables, such as bean sprouts, spinach, and cabbage, that are then mixed with a grated coconut dressing. The dressing is made from grated coconut, shallots, garlic, chili peppers, tamarind juice, and palm sugar, which are all ground together to form a paste. The dressing is then mixed with the steamed vegetables to create a flavorful and refreshing salad that is often served as a side dish.
<i>Perkedel</i>	A mashed potato patties that are mixed with minced meat, such as beef or chicken, as well as herbs and spices such as shallots, garlic, and pepper. The mixture is then shaped into small patties, coated in beaten egg, and fried until golden brown and crispy. <i>Perkedel</i> are often served as a side dish or snack and are popular throughout Indonesia.
<i>Balado</i> potato	A dish where potatoes are cooked with a spicy chili paste, similar to <i>balado</i> eggs. The potatoes are typically boiled until they are tender and then fried until golden brown and crispy. They are then tossed in a <i>balado</i> seasonings.
Dried anchovies with peanut	A traditional Indonesian snack made from dried anchovies and peanuts that are roasted until they are crispy and golden brown. The anchovies and peanuts are often seasoned with salt and other spices to enhance their flavor. This snack is crunchy, savory, and slightly salty, making it a popular snack or accompaniment to rice dishes.
<i>Ingkung</i> rooster	A Javanese dish where chicken, typically a rooster, is cooked with various herbs and spices until tender. The dish is often associated with traditional Javanese ceremonies and celebrations. The chicken is usually marinated in a mixture of herbs and spices such as turmeric, garlic, shallots, ginger, and lemongrass before being slow-cooked until it is flavorful and tender.
<i>Balado</i> egg	A hard-boiled eggs that are then peeled and fried until they are golden brown and crispy. They are then tossed in a <i>balado</i> seasoning consisting of spicy chili paste made from chili peppers, garlic, shallots, tomatoes, and other seasonings. The result is a flavorful and spicy egg dish that is often served as a side dish.



Figure 6. *Tumpeng* side dishes such as (A) *ingkung* rooster; (B) *balado* egg; (C) *orek tempeh*; (D) *urap*; (E) *perkedel*; (F) *balado* potato; (G) dried anchovies with potato.

Tempeh, a traditional Indonesian soy product, symbolizes resilience, adaptability, and resourcefulness, as it is made from fermented soybeans, reflecting the ability to transform and thrive even in adverse conditions. When prepared as *orek tempeh*, cooked with various spices and seasonings, it represents the importance of flavor and balance in life. *Urap* typically consists of blanched or steamed vegetables such as spinach, long beans, and bean sprouts, mixed with grated coconut and seasoned with various herbs and spices. Each component of *urap*, from the vibrant assortment of vegetables to the fragrant coconut and aromatic spices, symbolizes different aspects of life and nature coming together in harmony (38). *Perkedel* and *balado* potato representing the earth element, symbolizing grounding and stability. They signify the foundational aspects of life, providing sustenance and nourishment from the earth. Anchovies symbolize abundance and the richness of marine resources. They reflect the interconnectedness of humans with the aquatic environment and the importance of sustainable resource management (40).

4.4. *Tumpeng* as a Symbol of Relations

Tumpeng is an expression of Javanese culture that was passed down from ancestors and has been preserved to the present era. *Tumpeng*'s existence depicts the human relationship with God, society, and the environment. In Javanese belief systems, such offerings hold profound significance in nurturing the relationship between humans and the divine realm. It is firmly believed that by presenting these offerings, individuals establish a connection with the divine, seeking favor and protection in return. The act of offering *tumpeng* is not merely a ritualistic gesture but also an expression of gratitude towards the divine for bestowing a bountiful existence upon humanity (41).

