

Cultured meat: future projection?

OBJECTIVES

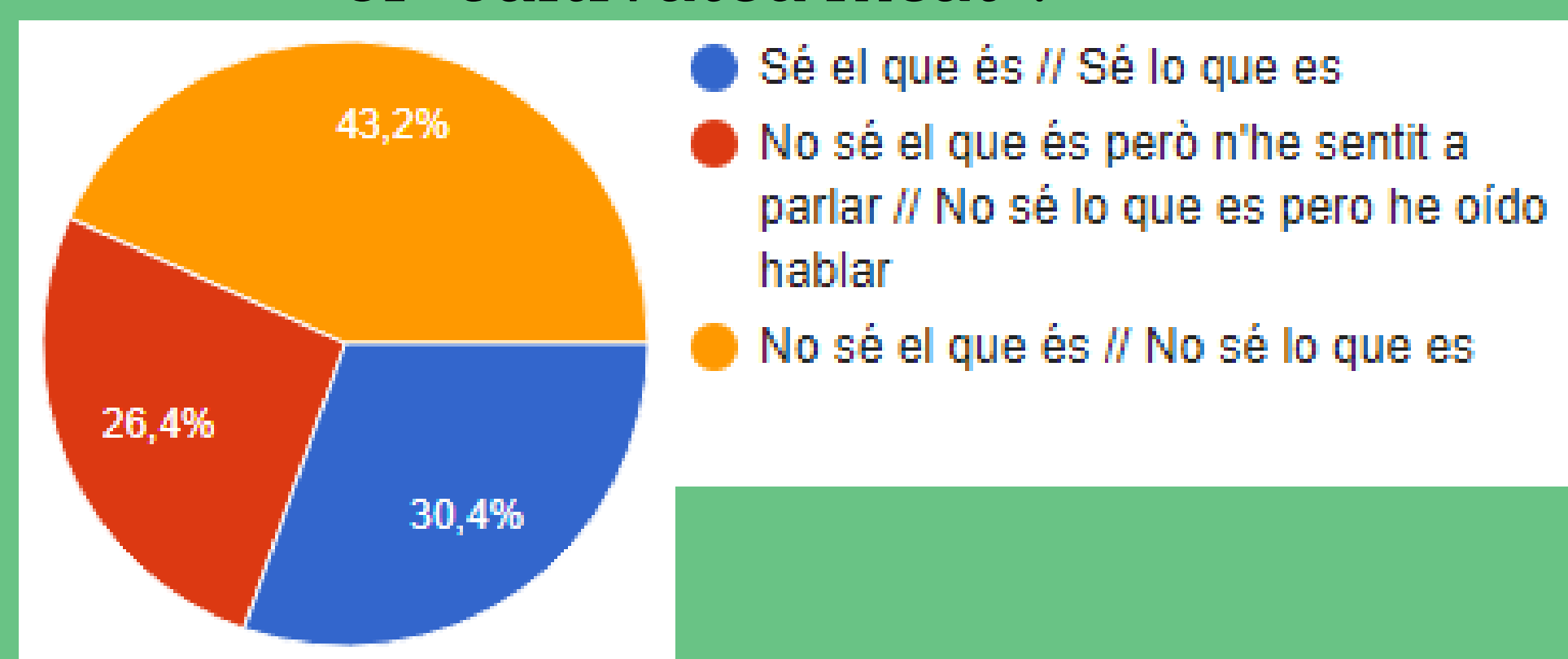
The main objective is to analyze the viability and projection that cultivated meat can have as an alternative to traditional meat or a source of protein. Focusing on aspects such as benefits, disadvantages, production process and consumer acceptance and point of view.

WHY TO PRODUCE CULTURED MEAT?

- Sustainable production ✓
- Environmental sustainability ✓
- Animal welfare ✓
- Food security ✓
- Design, functional and stable products ✓

POLL

Do you know what it is or have heard of "cultivated meat"?



Would you consume this type of meat?

