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CULTURED MEAT: AN APPRAISAL FROM THE FIQH AND SUFI VIEWS OF MUSLIM SCHOLARS

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Abstract

Meat comprises of important nutrients for the human body. As the global population increases, so has the demand for meat. A new idea was conceived to invent cultured meat produced from the outer part of the animal's body in the 1930s. However, the idea of cultured meat invention was only realized in 2013 by a Dutch scientist who invented burger-shaped cultured beef. This invention did not exist at the time of the Prophet, his Companions and the tābi'īn and it has become a polemic among the Muslim community regarding its halal status. The existence of cultured meat in the today's society requires a clear fiqh explanation and procedure because it is one of the new discoveries in the food industry. This study is significant to provide a good understanding and new knowledge to the Muslim society. A clear fiqh approach will provide guidelines to the society in considering it as a staple or alternative diet. Otherwise, they may avoid consuming cultured meat product as a precaution from haram and uncertainty (shubhah). This study employs qualitative descriptive research by analyzing some previous studies as secondary sources that have been recorded elsewhere, processed, printed and disseminated to the public. The results found that cultured meat is a new discovery in Malaysia. Although the original law for this cultured meat is halal, if it does not meet the shariah principles and criteria, it is considered haram. This paper highlights the halal status of cultured meat from fiqh and sufism in terms of the transformative form of God's creation. Based on the primary sources of fiqh and sufism, the status of cultured meat is considered halal provided if the shortage of meat affects the needs of the population, it causes no harm in terms of consumption and benefits the general public. Further research is necessary to verify that it is also tayyiban and fulfils the maqasid with regard to Islamic nutrition and the effects of consumption to consumers. © The Author(s) (2023).

Author Keywords

alteration of God's creation; Cultured meat; halal; haram

References

- Al-Athqalānī, Aḥmad Alī ibn Ḥajar
(2001) *Fath al-bārī syarḥ Ṣaḥīḥ al-Bukhārī*,
Riyad: Maktabah al-Malik Fahd
- Al-Attas, S. M. N.
(1963) *Some aspects of Sufism as understood and practised among the Malays*,
Shirle Gordon, Ed. Singapore: Malaysian Sociological Research Institute Ltd
- Yūsuf, Muḥammad ibn
(1993) *Tafsīr al-baḥr al-muḥīṭ*,
Abū, Ḥayyān Beirut: Dār al-Kutub al-'Ilmiyyah
- Al-Bukhārī, Abū
(2001) *Ṣaḥīḥ al-Bukhārī*,
Abd Allāh Muḥammad. Beirut: Dār Ṭūq al-Najah
- Adams, J.
(2018) *Meat and Islam: How vegetarians in Egypt navigate faith and contemporary food ethics*,

(Master's thesis). Harvard University ProQuest Dissertations Publishing Theses database. (Recor 28275849)

- Al-Du'aylaj, Mubārak ibn Muḥammad
(2000) *Al-Waḍ'ū fī al-Hadīth*,
Riyad: Maktabah al-Malik Fahd al-Waṭāniyyah
- Al-Ghazālī, Abū Ḥamīd
(1995) *Al-Ghazali on disciplining the soul and on breaking the two desires*,
(Trans. T. J. Winter). Cambridge: The Islamic Texts Society
- Al-Ghazālī, Abū Ḥamīd
Iḥyā' 'ulum al-dīn,
(n.d). Cairo: Dār Iḥyā al-Kutub al-'Arabiyyah 'Isa al-Babi al-Halabi wa Shurakah
- Al-Jawziyyah, Ibn Qayyim
(2006) *Badā'i al-tafsīr: Al-Jām'i limā fassarahu al-Imām Ibn Qayyim al-Jawziyyah*,
Al-Damam: Dar Ibn al-Jawzi
- Al-Qaradāwī, Yūsuf
(1980) *Al-Halal wa al-haram fī al-Islām*,
Cairo: Maktabah Wahbah
- (2006) *Al-Jāmi' li aḥkām al-Qur'ān wa al-mubayyin limā taḍammana min al-Hadīth wa aḥkām al-Furqān*,
Beirut: Muassasah al-Risālah.Al-Razi
- Al-Qushayri, Abū Al-Qāsim
(2007) *Al-Qushayri's epistle on Sufism: Al-Risala Al-qushayriyya fi 'ilm al-tasawwuf (The great books of Islamic civilization)*,
Reading, UK: Garnet Publishing
- Al-Rāzī, Abū 'Abd Allāh Muḥammad
(2012) *Al-Tafsīr al-kabīr*,
Beirut: Dar al-Fikr
- Al-Ṣābūnī, Muḥammad 'Alī
(1981) *Ṣafwat al-tafāsīr*,
Beirut: Dar al-Quran al-Karim
- Al-Sha'rāwī, Muḥammad Mutawallī
(1971) *Tafsīr al-Sha'rāwī*,
Cairo: Al-Azhar Islamic Research Academy General Department for Research, Writing & Translation
- (2005) *Aḍwā' al-bayān fī idāh al-Qurān*,
Makkah al-Mukarramah: Dar 'Alam al-Fawa'id
- Al-Sinhaji, Shihab al-Din Abi al-'Abbas
(2001) *Kitab al-furuq: Anwar al-buruq fi anwar al-furuq*,
Kaherah: Dar al-Salam
- Al-Suyūṭī, Jalāl al-Dīn
(2003) *Al-Durr al-manthūr fī tafsīr bi al-ma'thūr*,
Abd al-Raḥman ibn Abī Bakar, al Beirut: Dar al-Fikr
- (1994) *Jāmi' al-bayān 'an ta'wīl āy al-Qur'ān*,
(Tafsīr al-Ṭabarī). Beirut: Muassasah al-Risālah
- Al-Tirmīdhī, Abū 'Īsā' Muḥammad ibn 'Īsā' al-Sulamī
(1996) *Al-Jām' al-Kabīr*,
al Beirut: Dār al-Garb al-Islamī

