

Food Fight - S1E9B - Spotlight Aleph Farms.mp3

Lukxmi Balathasan [00:00:06] Welcome to this bonus episode of The Food Fight podcast from EIT Food.

Matt Eastland [00:00:11] In these episodes, we want to shine a light on new projects and agrifood start-ups and hear about their efforts to fight for a better food future. This week, we're handing over to Didier Toubia to tell us about Aleph Farms, a Start-Up who are developing lab-grown meats that look and feel like the real thing.

Didier Toubia [00:00:35] I am Didier Toubia, co-founder and CEO of Aleph Farms. I'm a food engineer and biologist by education. At Aleph Farms we grow meat. We cultivate meat directly from cells we isolate from a cow so that we can reproduce the same experience, the same nutritional, culinary and sensory quality without without the need to - each time farm the whole animal and slaughter it.

[00:01:03] At Aleph Farms, we fight for the future generations, to get a world which is worth living in, which is green, which is thriving, which is diverse. We want to make sure that we find better ways to produce high quality nutrition anytime, anywhere in the world. Not only today, but also in 30, 50 and 100 years from now – making high quality meat as an alternative to industrial farming of animals.

[00:01:31] There is no way we can continue and scale the system and feed the nine billion people we will have on Earth a few decades from now. The only way to sustain the world in terms of environment, in terms of society, and to support the economic development of regions like Asia, Africa, South America, is to switch to a model where we'll have the conventional agriculture and farming methods reverting to more local, traditional, extensive regenerative ag. Methods together with cultivated meat, replacing a large part of the industrial farming.

[00:02:12] Cultivated meat is an extension of the animal. We reproduce outside of the animal – the natural, spontaneous phenomenon for tissue regeneration. We found a way to isolate the cells responsible for making new muscle tissue in cattle, which is basically meat, and we transfer them into controlled conditions on the outside, which reproduce the same conditions as inside the animal, so that the cells feel like they're still in the natural environment, continue to multiply and form the same meat. And more meat – in a way which enables us to produce a large quantity of meat, only with [using] a few cells, without the need for, each time, raising and slaughtering the whole animal. The whole process takes three weeks instead of two years to bring cattle to slaughter age. And we use only the amount of resources required for the steak to grow. Only the exact precise amount of nutrients, water, energy. So we are some type of 'precision agriculture'. We are urban farming. We can grow meat anywhere. Vertical farming... Well, some kind of "hydroponic way" to grow meat.

[00:03:25] It tastes like eat. It is meat.

[00:03:28] And there is a big difference between [the] two approaches within the market, and each of those has its own merits and room in the marketplace. Does one approach; which is the veggie burger approach, which has been improved recently with new companies like Impossible Foods, like the Nestlé "New Incredible Burger" and others. The second approach, which is Aleph Farms approach, which is based on that cultivating cells

and tissues. Which is reproducing the same product, but just making the production process more efficient, more ethical and healthier.

[00:04:01] We are, real meat, we don't change meat with something else. Which change the broken production process of industrial farming, with a better way to avoid misery and to avoid the pitfalls of intensive animal farming.

[00:04:18] Our vision is that in 10 to 20 years from now, cultivated meat will represent a very large segment of the meat market and we will have two different categories of meat products. We'll have conventional meat, which will revert to more traditional, local, organic grass-fed practises. And we'll see the 'cultivated meat segment', which will represent a large part of the market and address the need for high quality mass-products with nutritious meat... delicious meats... produced on a large scale without the downsides.

[00:04:52] The way we look at technology is a means for human progress. Not a means for driving profits or driving more consumption. People today eat (probably) too much meat. We don't want to sell more meat to the people - we just want to make sure that the meat people eat today is produced in line with the long-term sustainability goals of the United Nations.

[00:05:16] Aleph Farms is part of EIT Food. We've been part of the network for the last two years and two of the founding members of Aleph farms – Technion and the Strauss Group – are also part of the EIT Food. So we are very engaged gets to with that network. And we believe that it's a unique ecosystem on the globe, of that scale and of that quality.

[00:05:39] EIT Food has been very successful in building an eco system in Europe for advancing innovative and more sustainable food solutions, bringing together large companies and industries, start-ups, academic institutions... all partnering together, exchanging ideas, figuring out together how each player can bring to the table its own strength and expertise in specific fields... so that all together we can better address the challenges of the food system in Europe and find better solutions for the long term.

[00:06:20] So I would say that cultivated meat is the natural evolution of farming.

Lukxmi Balathasan [00:06:27] Thanks for listening to this bonus episode of The Food Fight podcast.

Matt Eastland [00:06:31] To find out more and to learn how you can get involved in the fight for better food future, head over to EITFood.eu/podcast.