

Sources	New Scientist, Bloomberg	
Date	June 2021	
Potential scale of impact  ★★★  *******************************	Certainty of outcome  ★★★★	Impact horizon H1 H2 H3

Canadian researchers have <u>developed a new form of cultured meat</u> that promises more natural flavour and texture than other alternatives to meat from animals. Published in the journal <u>Cells Tissues Organs</u>, the method used by researchers at McMaster University in Canada is based on stacking very thin layers of muscle and fat cells grown in the lab to form "slabs of meat." The researchers say they can replicate the marbling and fat content of any piece of meat with this new technique. The method can be adapted to beef, pork, or chicken, and is suitable for large-scale production.

Cultured - or clean - meat allows consumers to maintain their dietary preferences for animal meat while removing any moral, health and environmental considerations that may be associated with current production.

There are still technical issues to resolve before production at scale is guaranteed - but the global <u>clean meat market is still expected to be worth around \$600 million by 2032</u>. Key players include Memphis Meats (US), MosaMeat (Netherlands), Integriculture (Japan), Aleph Farms Ltd (Israel), Finless Foods Inc. (US), Avant Meats Company Limited (China), and Shiok Meats (Singapore).

In December 2020, US start up Eat Just's cultured chicken was <u>approved for sale</u> as an ingredient in chicken nuggets in Singapore restaurants in a world regulatory first; and in June 2021, Israeli developer Future Meat Technologies announced that it had found a way to mass-produce its own lab-grown meat in a way that makes cultured meat "affordable for everyone."

Future Meat has developed a process that allows production to scale up to growing hundreds of kilograms of meat in stainless steel vessels. Production is clean and efficient and the company aims to expand to the United States by 2022. <u>According to reports</u>, they will partner with Nestle.

Several food and meat giants have backed cultured meat startups in recent years in recognition of the technology's potential. <u>Tyson Foods Inc.</u> and <u>Cargill Inc.</u> have invested in the space, while <u>BRF SA</u> and <u>Mitsubishi Corp.</u> are working with <u>Aleph Farms Ltd</u>. The latest financing round by Aleph Farms also drew backing from <u>Thai Union Group</u> and South Korea's <u>CJ CheilJedang Corp</u>.

