

A virtue-ethical approach to cultured meat

The proposed benefits of cultured meat fail to track our moral intuitions because they are focused on the practical aspect of cultured meat production and consumption. A virtue-oriented approach can show cultured meat in a different light.

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o meat eaters want cultured meat (CM)? Surveys show that meat eaters feel disgust toward CM¹ and regard it as an unnatural product². CM is produced in bioreactors and does not taste exactly like traditional meat³, although its taste may be perfected in the future. Yet, meat eaters are not interested in consuming CM on a regular basis, let alone replacing traditional meat with CM⁴. Perhaps more information will enable people to overcome their disgust toward CM — but toleration is not synonymous with acceptance. Many meat eaters, in fact, argue that using animals for food is what makes us human⁵.

It is not in the interests of the livestock sector to shrink itself. CM production will involve fewer jobs than those available in traditional animal farming and quite different sets of skills that animal farming workers may lack⁶. Danielle Beck, senior director of government affairs for the National Cattlemen's Beef Association, said of CM, "Lab-grown fake meat products should not be permitted to use the term 'beef' and any associated nomenclature"7. Such terms as 'fake meat' and 'real beef' reflect a negative sectoral attitude toward CM. Consequently, CM may never be accepted by consumers to the degree necessary to make environmental and ethical differences.

When evaluated in terms of the major ethical systems, deontological and utilitarian ethics, the question of CM becomes relatively easy. According to the deontic approach, we ought to respect the rights of all (typically sentient) beings who can claim, either directly or indirectly, certain rights. The fact is that CM will pass the test with flying colours because CM is an insentient object that is devoid of any rights at all.

A similar result follows from utilitarian principles: if it is true that CM production and consumption are safer for the environment than intensive factory farming and that they avoid animal exploitation — in other words, they are conducive to the greatest happiness for the greatest number of interested beings — CM passes the utilitarian test. Passing these tests means

that CM would be morally permissible and/or morally required.

However, just because something is practically viable, it does not necessarily follow that it is moral. Virtue ethics is an approach to ethics according to which our moral decisions should be based on certain character traits, such as compassion, magnanimity, justice and more, which are essential to human flourishing. I argue that, on the basis of a virtue-oriented ethic, CM ought not to be produced or consumed.

Fighting fire with fire often backfires

Experts largely agree that decreasing meat consumption is good for human and planetary health8. But where does CM sit in this, and could the widespread, guilt-free consumption of CM be counterproductive to healthful, sustainable diets? CM and traditional meat are made in very different ways, but the final products are said to be almost identical. Considering that most nutrition experts warn people to consume meat in moderation because meat, when consumed in abundance, does not support good health, then the same would apply to CM. Moreover, the general message that CM producers send to the public is that CM is more environmentally friendly and ethically produced. Yet, even the father of CM, Dr. Mark Post, stated, "Quite frankly, vegetarians should remain vegetarians, that's better for the environment than cultured beef"8. A plausible consumer reaction to messaging that aligns CM with a sustainable food systems agenda may well be indulgence or overindulgence in meat. In other words, fighting fire with fire could well backfire.

Democracy or deception

The question that underpins the vision of CM is how to convince meat eaters to embrace CM. There are two possible routes: CM producers implement an aggressive campaign to persuade consumers to buy CM, or the environmental argument is made; namely, that intensive animal agriculture must be phased out whether meat eaters like it or not. Let us consider each in turn.

Persuade consumers. It would be peculiar to argue that, despite the evidence showing that consumers are quite happy about eating meat and are not interested in CM, in time they will welcome CM by way of aggressive advertisement and lobbying. After all, if traditional meat is what meat eaters want, why produce CM? Aside from health, there is evidence that, in Western countries, meat eaters are not willing to stop eating meat for environmental reasons9, and many environmentally minded meat eaters argue that consuming meat can be environmentally friendly¹⁰. Therefore, any aggressive attempt to persuade people to buy CM against their desires would be anti-democratic.

Legal changes to reduce animal agriculture and promote CM. The

argument here may be as follows: time is of the essence for the environment, and traditional animal farming is no longer sustainable; therefore, a framework must be put in place to force people to buy CM and reduce or discontinue traditional meat consumption. However, why replace meat with more meat? Why promote CM when a viable solution may be a synergistic approach that favours plant-based diets? Why not gradually diminish the production of animal-based food and transition to plant-based diets instead of introducing yet another product into an already confusing food market? The most sensible response is to educate people and make them realize the necessity of transitioning to more sustainable food systems that do not involve lab-grown food.

The crux is this: if the argument is that, due to environmental and ethical concerns, traditional meat production must be reduced and meat eaters will be obliged to consume CM (whether they like it or not), then it would seem equally, if not more, sensible to require people to embrace a synergistic food plan focused on prevalently plant-based diets. In short, either the project of CM is deceptive and anti-democratic on the one hand, or it is superfluous on the other.

A different ethical approach

The following ethical approach concerns affluent countries, such as the United States, in which the consumption of meat is egregious. CM seems to be a good idea and morally unproblematic because it is often considered from broadly utilitarian principles, for example, reducing pollution and suffering. However, just because a practice may lead to overall satisfactory outcomes, it does not follow that it is moral.