- Ansari, M. A. H.
(1986) *Sufism and Shari'ah*,
Leicester: The Islamic Foundation
- (1992) *Al-Bahr al-muhīt fī uṣūl al-Fiqh*,
Kuwait: Dār al-Ṣafwah
- Ba'labakī, M.
(1993) *Al-Mawarid: A modern 'Arabīc-English dictionary*,
Beirut: Dār al-'Ilm lī al-Malayin
- Baharom, N.
(2002) *Kamus Dewan*,
Kuala Lumpur: Dewan Bahasa dan Pustaka
- Bailey, P., Holowacz, T., Lassar, A.
The origin of skeletal muscle stem cells in the embryo and the adult
(2001) *Current Opinion in Cell Biology*, 13 (6), pp. 679-689.
- Benjaminson, M. A., Gilchrist, J. A., Lorenz, M.
In vitro edible muscle protein production system (MPPS): stage 1, fish
(2002) *Acta Astronautica*, 51 (12), pp. 879-889.
- Bhat, Z. F., Kumar, S., Fayaz, H.
In vitro meat production: Challenges and benefits Over Conventional Meat Production
(2014) *Journal of Integrative Agriculture*, 14 (2), pp. 241-248.
- Bhat, Z. F., Bhat, H., Pathak, V.
Prospects for in vitro cultured meat: A future harvest
(2014) *Principles of tissue engineering*, pp. 1663-1683.
(4th ed). Lanza R, Langer R, Vacanti Joseph (ed). Elsevier, San Diego: CA, USA
- Bhat, Z. F., Bhat, H.
Animal-free meat bio fabrication
(2011) *American Journal of Food Technology*, 48 (2), pp. 125-140.
- Bracke, M. B. M.
(2009) *Animal welfare in a global perspective*,
Netherlands: Wageningen University & Research
- Bryant, C.
Culture, meat, and cultured meat
(2020) *Journal of Animal Science*, 98 (8), pp. 1-7.
- Carel, A.
The culture of whole organs: I. technique of the cultured of the thyroid gland
(1937) *Journal of Experimental Medicine*, 65 (4), pp. 515-526.
- Celada, P., Bastida, S., Muniz, S. F. J.
To eat or not to eat meat. That is the question
(2016) *Nutricion Hospitalaria*, 33 (1), pp. 177-181.
- Choudhury, D., Singh, S., Seah, J. S. H., Yeo, D. C. L., Tan, L. P.
Commercialization of plant-based meat alternatives
(2016) *Trends in Plant Science*, 25 (11), pp. 1055-1058.
- DeFoliart, G. R.
Insects as human food
(1992) *Crop Protection*, 11 (5), pp. 395-399.

