Growing cell-based meat in space? If humans travel intergallactic distances or colonize planets, this is how we might feed ourselves

Growing meat from cells – particularly at scale – even on Earth isn't easy. Aleph Farms is one of several companies trying to produce "cultured meat" but it is the first to try to do it in space.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter. SIGN UP

Zvika Tamari, who heads Aleph Farms' space programme, says scientists don't know whether this can be replicated in zero gravity.

"We know from many previous scientific studies that physiology and biology behave very differently in a microgravity environment... So, we actually don't know, nobody knows, if these processes of cultivation of meat proliferation can actually occur in space."

So, when on 8 April four men blasted off into space in a SpaceX rocket, on the first private mission to the International Space Station, they brought with them a small shoe box-sized container carrying in it animal cells – and everything they need to grow.

•••

Certainly if humanity is serious about putting people on Mars, how to feed astronauts with nutrient rich food that doesn't spoil – and tastes good – is an important and difficult conundrum.

It's one thing proving meat can be grown in space – it's another proving it's reliable enough, or a practical alternative to food brought from earth.

This is an excerpt. Read the original post here