Tumpeng is typically shared among family members or neighbors, fostering a sense of communal harmony. The act of dining together is believed to cultivate unity and accord within the community. According to Javanese tradition, the attainment of such harmony is deemed auspicious, eliciting blessings from the divine. This sense of togetherness is further reinforced through collective efforts in preparing the event and dishes, as well as in distributing *tumpeng* to neighbors unable to attend. Rooted in the principle of karma, Javanese culture holds that acts of kindness towards others yield reciprocal benevolence. Consequently, during *tumpeng* servings, precedence is given to elders or esteemed individuals, followed by close relatives and friends. These custom underscores the importance of respect for elders, instilling values of reverence and deference in younger generations. Ultimately, *tumpeng* epitomizes a form of indigenous wisdom, imbued with sacred significance, imparting lessons of gratitude towards the divine and reverence for elders (42).

The conical structure of *tumpeng*, alongside its accompanying side dishes, serves as a symbolic expression of gratitude towards the mountain, which bestows upon the people fertile soil, pure air, and ample water resources (43). Ranging from the land-based poultry and vegetables to the aquatic fish, each element comprising the side dishes signifies an acknowledgment of the environment's vital role. The environment fulfills all essential needs of the Javanese populace, thus prompting a profound desire to pay homage to it during every significant ceremony in their lives.

5. Preparation of *Tumpeng*

To prepare *tumpeng* rice, a whole grain, large, and *pulen* rice are used to facilitate molding and ensure firmness upon removal from the mold. The term "pulen" denotes the cohesive quality among rice grains and the sticky texture of cooked rice. For yellow rice, starts by rinsing the rice thoroughly and allowing it to drain. Subsequently, transfer the rice to a wok containing coconut milk, turmeric, lime leaves, lemongrass, and ginger. It is advisable to utilize freshly grated coconut to enhance the savory flavor of the rice (44). Continue by cooking the rice along with the coconut milk and seasonings, ensuring thorough mixing to allow the spices to permeate the rice. This culinary process, known as "aron" in Javanese, involves partially cooking the rice through stirring, facilitating ease of molding later on. Once the spices have been absorbed, steam the yellow rice in the pan for approximately one hour until fully cooked. Conversely, for white rice, follow the same cooking procedure as for yellow rice, excluding the use of coconut milk and additional seasonings (45). Rice can be shaped using a mold and positioned at the center of the tray. The perimeter of the rice may be adorned with side dishes such as *ingkung* rooster, *balado* eggs, *orek* tempeh, *urap*, *perkedel*, *balado* potatoes, and dried anchovies with peanut (Figure 5). An illustrative *tumpeng* recipe is provided in the Appendix.

6. Varieties of *Tumpeng*

Tumpeng is one of the ceremonial accessories that is always present in every Javanese traditional ceremony or ritual. As ceremonial equipment, the *tumpeng* used has a symbolic meaning related to the ceremony being held. Various types of *tumpeng* are prevalent in Javanese traditional ceremonies, including *tumpeng adhem-adheman*, *among-among*, *alus*, *blawong*, *duplak*, *kaparanto*, *kendhit*, *megana*, *poncho worno*, *punar*, *pungkur*, *pustoko*, *robbyong* and *robbyong gundul*, *ropoh*, and *rasulan* (Figure 7) (19,46,47).