To illustrate how virtue ethics would approach the question of CM, consider a recent controversy. During the COVID-19 pandemic, Beach Drive in Washington DC, a road that runs across Rock Creek Park, was closed to traffic in order for people to enjoy the park. The National Park Service is now considering whether to reopen the road to traffic. As the road is a major artery, many argue that opening the road to traffic makes it easier for thousands of cars to commute from one part of the city to another, thus avoiding lots of traffic building up elsewhere. From a utilitarian standpoint, opening the road would not be wrong — in fact, it would maximize public good without infringing anyone's rights. Similarly, from a deontological standpoint, it would not be undutiful. This, however, should not be the conclusion.

From the perspective of virtue, moral excellence and human flourishing¹¹, the conclusion may be very different — that the road should remain closed to traffic and the park should continue to be a space of nature and recreation. A virtue-based approach would argue that keeping the park closed to traffic is the noble decision because it is conducive to human (as well as non-human animal) flourishing.

The view that I propose was originally articulated by Aristotle. Accordingly, morality is an aspect of human nature and human goodness. To appreciate virtue ethics, it is necessary to understand the human good, that is, what enables humans to grow, to develop, to thrive and ultimately to flourish (to perfect). The human good is understood in terms of what is conducive to human flourishing. In other words, by understanding our nature, we can determine the sorts of virtues necessary for human flourishing.

Thus, a virtue-ethical approach would consider how to become the best human being one can be by acting virtuously — justly, compassionately, mercifully, benevolently, magnanimously and so on. A virtuous person is not merely one who exhibits a certain behaviour, for example, one who is often or typically or selectively generous. Rather, one is virtuous because generosity, for example, is a firm aspect of

one's character, whereby one's character is a complex psychological disposition consisting of the right emotions and attitudes, which are guided by sound reasoning. For every particular context, a virtuous person expresses their virtue in appropriate manners, at the right moment, toward the right individuals and in the right amount. For example, a truthful person will not necessarily tell the truth as a fixed principle; they will not divulge the truth if doing so may hurt others or be used to hurt others.

In his book *The Nicomachean Ethics*, Aristotle describes a truly virtuous person as having the most important of all virtues, what Aristotle calls megalopsychia, which is often translated as 'greatness of soul' or as 'magnanimity'12. The great-souled person possesses the virtues of courage, temperance, wisdom, generosity, fortitude and justice, among others. Aristotle called greatness of soul "a sort of crown of the virtues"12 for good reasons. The great-souled person is not too concerned about material goods, and they would give up their possessions or even their life for the sake of honour without any sense of loss. The great-souled person helps others, although they are not interested in benefiting from others. They take pleasure in benefiting others.

Aristotle describes great-souled individuals as magnanimous and as individuals concerned with nobility of character — individuals who care about and for the environment, and for all sentient creatures. They are merciful and temperate individuals who care about justice. Arguably, they are individuals who possess strong wills and self-control, who are able to easily adjust their diet to benefit themselves and the environment. As noted, one important moral character trait possessed by great-souled individuals is temperance.

Aristotle explains that temperance is the relevant virtue in the context of physical appetites. A temperate individual has a rational and harmonious approach to appetite and food pleasure. They are not particularly attached to a certain food simply because it may taste good or because it generates pleasure. Consider that some people often indulge in food that is deleterious or unhealthful. As the saying goes, 'I do not live to eat but I eat to live.' In other words, while food pleasure is relatively important, the main purpose of eating food is to acquire energy for growth and for proper functioning and health.

Thus, a virtuous person may consider that optimal health does not require the consumption of any animal products^{13–15}. Indeed, some argue that it is best to avoid consuming meat¹⁶; that humans were

biologically selected to eat plants^{17,18}; that humans can thrive without eating meat¹⁹; that meat must be consumed in moderation because it is not healthful in abundance²⁰; that well-planned, plant-based, vegan diets are optimal; that plant-based diets are more sustainable and overall better for the environment²¹; that taste can be adjusted; and that animal suffering can be avoided without sacrificing important human values.

If consumers are committed to virtue-ethical principles, then they would likely also internalize temperance and justice by choosing options that would reflect these virtues and would thereby choose satisfactory alternatives. As there already are satisfactory alternatives — plant-based, vegan diets, or forms of agriculture that may include very low amounts of meat — it is logical to conclude that virtue ethics would favour the option that does not require financial burden and strategies to convince people to abandon what they see as perfect and natural (factory farming) to embrace something unnatural made in the lab that they do not want.

Moreover, if meat turns out to be healthful, then it would seem that the virtuously temperate person would have considered that intensive animal agriculture is bad for the environment and for animals, that CM is not supposed to replace traditional farming and that traditional farming is supposed to continue. Thus, they would endorse sustainable agriculture and the temperate consumption of traditional meat at a level that is conducive to good health, that is environmentally responsible and that enables the ethical treatment of farmed animals. In other words, the virtue approach either leads to a total vegan attitude to agriculture and diet or, if one argues that it would be impossible to do away with animal farming, it leads to an ethical and responsible non-intensive animal farming model — without the need for CM.

Conclusion

The details of the virtue-based view presented here may be subject to a number of criticisms. However, my goal is not to provide a knockdown argument for ethical veganism or vegetarianism. Rather, it is to illustrate that the traditional ethical approaches to CM are incomplete and fail to track our moral intuitions because they are focused only on the practical aspect of CM. A virtue-oriented approach can make us realize the triviality of CM in the light of today's environmental problems. Therefore, the virtuous approach concerning CM is

to shun CM and promote either ethical veganism or, at least, a considerably less harsh food system.

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Competing interests

The author declares no competing interests.

Additional information

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