

Decoding cultured meat production

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Stellingen

1. Cultured meat technology promises to resolve environmental and ethical issues of meat consumption.
2. Bovine satellite cells are a promising cell type for production of cultured beef.
3. Transcriptomic analysis is a powerful tool for improving the cultured meat production process.
4. Bovine satellite cells can perform myogenic differentiation under serum-free conditions.
5. Serum-free growth media have selective effects on cell types and need to be adjusted to avoid overgrowth.
6. Satellite cells can switch between three states during proliferation in vitro: activated, quiescent, and committed.
7. Maintenance of stemness through p38 α / β MAPK inhibition can be hampered by coating-dependent off-target effects.
8. Distinct satellite cell cultures have the ability to proliferate and differentiate beyond 35 population doublings – sufficient to produce commercially relevant quantities of cultured meat from a single muscle biopsy.
9. *Die Welt ist kein Machwerk und die Tiere kein Fabrikat zu unserm Gebrauch.* Arthur Schopenhauer
10. *Peace cannot be kept by force; it can only be achieved by understanding.* Albert Einstein
11. *Dwell on the beauty of life. Watch the stars, and see yourself running with them.* Marcus Aurelius