Lab-Grown Meat in 2024 and Beyond: How Close Is It?

In 2024, **lab-grown meat**, **or cultured meat**, reached a point of gaining several regulatory approvals in various countries. These approvals mark crucial steps forward for the industry, assuring the public that the food is safe to eat and that investors are making wise decisions. It's an industry that is projected to reach a value of \$25 billion by 2030! However, some countries have gone as far as to ban the meat as it gets caught up in all sorts of political games.

Let's take a closer at where lab-grown meat is in 2024, and how its future looks:

Is It Lab-Grown Meat, Cultivated Meat or Cultured Meat?

There are several terms used, including lab-grown meat, cultured meat, cultivated meat, in vitro meat, synthetic meat, clean meat and cell-based meat.

The majority of industry CEOs would prefer it to be called 'cultivated meat', but our Google search information reveals people call it lab-grown meat 4x as often.

Where Is Lab-Grown Meat Approved in 2024?

Approved In:	Banned In:
Singapore	Italy
United States of America	Romania
Israel	
Netherlands (test tasting only)	

Here's a breakdown of where lab-grown meat is at in 2024, per region:

Australia and New Zealand

Down-under has seen significant progress in the cultured meat sector, with Australia and New Zealand's joint regulator approving Sydney's Vow Food as safe for consumption. By May 2024, we should know if it has passed the final steps in the commercial regulatory approval process.

Asia and Pacific

Aside from Singapore, Asia is some way behind other continents in the approval of lab-grown meat. China has met with the U.S. to find a framework for its approval, while Japan and South Korea have also made steps to find a legal framework. These nations believe it gives them a chance to tackle the climate crisis.

Canada

Canada has yet to make a move in the lab-grown meat sector. However, start-up 'The Better Butchers' has plans to become the world's first exclusively cultured meat butchery by 2025. It is in talks with Canadian regulatory bodies.

The European Union

National Pushbacks

Europe is proving the biggest hurdle for lab-grown meat's progress in 2024. There are various reasons for this, but the primary issue is the significant pushback from some nations.

Austria, France, Italy, Czech Republic, Cyprus, Greece, Hungary, Luxembourg, Lithuania, Malta, Romania and Slovakia all argue that lab-grown meat threatens "genuine food production methods". In a document submitted to a meeting of EU agriculture ministers, the countries stated.

"These practices represent a threat to primary farm-based approaches and genuine food production methods that are at the very heart of the European farming model,"

The strongest of these opponents is Italy; <u>in November 2023, Italy banned lab-grown meat.</u> It was a move the right-wing government described as a defense of national traditions. Romania also passed a bill banning the sale of lab-grown meat.

Regulatory Hurdles

Challenges to Italy and Romania's bans could arise should the EU give regulatory approval to lab-grown meat in the future.

However, the EU approval process itself is proving a stumbling block. The European Food Safety Authority (EFSA) imposes strict regulatory testing periods before an approval can be provided. Although lab-grown meat producers are now in a position to gain approval from the EU, none have yet applied for EFSA approval.

Experts suggest lab-grown meat producers are put off by the process that requires them to send an application, but then no further input - which is very different to the open communication provided by systems in the US, UK, Israel and Singapore.

The Dutch Take a Bite

The good news for lab-grown meat investors is that Dutch lawmakers have opened the door to a lab-grown meat industry boom in the Netherlands. <u>The Dutch government released an official letter permitting the *tasting* of lab-grown meat products - a welcome announcement for Dutch startups.</u>

Israel

Israel is keenly behind the growth of the lab-grown meat industry. Three out of the first eight lab-grown meat companies found worldwide are from Israel.

Israel has <u>approved the sale of Aleph Farms' Black Angus Petit Steaks</u>, only now waiting for labeling and marketing requirements before it can hit stores. This makes it the third country to approve the sale of lab-grown meat (after the U.S. and Singapore).

Poultry meat from the startup 'SuperMeat' <u>has also been approved as kosher by The Orthodox Union.</u>

Singapore

Leading the Way

Singapore was the very first nation to approve the commercial sale of lab-grown meat (with 'chicken bites' by Eat Just). Since then, the Singapore Food Agency has also approved GOOD Meat. Lab-grown meat can be found in several Singapore restaurants and food delivery services - but it is far from being easily affordable or available.

Research suggests the Singapore Lab-Grown Meat Market could hit a market valuation of US \$761.17 million by 2032.

United States

Ready to Go

The FDA deemed that Upside Foods' lab-grown chicken and Good Meat's meat is safe to eat, paving the way for commercial sales. That was soon followed by approval to produce cell-based proteins, from the US Department of Agriculture (USDA) in 2023.

Good Meat has already started its production in the U.S. after its success in Singapore.