- Duque, P., Gomez, E., Diaz, E., Facal, N., Hidalgo, C., Diez, C.
Use of two replacements of serum during bovine embryo culture in vitro
(2003) *Theriogenology*, 59 (3-4), pp. 889-899.
- Edelman, P. D., McFarland, D. C., Mironov, V. A., Matheny, J. G.
Commentary: In Vitro-cultured meat production
(2005) *Tissue Engineering*, 11 (5-6), pp. 659-662.
doi.org
- Eelen, V.
(1999) *Industrial scale production of meat from in-vitro cell cultures*,
Retrieved International Application Published Under the Paten Cooperation Treaty (PCT)
from the World Intellectual Property Organization Bureau website
- Fadzli, S. D. N. M., Reza Adnan, M. R. A., Baharuddin, A. S., Wan Harun, M. A.
**Produk makanan ubah suai genetik (GMF) dalam perspektif konsep halalan toyyiban
berdasarkan penilaian maqasid hifz an nafs**
(2021) *Malaysian Journal Syariah and Law*, 9 (1), pp. 73-99.
- Fakhry, M.
(2000) *Islamic philosophy, theology, and mysticism: A short introduction*,
(2nd ed). London: Oneworld
- Fattah, I. A.H.
(1993) *Nasha'at al-falsafah al-sufiyyah wa tatawwaru-ha*,
Beirut: Dar al-Jil
- (2011) *Livestock's long shadows-Environmental issues and options*,
Retrieved from
- Fuseini, A., Wotton, S. B., Knowles, T. G., Hadley, P. J.
**Halal meat fraud and safety issues in the UK: A review in the context of the
European Union**
(2017) *Food Ethics*, 1 (2), pp. 127-142.
doi.org
- Godfray, H. C., Aveyard, P., Garnett, T., Hall, J. W., Key, T. J., Lorimer, J., Pierrehumbert,
R. T., Jeb, S. A.
Meat consumption, health, and the environment
(2018) *Science*, 361 (6399).
- Gould, S., Friedman, L.F.
(2016) *These are the countries where people eat the most meat*,
Retrieved from the Insider US Market Closed Website
- Grigg, D.
The nutritional transition in Western Europe
(1995) *Journal of Historical Geography*, 21 (3), pp. 247-261.
- Hamdan, M. N., Ramli, M. A.
(2019) *Daging kultur: Konsep, sejarah dan hukum Islam*,
Kuala Lumpur: Institut Kefahaman Islam Malaysia (IKIM)
- einz, G., Hautzinger, P.
(2007) *Meat processing technology for small to medium scale producers*,
Bangkok: RAP Publication
- Hetts, S., Estep, D., Marder, A.
**Psychological well-being in animals: Conceptual Issues, behavioral measures, and
implication for dogs**
(2008) *Advances in Companion Animal Behaviour*, 21 (2), pp. 369-387.

- Hoekstra, A. K., Chapagain, A. K.
Water food prints of nations: Water use by people as a function of their consumption pattern
(2007) *Water Resources Management*, 21, pp. 35-48.
doi.org
- Hātim, Ibn Abī, Abd al-Raḥman Muḥammad, Abd al-Raḥman Muḥammad
(1997) *Tafsīr al-Qurān al-Aẓīm musnadan ‘an Rasūlillāh wa al-Ṣaḥabah wa al-Ṭabi’in*,
Riyad: Maktabah Nizar Mustafa al-Baz
- (2001) *Al-Muḥarrar al-wajīz fī tafsīr al-kitāb al-‘ajīz*,
Beirut: Dar al-Kutub al-‘Ilmiyah
- Kathīr, Ibn
‘Imād al-Dīn Abū al-Fidā’ Ismā’īl
(2000) *Tafsīr al-Qur’ān al-‘Aẓīm*,
Cairo: Muassasah Qarṭabah
- (2005) *Majmu‘ al-fatāwā Shaykh al-Islām Aḥmad ibn Taymiyyah*,
Mansurah: Dar al-Wafa
- Ikhsan, M.
Sejarah Mazhab Fikih di Asia Tenggara
(2018) *Nukhbatul ‘ulum: Jurnal bidang kajian Islam*, 4 (2), pp. 120-134.
- Ismail, I., Hwang, Y. H., Joo, S. T.
Meat analog as future food: A Review
(2020) *Journal of Animal Science and Technology*, 62, pp. 111-120.
- (2011) *Hukum memakan makanan terubahsuai genetik (Genetic modified food)*,
Retrieved from
- Jochem, C., Valk, J., Stafleu, F., Baumans, V.
The use of fetal bovine serum: Ethical or scientific problem?
(2002) *Alternatives to laboratory animals: ATLA*, 30 (2), pp. 219-227.
- Kelland, K.
(2013) *First taste of test-tube burger declared “close to meat”*,
Retrieved from the Reuters website
- Knysh, A.
(2000) *Islamic mysticism: A short history*,
Leiden, Boston, Koln: Brill
- Knysh, A.
(2017) *Sufism: A new history of Islamic mysticism*,
Princeton & Oxford: Princeton University Press
- Larsson, S. C., Wolk, A.
Meat consumption and risk of colorectal cancer: A meta-analysis of prospective studies
(2006) *International Journal of Cancer*, 119 (11), pp. 2657-2664.
- Mahato, S.
Relationship of sanitation parameters with microbial diversity and load in raw meat from the outlets of the Metropolitan City Biratnagar, Nepal
(2019) *Hindawi International Journal of Microbiology*, 17.
doi.org
- May, A. S. G.
(2013) *In vitro meat: protein for twelve billion?*,

