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#### Use of Artificial Meat in the Context of Sharia Texts

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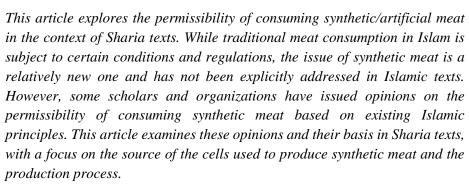
### **Abstract**











## **Keywords**

Artificial meat, synthetic meat, artificial meat, Sharia texts, Halal, Haram.





#### 1. Introduction

The use of synthetic or artificial meat has been a topic of great interest in recent years due to various concerns such as animal welfare, environmental impact, and the growing global population's demand for meat. Synthetic meat, also known as lab-grown meat, is produced by culturing animal cells in a laboratory setting, while artificial meat is made from plant-based proteins that mimic the taste and texture of animal meat. While the use of synthetic or artificial meat is gaining popularity among many people, its acceptability in the context of Sharia texts remains a topic of debate.

Sharia is the Islamic law that regulates all aspects of a Muslim's life, including dietary laws. According to Sharia, Muslims are prohibited from consuming certain types of food, including pork, alcohol, and meat from animals that are not slaughtered in the prescribed Islamic way. Therefore, the use of synthetic or artificial meat needs to be evaluated in the context of Sharia texts to determine whether it is permissible for Muslims to consume.

This article will explore the use of synthetic or artificial meat in the context of Sharia texts, including the opinions of Islamic scholars on this topic, and the potential implications of its use in Muslim societies.

## 2. Islamic Dietary Laws

Islamic dietary laws, also known as Halal, regulate what Muslims can and cannot eat. Halal is an Arabic word that means "permissible," and it is used to refer to any food or drink that is permissible for Muslims to consume. Conversely, Haram means "prohibited," and it refers to any food or drink that is forbidden for Muslims.

The following are some of the dietary laws that Muslims must follow:

- 1. Muslims are prohibited from consuming pork and any food or drink that contains pork derivatives.
- 2. Muslims are prohibited from consuming alcohol and any food or drink that contains alcohol.
- 3. Muslims are prohibited from consuming any food or drink that contains any ingredient derived from animals that were not slaughtered in the prescribed Islamic way.
- 4. Muslims are prohibited from consuming any food or drink that contains any impure substances, such as blood or excrement.

The above dietary laws are based on the Quran and the Sunnah, which are the two primary sources of Islamic law. The Quran is the holy book of Islam, and it contains the words of Allah (God) as revealed to the Prophet Muhammad (peace be upon him). The Sunnah refers to the actions and sayings of the Prophet Muhammad (peace be upon him), which serve as a guide for Muslims on how to live their lives.

## 3. Opinions of Islamic Scholars on Synthetic Meat

The use of synthetic or artificial meat in the context of Sharia texts is a topic of debate among Islamic scholars. Some scholars believe that synthetic meat is permissible for Muslims to consume, while others argue that it is not.

Those who argue that synthetic meat is permissible for Muslims to consume base their opinion on the principle of necessity (Darura). According to this principle, Muslims are allowed to consume haram food if it is necessary to avoid starvation or to protect their lives. Synthetic meat can be seen as a necessary alternative to conventional meat, which can be harmful to human health and the environment.

Moreover, synthetic meat is produced by culturing animal cells in a laboratory setting, which does not involve the slaughter of animals. Therefore, it does not fall under the category of haram meat and can be consumed by Muslims.

On the other hand, some scholars argue that synthetic meat is not permissible for Muslims to consume because it is not produced in the prescribed Islamic way. According to Sharia, animals must be slaughtered in a specific way to ensure that they are halal for Muslims to consume. Synthetic meat is not produced in this manner and therefore cannot be considered halal.