In July 2023, Upside put food on the plates of the Michelin-starred Bar Crenn in San Francisco. Competition winners were the first in the U.S. to try cultured chicken fillets, for just \$1!

Issues are still present for the industry though, with U.S. states keen to ban lab-grown meat soon. Florida's Republican lawmaker Tyler Sirois recently drafted legislation to lab-grown meat in Florida.

Arizona has also drafted a similar bill, in fears it could impact the state's land use and economy.

UK

Huge Lab-Grown Meat Sector

The United Kingdom is still following pre-Brexit food rules but is free from potential EU law changes on cultured meat. The UK is home to over 23 lab-grown meat start-ups and is a rapidly growing sector with over £15m more funding than Europe combined.

Deal with Israel

In late 2023, the Telegraph reported that the UK is seeking a collaborative deal with Israel to fast-track the approval for lab-grown meat. The efforts could potentially offer a way to ease the cost-of-living crisis that is hampering the country - some meat prices have doubled in the past 12 months alone.

In August 2023, <u>Aleph Farms filed for UK lab-grown meat approval (the first to do so)</u> and is in talks with commercial partners to start producing in the UK in the coming years. A regulatory approval would be huge for the entire industry, not just Aleph Farms.

The UK government has also made a large investment in the sector with a £12M grant for the launch of the Cellular Agriculture Manufacturing Hub.

How Does Lab-Grown Meat Taste in 2024?

The reviews on what lab-grown tastes like haven't really changed in recent years, but the number of people able to experience it has!

From pork to chicken and steaks, the consensus is that lab-grown meat tastes good and is near-identical to the 'real' thing. Naturally, there is no blood flowing through the meat to give it that raw taste that some may be after. But for the vast majority of dishes, you won't taste a difference - according to reviews from those lucky enough to give it a taste.

The Guardian reported on a pork-tasting session,

"The pork is, in a word, delicious. The texture of the meat is perhaps slightly softer and more gelatinous than regular mince."

CNN said a meatball was,

"a bit dense and on the smaller side — not exactly the classic version you imagine melting in your mouth at an Italian restaurant. But it tasted like traditional meat, and the flavor was full and savory."

A CNET reporter said of lab-grown meat chicken,

"this actually does taste like chicken."

Read Related: Our Guide to Lab-Grown Meat

What Does The Future Look Like for Lab-Grown Meat?

Can It Produce Large Numbers?

As you can see from the approval information above, cultured meat producers are on the verge of being able to feed mouths around the world. The number one thing that will hold it back is scalability. Can producers really get the numbers needed for it to be financially worth it?

In 2023, Eat Just's production capacity yields just 4.4 lb (3kg) per week in Singapore. A Singapore butchery sells nearly 1,100 lbs (5,000 kg) of slaughtered chicken every week! So to make a real dent in the world we know, things have to ramp up big time. There are also reports that Upside Foods is struggling to produce large quantities of edible lab-grown meat at a good speed.

But as investments continue to flow and technology improves, it could quickly take off. Just look at the sheer number of investors throwing millions of USD at cultivated meat companies and it's hard to believe this will grow fast. There is also the option of blending plant and meat to reduce costs.

Can It Capture the Public?

Most of the general public has no idea what lab-grown meat is. When introduced to the idea, the answer is usually something like "Yuck!" That's a significant hurdle for the sector to overcome, as without customers it's going nowhere fast.

In our opinion, how the industry presents itself to the world will define its direction. The producers can't expect customers to simply want a replacement for their traditional meats without a good argument. They need to be convinced by strong marketing about the lack of animal slaughter and the benefits for their health and their planet.

And of course, it will always come down to whether they get a good deal for their buck. Where the money flows, governments and investors will follow.

Lab-Grown Meat Will Find Its Niche

We predict lab-grown meat has a vibrant future ahead of it, but in our lifetimes it's likely to find a unique use in society rather than revolutionize the world.

There is almost certainly a market for 'clean', slaughter-free meat and we think that will be one of its biggest draws for the Western world in the coming decades. Vegetarians and vegans will have an option that is free from the main drawback of traditional meat.

It could also be a game-changer for countries with large populations and a cost-of-living crisis. Countries in Asia and Europe could benefit from reducing their carbon footprints and allowing a cheaper way to eat protein.

However, it could also have a long-term future in a society where the climate crisis has devastated our traditional farming methods amongst rising populations. If you could ask for anything from this tech, it would surely be to reduce famine.

Finally, we believe it's still a great opportunity for potential investors! If it does positively capture the market, it could snowball into a truly giant industry.

Who Are The Big Producers of Lab-Grown Meat?

There is an extensive list of start-ups and companies now developing lab-grown meat. You can view our <u>full list of lab-grown meat companies here</u> and our list of the <u>top lab-grown meat stocks</u> here.