(Master Thesis of Science Communication, University of Otago, New Zealand Retrieved from

- Muslim, Muslim ibn al-Ḥajjāj
(2006) *Ṣaḥīḥ Muslim*,
Riyāḍ: Dar Tayyiba lil-Nashr wa al-Tawzī
- Nid, L., Pisestyani, H., Basri, C.
Studi kasus: Pemalsuan daging sapi dengan daging babi hutan di Kota Bogor
(2020) *Jurnal Kajian Veterinar*, 8 (2), pp. 121-130.
- Paul, A., Frederich, M., Uyttenbroeck, R., Hatt, S., Malik, P., Lebecque, S., Hamaidia, M., Danthine, S.
Grasshoppers as a food source? A review
(2016) *Biotechnology, Agronomy and Society and Environment*, 20, pp. 337-352.
(S1)
- Paulsen, P., Nauman, K., Bauer, F., Avagnina, A., Smulders, F. J. M.
Game meat fermented products food safety aspects
(2017) *Food Biology Series Fermented Meat Products: Health Aspects*, pp. 58-77.
N. Zdolec (Eds), Boca Raton: CRC Press Taylor&Francis
- Petriani, P., Hafid, H., Mirwanhono, R. E., Wahyuni, T. H.
(2020) *Teknologi pengolahan daging*,
Medan: CV Anugerah Pangeran Jaya Press
- (2015) *The future of world religions: Population growth projections, 2010-2050. Why Muslims are rising fastest and the unaffiliated are shrinking as a share of the World's Population*,
Retrieved from
- Post, M. J.
Cultured meat from stem cells: challenges and prospects
(2012) *Meat Science*, 92 (3), pp. 297-301.
- Post, M. J.
Cultured beef: medical technology to produce food
(2014) *Journal of the Science of Food and Agriculture*, 94 (6), pp. 1039-1041.
doi.org
- Seidel, K.
(2000) *Serving the guest: A Sufi cookbook*,
Retrieved from the Sufism and Vegetarianism website
- Reese, J.
(2018) *The end of animal farming: How scientists, entrepreneurs, and activists are building an animal-free food system*,
Boston: Beacon Press
- Sans, P., Combris, P.
World meat consumption patterns: An overview of the last fifty years (1961–2011)
(2015) *Meat Science*, 109, pp. 106-111.
- Schneider, Z.
(2013) *In vitro meat: Space travel, cannibalism, and federal regulation*,
Retrieved February 19, 2023, from
- Sealea, P., Rudnicki, M. A.
A new look at the origin, function, and “stem-cell” status of muscle satellite cells
(2000) *Developmental Biology*, 218 (2), pp. 115-124.

- Shah, G.
Why do we still use serum in the production of biopharmaceuticals?
(1999) *Developments in Biological Standardization*, 99, pp. 17-22.
- Shindell, D., Faluvegi, g., Koch, D., Schmidt, G., Unger, N., Bauer, S.
Improved attribution of climate forcing to emissions
(2009) *Science*, 326, pp. 716-718.
- Smith, F. E.
(1930) *The World in 2030 A.D*,
London: Hodder and Stoughton
- Specter, M.
Test-tube Burgers
(2011),
The New Yorker Magazine. Retrieved from the Burgers From A Lab: The World Of Vitro Meat website
- (1998) *An in vitro edible muscle protein production system in small busines innovation research*,
Retrieved from
- (2019) *World population to reach 9.7 billion by 2050 new study predicts*,
Retrieved from
- Wahab, N. A., Shahwahid, F. M., Hamid, N. A. A., Othman, N., Ager, S. N. S., Abdullah, M., Miskam, S., Saidpudin, W.
Contributions of Malaysia and Singapore in the development of Halal industry in the ASEAN region
(2016) *Asian Journal of Social Sciences & Humanities*, 5 (2), pp. 37-46.
- Weiss, F., Leip, A.
Greenhouse gas emissions from the EU livestock sector: A life cycle assessment carried out with the CAPRI model
(2013) *Agriculture, Ecosystems and Environment*, 149, pp. 124-134.
- (2020) *Current world population*,
Retrieved February 19, 2023, from
- Wyers, R.
(2019) *The finishing touch for cultured meat? Spanish start-up scores in fat replication*,
Retrieved February 19, 2023, from
- Yanke, G.
The path to the bloodless butcher: In vitro meat and its moral implications
(2011) *The Triple Helix, Inc*, 1, pp. 8-9.
- Zaraska, M.
(2013) *Lab-grown beef taste test: 'Almost' like a burger*,
Retrieved from the Washington Post website

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