Furthermore, some scholars argue that the use of synthetic meat could lead to a reduction in demand for halal meat, which could negatively impact

# 4. Ethical Perspective on the Use of Synthetic/Artificial Meat

The use of synthetic/artificial meat has also been discussed from an ethical perspective.1 Proponents argue that it can reduce animal suffering, improve animal welfare, and decrease the environmental impact of meat production.2 However, opponents argue that it may lead to the loss of traditional farming practices and could have negative impacts on small-scale farmers.3

## 5. Scientific Perspective on the Use of Artificial Meat

Synthetic/artificial meat is produced using cellular agriculture techniques that involve growing muscle tissue from animal cells in a lab setting.4 Studies have shown that this process can be more environmentally friendly and may have fewer health risks compared to conventional meat production.5

## 6. Economic Perspective on the Use of Artificial Meat

The use of synthetic/artificial meat has the potential to disrupt the global meat industry, which is worth billions of dollars. However, it also has the potential to create new markets and economic opportunities.6

## 7. scientific composition of artificial meat

Artificial meat, also known as cultured meat or lab-grown meat, is a type of meat produced by in vitro cultivation of animal cells. The process involves extracting cells from an animal's muscle tissue and then using a nutrient-rich medium to encourage the cells to grow and differentiate into muscle tissue. The resulting tissue can then be harvested and processed into meat products. In this section, we will explore the scientific composition of artificial meat.

## 7.1 Cellular Composition of Artificial Meat

Artificial meat is made up of muscle cells, fat cells, and connective tissue cells. The cells are arranged in a similar way to conventional meat, with muscle cells forming fibers and connective tissue cells forming the matrix that holds the fibers together. However, the proportion of muscle cells to fat cells and connective tissue cells can be manipulated during the production process to achieve a desired texture and flavor.7

## 7.2 **Nutrient Composition of Artificial Meat**

The nutrient composition of artificial meat can be tailored to match that of conventional meat. It typically contains protein, fat, and various micronutrients such as iron, zinc, and vitamin B12. The nutrient content can be adjusted by altering the nutrient content of the growth medium or by adding nutrients during the processing stage.8

## 7.3 **Safety of Artificial Meat**

Artificial meat is subject to the same safety regulations as conventional meat. Before it can be sold for human consumption, it must undergo safety testing to ensure that it is free from harmful pathogens and toxins. Several studies have shown that artificial meat is safe for human consumption and has a lower risk of contamination than conventional meat.9

### 7.4 Sustainability of Artificial Meat

One of the key benefits of artificial meat is its potential to be more sustainable than conventional meat. The production process requires less land, water, and feed than traditional meat production, and produces fewer greenhouse gas emissions.

Additionally, it has the potential to reduce the environmental impact of livestock farming, such as deforestation, soil erosion, and water pollution.10

#### 8. Islamic Point of view

In Islamic jurisprudence, the consumption of meat is subject to certain conditions and regulations. However, the issue of consuming artificial meat, also known as labgrown meat or cultured meat, is a relatively new one and has not been explicitly addressed in Islamic texts.11However, some scholars and organizations have issued opinions on the permissibility of consuming artificial meat based on existing Islamic principles.

The Islamic Religious Council of Singapore, for example, issued a statement in 2019 stating that artificial meat is permissible as long as it meets the same halal requirements as traditional meat. The council emphasized that the source of the cells used to produce the artificial meat must be from halal sources and the production process must not involve any haram (prohibited) ingredients or methods.12

Similarly, the Halal Research Council in Pakistan has stated that artificial meat can be considered halal if it meets the same criteria as traditional meat in terms of the source of the cells and the production process.

Dr. Husni Hammuda, a lecturer and researcher in Islamic studies, has also stated that artificial meat can be halal as long as the cells used to produce it are from a halal source and the production process does not involve any haram ingredients or methods.13

It should be noted that these opinions are not universally accepted, and the issue of the permissibility of artificial meat consumption in Islam is still a matter of debate among scholars.

### 9. Conclusion

In conclusion, the permissibility of consuming synthetic/artificial meat in the context of Sharia texts is still a matter of debate among scholars. While some have issued opinions that synthetic meat can be considered halal if it meets the same criteria as traditional meat, others argue that it goes against the principle of tayyib (wholesome and pure) food. Nevertheless, it is clear that synthetic meat has the potential to address some of the ethical and environmental concerns associated with traditional meat production, and it is important for the Muslim community to continue to engage in discussions and research on this issue. Ultimately, any decision on the permissibility of consuming synthetic meat should be based on a careful analysis of

the relevant Sharia texts and principles, as well as scientific evidence on the safety and quality of the product.

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