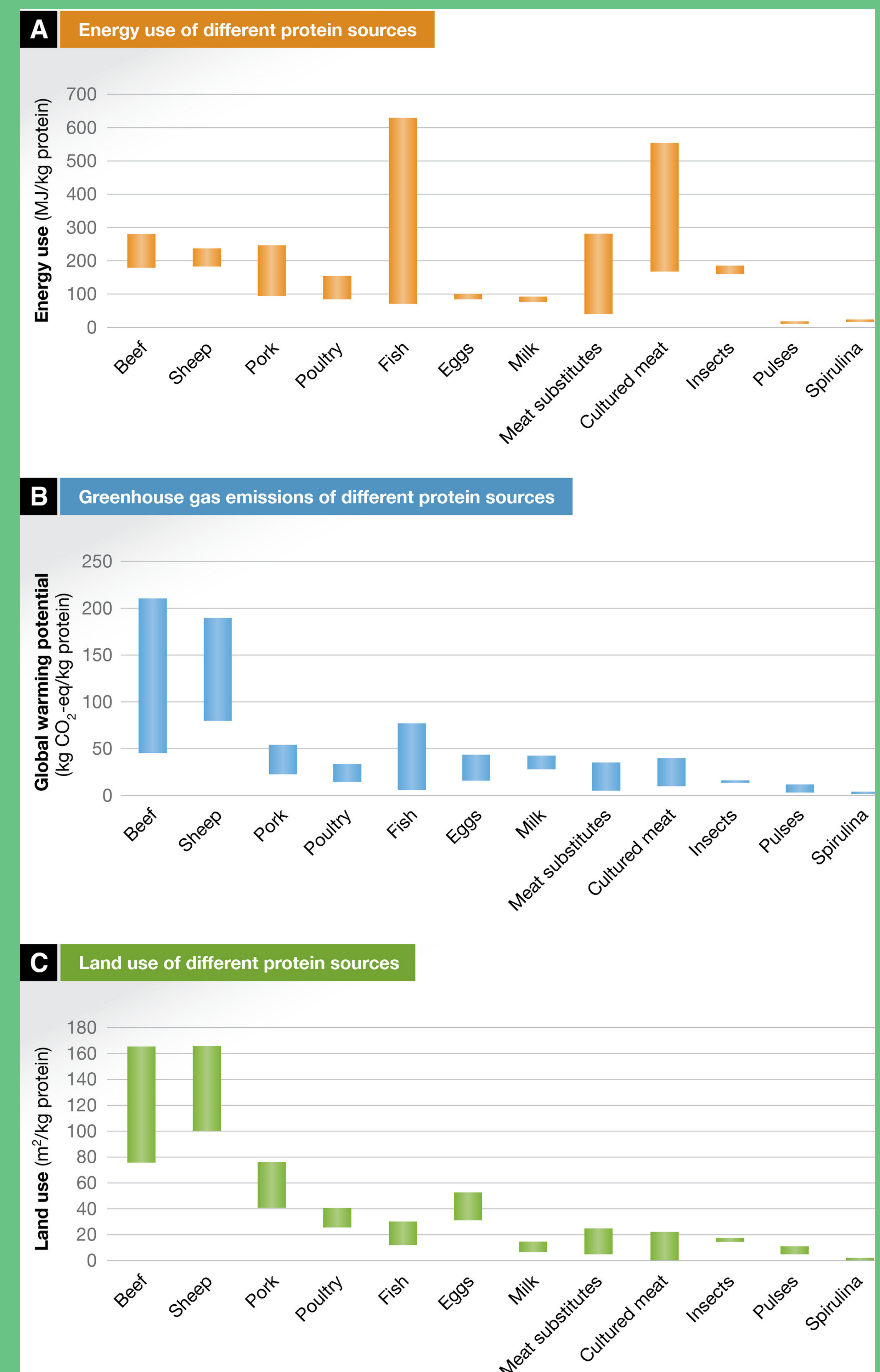
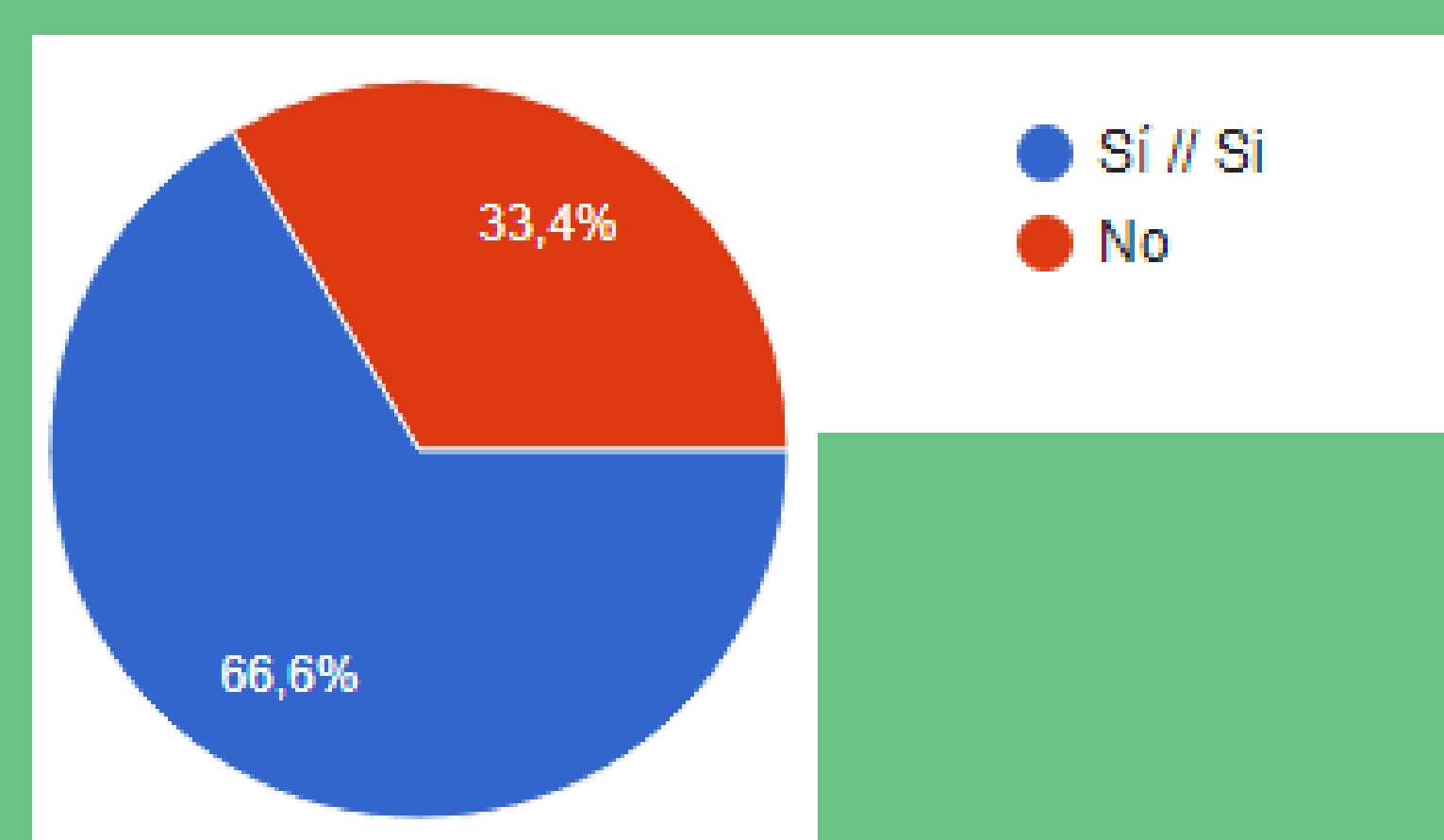


