

(e-ISSN: 2582-8223)

Zucchini and Zoodles

Riya Pandey¹, Swagat Ranjan Behera¹ and Gayatree Chatterjee²

¹Department of Vegetable Science, College of Agriculture,
G. B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand

²Department of Vegetable Science, College of Agriculture,

Bihar Agricultural University, Sabour, Bihar

ARTICLE ID: 54

Introduction

Zucchini or courgette, botanically known as *Cucurbita pepo*, belongs to the Cucurbitaceae family and is characterised by its mild flavour and tender texture. It is a versatile and nutrient-rich vegetable that has gained popularity in recent years, particularly for its role in the creation of "zoodles" or zucchini noodles – spiralised zucchini strands that mimic the appearance and texture of traditional noodles. This article digs into the nutritional composition of zucchini, its health benefits and the culinary trend of using zucchini as a low-carbohydrate alternative to traditional pasta.



Fig. 1. Yellow (L) and green (R) zucchini

Nutritional composition of zucchini

Zucchini is a low-calorie vegetable, making it a suitable choice for individuals aiming to manage their weight. According to the United States Department of Agriculture (USDA) National Nutrient Database, a 100 g serving of raw zucchini contains approximately 17 calories, 1.21 g of protein, 0.32 g of fat, 3.11 g of carbohydrates and 1.0 g of dietary fibre. Zucchini is also a rich source of essential vitamins and minerals. It is particularly high in



vitamin C, an antioxidant that plays a crucial role in immune function and collagen synthesis. Additionally, zucchini provides significant amounts of vitamin A, which is essential for maintaining healthy vision, skin and mucous membranes. Furthermore, zucchini contains minerals such as potassium, manganese and magnesium.

Health benefits of zucchini

- a) Weight management: The low-calorie and high-fibre content of zucchini make it a valuable component of a weight management diet. The dietary fibre in zucchini promotes a feeling of fullness, thereby reducing overall calorie intake.
- **b)** Antioxidant properties: Zucchini is rich in antioxidants, including vitamin C and carotenoids like lutein and zeaxanthin (pigments responsible for yellow colour). These compounds help neutralise free radicals in the body, protecting cells from oxidative stress and inflammation.
- c) Cardiovascular health: The potassium content in zucchini contributes to heart health by helping regulate blood pressure. Maintaining a potassium-rich diet is associated with a lower risk of cardiovascular diseases.
- d) Digestive health: The dietary fibre in zucchini aids in digestive health by promoting regular bowel movements and preventing constipation. Additionally, it supports a healthy gut microbiome, contributing to overall gastrointestinal well-being.
- e) Eye health: The presence of carotenoids, especially lutein and zeaxanthin, in zucchini is beneficial for eye health. These compounds are known to protect against age-related macular degeneration and promote optimal vision.

Zoodles: A low-carb alternative to pasta

Zoodles, short for "zucchini noodles", have gained popularity as a healthy and low-carbohydrate alternative to traditional pasta. The creation of zoodles involves using a spiraliser, or julienne peeler, or other peelers and knife to transform zucchini into long, thin strands resembling spaghetti or other forms. Following are some of the reasons for their increasing acceptance in the society:

a) Low in calories and carbohydrates: Zoodles are particularly popular among individuals following low-carbohydrate or ketogenic diets. They offer a lower-calorie and lower-carbohydrate alternative to traditional wheat-based noodles, making them suitable for those looking to reduce their carbohydrate intake.



- **b) Gluten-free option:** Zoodles are naturally gluten-free, catering to individuals with gluten sensitivities or those adhering to a gluten-free diet. This makes zucchini noodles a versatile and inclusive choice in various dietary preferences.
- c) Versatility in cooking: Zoodles can be used in numerous ways in the kitchen. They can be enjoyed raw in salads, lightly sautéed for a more tender texture, or incorporated into stir-fries. The mild flavour of zucchini allows it to complement a wide range of sauces and seasonings.
- **d) Increased vegetable intake:** Incorporating zoodles into meals provides an easy and enjoyable way to increase vegetable intake. This is especially beneficial for individuals who struggle to meet their daily recommended servings of vegetables.



Fig. 2. Zoodle salad



Fig. 3. Spiralised zucchini pasta with avocado sauce



Fig. 4. Zoodles with pesto

Culinary guidelines for zoodle preparation

- a) Choosing the right zucchini: Selecting fresh and firm zucchini is crucial for optimal zoodle texture. Smaller zucchinis with a diameter of about 1 to 1.5 inches are often recommended for a more noodle-like consistency.
- **b) Spiralising techniques:** Using a spiraliser or peeler, zucchinis can be transformed into noodles of various thicknesses and shapes. Experimenting with different spiralising techniques allows for customisation based on personal preference and the intended dish.









(e-ISSN: 2582-8223)

Fig. 5. Spaghetti zoodles

Fig. 6. Fettucine zoodles

Fig. 7. Curved spaghetti zoodles

- c) Sweating zoodles: Zucchini contains a high-water content, which can affect the texture of the final dish. To prevent excess moisture, some recipes recommend "sweating" the zoodles by salting them and allowing them to sit for a short period before cooking.
- d) Quick cooking methods: Zoodles cook quickly, and overcooking can result in a mushy texture. Sautéing for a few minutes in a pan with a small amount of oil or blanching in boiling water for a brief period helps maintain a desirable firmness.



Fig. 8. Angel hair zoodles



Fig. 9. Pappardelle zoodles

Conclusion

Zucchini, with its nutrient-rich profile and versatility, has become a staple in healthy and creative cooking. The trend of using zucchini to create zoodles provides a nutritious and low-carbohydrate alternative to traditional pasta, catering to various dietary preferences and restrictions. As individuals continue to prioritise health-conscious choices in their diets, the



popularity of zucchini and zoodles is likely to endure, offering a flavourful and nutrient-packed addition to culinary collections.