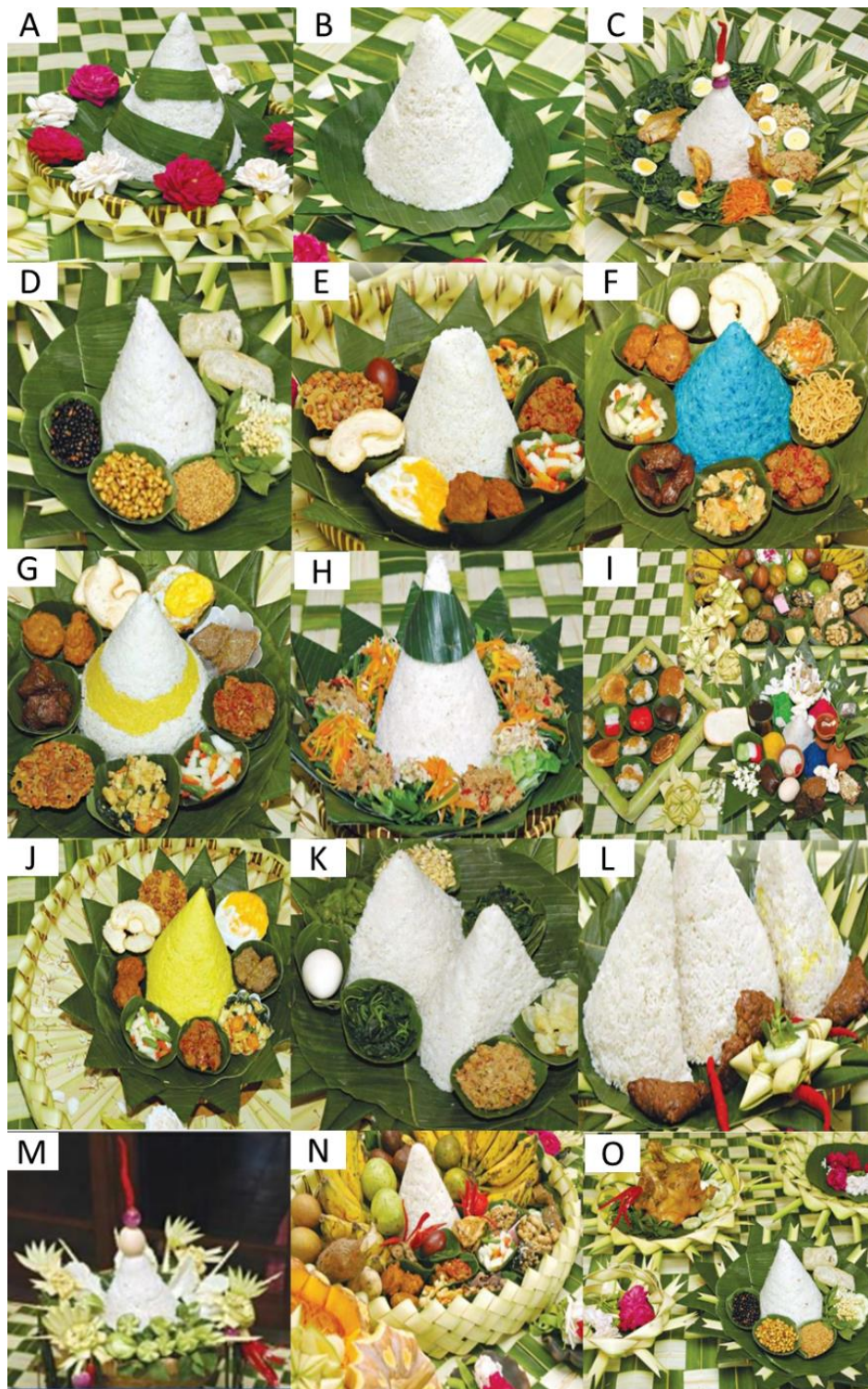


Figure 7. Varieties of *tumpeng* such as (A) *tumpeng adhem-adheman*; (B) *tumpeng alus*; (C) *tumpeng among-amongan*; (D) *tumpeng blawong*; (E) *tumpeng duplak*; (F) *tumpeng kapuranto*; (G) *tumpeng kendhit*; (H) *tumpeng megana*; (I) *tumpeng ponco worno*; (J) *tumpeng punar*; (K) *tumpeng pungkur*; (L) *tumpeng pustoko*; (M) *tumpeng robyong*; (N) *ropoh*; (O) *tumpeng rasulan*.

Table 2 shows the variety of *tumpeng* with the side dishes and its purposes. *Tumpeng* and its side dishes are a means for humans to ask for protection, safety and prosperity. The hopes or wishes of the holder of the event are expressed in symbols found on the *tumpeng*.

Table 2. Various kinds of *tumpeng* along with the side dishes and purposes.