Figure 1. Environmental impact of different protein sources. Energy use (A), greenhouse gas emissions (B) and land use (C) (Hanna L. Tuomisto 2014)

Why not?

- Es antinatural
- No me inspira confiança
- Massa manipulació i aliment processat
- No m'agrada la carn i menys processada.
- No sé quins efectes pot tindre sobre el nostre cos a la llarga. Mentre n'hi hagi de la normal no en tinc cap necessitat.

Advantages and disadvantages

- No tindria residus antibiòtics
- No matar animals
- Pots arribar-la a modificar nutricionalment (vitamines, minerals, etc.)
- En l'aspecte mediambiental suposu que es una opció més verda

BARRIERS

- Ethics
- Organoleptic characteristics
- Cost
- Naturalness
- Health
- Culture

- Ethics**: "Why should we take jobs away from farmers and give them to scientists?"
- Cost**: "It's too expensive."
- Naturalness**: "It's not natural." "It's disgusting." "Food should come from a farm, not a lab."
- Health**: "It's not as healthy as 'real' meat." "It's not safe to eat."
- Taste**: "Sounds gross." "It won't taste as good as 'real' meat." "It won't have the flavor of 'real' meat."
- Identity**: "Eating meat is part of my culture." "Eating 'real' meat is manly."

Figure 2. Overview of common consumer perceptions posing barriers to the potential uptake of cultured meats (A.J. Tomiyama et al. 2020)

CONCLUSIONS

- Cultured meat has advantages over traditional protein sources
- The biggest barrier it has is the mindset of consumers
- Cultured meat has a positive future, but negative consumer perceptions must be addressed.