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SATAY: MORE THAN JUST A TASTY TREAT



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MORE THAN JUST A TASTY TREAT

Discovering Its Surprising Nutritional Benefits

By:

TAJULURRUS MOHAMMAD

Faculty of Hotel and Tourism Management
Universiti Teknologi MARA Cawangan Terengganu
Corresponding Email: tajul404@uitm.edu.my

Satay is a popular street food that is originated from Indonesia and Malaysia but is now enjoyed in many other Southeast Asian countries and beyond. Satay is a dish that is typically made with meat, such as chicken, beef, or lamb, that is skewered on sticks made of bamboo or coconut. The marinated meat is then grilled over charcoal.



The dish is served with compressed rice, sliced onions, cucumbers, and peanut sauce. There are many variations of satay, with different countries and regions putting their own spin on the dish. For example, in Indonesia, satay is often served with a sweet soy sauce and served with rice cakes, while in Thailand, it is often served with a peanut sauce and cucumber relish.

Protein from meats like goat, chicken, or beef used for satay is usually mixed with sugar, typically from sources like honey, sugar, or soy sauce. When satay is grilled over high heat, the Maillard reaction occurs, giving the food a brownish-black color. At high temperatures, carbonyl groups in sugar react with nucleophilic groups in amino acids - forming glycosylamine. The resulting compounds undergo isomerization and rearrangement of chemical structure,

producing various small compounds. These compounds are responsible for the variety of aromas and flavors in the food. Different amino acid or sugar compositions give different aroma and flavor compositions. Additionally, cooking time, temperature, and moisture also contribute to different flavors.

Pyrazines, pyrroles, and furanones contribute to the smoky and toasty scent of the food. Melanoidins also form, contributing to the brownish color of the food. However, acrylamide, which is potentially carcinogenic, is also produced during the Maillard reaction.

However, the accompanying ingredients such as cucumbers, onions, and peanut sauce offer a solution. The table below explains some of the benefits

found in these accompanying ingredients:

Ingredients	Benefits According to Scientific Research
Cucumbers	Cucumbers contain Cucurbita and can provide various health benefits, such as helping to control blood sugar levels and preventing atherosclerosis and cancer. It also has high antioxidant content.
Onions	The organosulfur compounds found in onions are antiplatelet agents that can inhibit platelet aggregation, reducing the risk of cardiovascular disease. Additionally, it is also an anti-fat formation agent.
Peanuts	Peanuts containing resveratrol, an antioxidant compound, have the potential to protect the eater from cardiovascular disease and heart failure. It also contains high amounts of dietary fibre and magnesium, which help reduce the risk of diabetes.



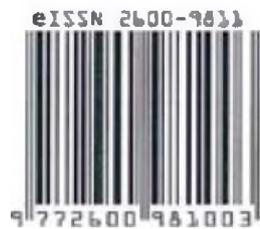
Satay has a strong cultural and historical significance, with its origins dating back to the 19th century. The dish has since become a staple in Southeast Asian cuisine and continues to be enjoyed by people all over the world. Its flavorful and nutritious qualities make it a popular and healthy choice for many. However, it is important to note that some types of meat used in satay can be high in saturated fat and

calories, so it is important to be mindful of portion sizes and to choose leaner cuts of meat whenever possible.

Our ancestors realized the benefits of these ingredients a long time ago and have been practicing it for generations. Who would have thought that the seemingly simple dish of satay has a strong scientific foundation in nutrition?

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Faculty of Business and Management
Universiti Teknologi MARA Cawangan Terengganu, Kampus Dungun
Sura Hujung, 23000 Dungun, Terengganu, MALAYSIA
Tel: +609-8400400
Fax: +609-8403777
Email: biznewzuitm@gmail.com