Varieties	Color of rice	Side dishes	Cultural signification
<i>Adhem-adheman</i>	White	-	Maintaining the relationship between humans and spirits
<i>Alus</i>	White	-	Expressing sincerity at any occasion such as grave cleaning, rice plant, land cultivation, and harvesting
<i>Among-among</i>	White	Boiled vegetables with <i>megana</i> spices (a mix of young jackfruit with grated coconut, herbs, and spices)	Showing respect to spirits
<i>Blawong</i>	White	Beef jerky, fried black <i>tolo</i> beans, <i>tempeh</i> , <i>empal</i> , and <i>pindang</i> eggs	Aspiration for prosperity and abundance
<i>Duplak</i>	White	Ground beef fried chili sauce, mixed vegetables, pickled cucumber, beef stew, <i>pindang</i> eggs, <i>perkedel</i> , prawn crackers	Expressing gratitude for the abundance of blessings
<i>Kapuranto</i>	Blue	Meat fried sambal, <i>urap</i> , noodles, mixed vegetables, eggs, beef <i>semur</i> , <i>perkedel</i> , pickles, and crackers	Warding off malevolent forces, evil spirits, or negative influences, and seek for forgiveness
<i>Kendhit</i>	White and yellow	Ground meat fried Sambal, mixed vegetables, pickles, beef <i>semur</i> , dried meat, fried eggs, <i>perkedel</i> , prawn crackers	Purification or cleansing
<i>Megana</i>	White	Boiled vegetables with <i>megana</i> seasoning and hard-boiled eggs	Pregnancy or birth ceremonies
<i>Ponco warno</i>	Five colors (white, yellow, red, blue, and green)	Sweet potatoes, unripe fruits, <i>empon-empon</i> (traditional drink from plant roots and spices), and <i>setaman</i> flowers	Seven months of pregnancy
<i>Punar</i>	Yellow	Mixed vegetables, pickles, eggs, <i>rempeyek</i> , <i>tempeh</i> , <i>balado</i> potatoes	Prosperity and glory
<i>Pungkur</i>	White	Hard boiled eggs and boiled vegetables	Symbolize gratitude and fulfillment for the achievements and blessings
<i>Pustoko</i>	White	Tempeh and chili	Showing belief in God and respect for the king
<i>Robyong</i>	White	Hard boiled eggs	Fostering community unity, solidarity, and cooperation
<i>Ropoh</i>	White	Ground meat fried sambal, mixed vegetables, <i>semur</i> (meat stew in thick brown gravy), <i>pindang</i> egg, <i>perkedel</i> , pickles, and fritter	Celebrating communal unity, solidarity, and collaboration
<i>Rasulan</i>	White	<i>Ingkung</i> rooster, <i>areh</i> seasoning, vegetables, fried <i>rambak</i> (cattle skin cracker), and fried black soybean	Commemorating the birthday of the Prophet Muhammad SAW

7. Nutritional Values of *Tumpeng*

In addition to its ceremonial significance, *tumpeng* serves as a valuable tool for nutritional education within the community. The diverse array of side dishes accompanying *tumpeng* enables it to effectively illustrate the nutritional composition of its components, aiding in the dissemination of nutrition-related information and the promotion of healthy dietary practices. Table 3 displays the nutritional content of *tumpeng* based on the Indonesian Food Component Database by the Ministry of Health, Republic of Indonesia. While the table displays the nutritional value of each component per 100g for standardization, a more functional analysis emerges when calculating a realistic, single serving to understand its role in the Indonesian diet. Based on the data in Table 3, a celebratory portion consisting of approximately 150 grams of rice and customary side dishes was estimated to contain around 850 kcal. This substantial energy value emphasizes *tumpeng*'s role as a festive dish, and its nutritional importance becomes more evident when compared to everyday meals. For instance, comparing it to a typical daily Indonesian meal like *Soto Betawi* with rice (about 400-550 kcal), a plate of *tumpeng* provides a notably higher energy intake [57]. This caloric difference highlights that *tumpeng* is not designed for everyday sustenance. Instead, its richness is symbolic, representing the abundance, prosperity, and gratitude central to the special occasion being commemorated (5).

