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REVIEW

In vitro meat production: Challenges and benefits over conventional meat production

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Abstract

In vitro meat production system is the production of meat outside the food animals by culturing the stem cells derived from farm animals inside the bioreactor by using advanced tissue engineering techniques. Besides winning the favour of animal rights activists for its humane production of meat, *in vitro* meat production system also circumvents many of the issues associated with conventional meat production systems, like excessively brutal slaughter of food animals, nutrition-related diseases, foodborne illnesses, resource use, antibiotic-resistant pathogen strains, and massive emissions of methane that contribute to global warming. As the conditions in an *in vitro* meat production system are controlled and manipulatable, it will be feasible to produce designer, chemically safe and disease-free meat on sustainable basis. However, many challenges are to be faced before cultured meat becomes commercially feasible.

Although, the production cost and the public acceptance are of paramount importance, huge funds are desperately required for further research in the field.



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Keywords

in vitro meat; history; advantages; techniques; problems

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Inside the meat lab, the chip integrates the composite strategic market plan, although this fact needs further careful experimental verification.

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