Furthermore, when compared to a modern fast-food meal, such as a burger combination (approx. 800 kcal), the *tumpeng*'s energy content is similar, but its nutritional quality is profoundly different (48). The 850 kcal in *tumpeng* are derived from a balanced profile of whole-food sources: complex carbohydrates from rice; varied proteins from chicken and eggs; and essential fiber and micronutrients from the *urap* vegetables. This contrasts with fast-food calories, which mainly stem from heavily processed fats and simple sugars, and often lack micronutrients and dietary fiber. This comparison emphasizes that *tumpeng* balances celebratory richness with nutrition, displaying traditional foods that are both festive and nourishing.

The nutritional profile of *tumpeng* is quite complex and carries important health considerations. As a dish centered around a large cone of rice, its primary characteristic is a high carbohydrate content, providing essential energy for bodily functions (49). Beyond its carbohydrate and protein base, the nutritional value of *tumpeng* also lies in its diverse side dishes, particularly the inclusion of fermented foods like tempeh. Tempeh offers more than complete protein, it is also a good source of dietary fiber, vitamins, and minerals including vitamin B12, riboflavin (vitamin B2), niacin (vitamin B3), calcium, and iron (50). Besides, tempeh also high in isoflavones, a bioactive compound naturally present in soybeans (51). Isoflavones acts as antioxidants, which play a critical role in protecting cells from oxidative stress that are linked to the development of chronic diseases such as cardiovascular disorders, diabetes, and cancer (52). A distinguishing feature of tempeh lies in its fermentation process. In raw soybeans, isoflavones are bound in a form that's less readily absorbed. However, during fermentation, the mold used in making tempeh produces enzymes called beta-glucosidases, which change conjugated isoflavones into their free form, making them easier for the body to absorb (53).

In some *tumpeng* recipes, coconut milk is included, adding another layer of nutritional interest. Coconut milk is rich in medium-chain triglycerides (MCTs), making up about 70% of its fat content (54). Unlike the longer-chain triglycerides (LCTs) found in many fats, MCTs are quickly absorbed into the bloodstream and transported directly to the liver via the portal vein.

This fast delivery allows them to be quickly oxidized for energy, which can boost metabolic activity and promote greater calorie burning, particularly when they replace LCTs in the diet (55,56). MCTs are also known to improve metabolic health by lowering LDL cholesterol and increasing HDL cholesterol levels. Furthermore, consumption of MCTs has been shown to increase satiety and reduce subsequent food intake compared to LCTs, suggesting a role in appetite regulation (57).

Table 3. Nutritional content of foods in *tumpeng* (58).

Foods	Energy (kcal)	Protein (g)	Fat (g)	Carbohydrate (g)
Rice	144	5.13	2.31	25.01
Eggs	171	11.57	13.52	0.95
Chicken	203	16	13.5	4.4
Anchovies	217	11	1.7	5.1
Potatoes	171	3.89	11.32	13.49
Tempeh	350	24.5	26.6	10.4
Spinach	23	1.2	0.6	3.7
Bean sprout	34	3.7	1.2	4.3

Data were shown per 100 g components

Due to its complete nutritional content, *tumpeng* has been used as a basis for the Indonesian Ministry of Health to promote for balanced dietary guidelines in Indonesia. In 2009, the Indonesian government choose *tumpeng* as the main guideline for balanced diet with a statement “Tumpeng Gizi Seimbang” or *tumpeng* as balanced diet. The representation of *tumpeng* within a balanced diet is depicted in Figure 8. Unlike the traditional ceremonial *tumpeng*, the space occupied by the side dishes illustrates various activities aimed at promoting a healthy lifestyle, including physical exercise, hand hygiene practices, and body weight measurement (59). The conical structure of *tumpeng* is segmented into several tiers, starting from the bottom with water, followed by the staple foods group, then the vegetables and fruits group, subsequent to which is the protein sources group encompassing meat, fish, and legumes, with the topmost segment comprising sugars, oils, and salt.



Figure 8. *Tumpeng* of balanced diet.

8. Future Perspectives of *Tumpeng*

In the future, as *tumpeng* becomes more widely available and accessible, it is expected to undergo significant transformations in terms of its availability, cost, and cultural significance. With *tumpeng* being sold freely in various food establishments, including restaurants, caterers, and online platforms, its accessibility will increase dramatically. Individuals will have the convenience of ordering *tumpeng* for various occasions, including celebrations, gatherings, and Thanksgiving ceremonies, with the option of customizing the dish according to their preferences and dietary requirements.

Moreover, there is a growing aspiration to elevate *tumpeng* as a symbol of cultural identity and pride, not only within Indonesia but also globally. As interest in Indonesian cuisine grows worldwide, *tumpeng* has the potential to become a sought-after dish in international culinary circles, leading to its promotion and recognition on a global scale. This includes initiatives to gain recognition for *tumpeng* on global platforms such as UNESCO's Intangible Cultural Heritage list, which would not only elevate its cultural status but also foster greater appreciation and awareness of Indonesian culinary heritage worldwide.

9. Conclusions

Through the exploration of its historical roots in ancient Hinduism and its subsequent adaptation and evolution within Indonesian culture, *tumpeng* emerges as a symbol deeply entrenched in tradition and spirituality. The philosophical significance of *tumpeng* is highlighted by its representation of various spiritual beliefs and practices, including reverence for ancestral spirits and expressions of gratitude to the divine. Furthermore, the diverse array of *tumpeng* varieties underscores its adaptability to different cultural contexts and ceremonial purposes, reflecting the dynamic nature of Indonesian society. The nutritional content showed the potential of *tumpeng* as a balanced and nutritious meal, incorporating essential food groups such as carbohydrates, proteins, vitamins, and minerals. Looking towards the future, *tumpeng* holds promise as more than just a cultural icon but also as a symbol of Indonesian identity and heritage. Therefore, efforts to promote *tumpeng* as a nutritious and culturally significant dish could further elevate its status both domestically and internationally, fostering greater appreciation and understanding of Indonesian culinary traditions.

Author Contributions

R.S. and D.N. Study conception; R.S. principal author; R.S. and R.P.N. data collection; R.S., R.P.N., and F.T. manuscript writing; F.T. and D.N. manuscript review and editing.

Funding

The authors received no specific funding for this work.

Data Availability Statement

This study was based on literature review. All materials related to the production of this manuscript can be found in the References section.

Conflicts of Interest

The authors declared no competing interests.

Appendix: Recipe for *Tumpeng*

A. Ingredients

Yellow rice (60)

2 L rice, 750 mL coconut milk, 4 lime leaves, 2 lemongrass, 2 gingers, curcumin powder, and 1 tsp salt.

Inkung rooster (61)

1 rooster, 5 lime leaves, 3 bay leaves, 2 sticks, 2 galangal, 1 tsp chicken stock, 1 tsp brown sugar, 2 L of thin coconut milk, and 500 mL thick coconut milk.

Balado eggs (62)

5 chicken eggs, 2 tbsp shallots, 2 tbsp garlic, 4 tbsp sliced red chili, 1 tomato, coarsely chopped, and 1 tsp salt.

Orek tempeh (63)

500 g of tempeh cut into long pieces, 3 large red chilies, 3 tablespoons of fried shallots, 1 tablespoon of fried garlic, 1 segment of crushed galangal, 2 bay leaves.

Urap (64)

Long beans, bean sprouts, water spinach, spinach, ½ young coconut, 1 piece of grilled shrimp paste, 2 red chilies, 2 cayenne peppers, 1 aromatic ginger, 2 cloves of garlic, 1 tbsp sugar, and 1 tbsp salt.

Perkedel (65)

500 g potatoes, 1 scallion that has been finely sliced, 1 celery stalk that has been finely sliced, 2 tablespoons fried shallots, 1 tsp salt, 1 egg, 4 cloves of fried garlic, 1 tsp ground pepper, and powdered broth.

Balado potato (66)

500 g potatoes, 3 bay leaves, 1 segment of crushed galangal, 1 tsp salt, 1 tsp brown sugar, 10 shallots, 5 cloves of garlic, 7 candlenuts, 25 red chilies.

Dried anchovies with potato (67)

500 g potato, 75 g anchovies, 12 red chilies, 8 shallots, 4 cloves of garlic, 50 g sugar, ½ tsp salt, and 1 tsp cooking vinegar.

B. Instructions

Yellow rice

Yellow rice or “*Nasi kuning*” is a traditional Indonesian rice dish that is typically served during special occasions or celebrations. It gets its vibrant yellow color from turmeric, which is commonly used as a natural food coloring agent in Indonesian cuisine. Yellow rice is often served as part of a larger spread of dishes, including various meats, vegetables, and condiments. To make yellow rice, first rice was rinsed under cold water until the water runs clear and drained. In a large pot, coconut milk, water, ginger, lime leaves turmeric powder, bay leaves, lemongrass stalks, and salt were combined and stirred. The coconut milk mixture

were boiled over medium heat and stirred occasionally to prevent the coconut milk from sticking to the bottom of the pot. Once the coconut milk mixture is boiling, the rinsed rice was added to the pot and stirred gently to ensure that the rice is evenly coated with the coconut milk mixture. The pot was covered, and the rice was allowed to simmer gently for about 15-20 minutes. Once the rice is cooked, the pot was removed from the heat and let it sit, covered, for an additional 5-10 minutes to allow the rice to steam and become fluffy. The bay leaves and lemongrass stalks were removed before serving if desired (67).

Inkung rooster

Inkung chicken is a whole rooster cooked with coconut milk. Firstly, the whole chicken is washed thoroughly, leaving the chicken pieces whole and uncut. The chicken is arranged and formed a curved shape as if prostrating. The chicken feet are folded and keep the chicken head upright. Ground spices sautéed with lime leaves, bay leaves, lemongrass, and galangal until fragrant and change color. Next, the coconut milk is poured, and the broth and brown sugar are added. The mixture is boiled and stirred occasionally. Chicken is added and cooked until the chicken is soft, and the gravy is reduced. Finally, coconut milk is added and cooked again until cooked and the coconut milk thickens (61).

Balado egg

To make balado eggs, hard-boiled eggs are cooked in sambal *balado*, a paste made of chili peppers and other spices (68). First, shallot, garlic, red chili, chopped tomato, and lime leaves are stir-fried until fragrant, then eggs are added. Eggs are cooked until the spices are absorbed (62).

Orek tempeh

To make *orek* tempeh, the tempeh is fried until it is yellow and dry. All the spices are mixed in a skillet. Galangal and bay leaf are added and cooked until boil and slightly thicken. Tempeh, red chilies, and fried shallots are added and mixed well (63).

Urap

To make *urap*, bean sprouts, long beans, spinach, and kale are washed, cut, and then boiled. The ground spices are ground and mixed with grated coconut, stirred well, and mixed with vegetables (64).

Perkedel

To make *perkedel*, potatoes are peeled and cut and then fried. While hot, the potatoes are mashed with a pestle. Fried garlic and pepper granules are pureed into the potato mixture. Fried shallots, celery, scallions, salt, and powdered broth are added and mixed well. The mixture is shaped rounded and then flattens slightly. Next, the mixture is dipped into a beaten egg and fried over low heat until cooked (65).

Balado potato

To make *balado* potato, potatoes are cut into cubes and washed thoroughly. Potatoes are fried until cooked and golden brown. Shallots, garlic, candlenut, and red chili are sautéed with bay leaves and galangal until fragrant. Water, salt, and brown sugar are added and mixed well. The potatoes are added and cooked until the spices absorb (66).

Dried anchovies with peanut

To make dried anchovies with peanuts, first peanuts were stir fried, lifted then drained. Red chili, shallot, garlic, and cooking vinegar are sautéed until fragrant. Salt and sugar are added and mixed well. Potatoes, anchovies, and red chilies are added then reduced the heat and stirred until dry and smooth (67).

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