4- Upside Foods - Pioneering a New Era of Meat Production

Founder: Uma Valeti



Interviewer: Adam Amin

Date: August 11, 2024

Introduction

Dr. Uma Valeti, former cardiologist and stem cell researcher, founded a company that would change the future of the meat industry. Valeti's Upside Foods addresses the ethical, environmental, and health challenges posed by traditional meat production. His company aims to produce real meat grown from animal cells, offering a sustainable and humane alternative to conventional farming.

Background and Inspiration

Uma's journey began in the medical field, where he used stem cells to regenerate heart muscle. This experience led him to the groundbreaking idea of using similar techniques to grow meat. "I loved eating meat, but I knew there had to be a better way," Uma explained. "When I realized we could use cells to grow meat, I saw an opportunity to solve one of the world's biggest problems." At first, Uma thought it was too late to solve the complex issue, but it was his kids who inspired him to pursue the idea, "My kids asked me, why are you not doing it? Why are you asking other people to do it? You're complaining that no one is doing it. Why are you not doing it? And that was my call to action." Motivated by this revelation, he shifted his focus from cardiology to the food industry, driven by the potential to create a significant impact on global food systems.

The Upside Foods Approach

Upside Foods is focused on producing meat from animal cells through a process that requires fewer resources than traditional farming. The company takes cells from cows, chickens, or pigs and grows them in a nutrient-rich environment that mimics the conditions inside an animal's body. "We take cells from a cow or a chicken or a pig, and we try to identify the cells that can remain healthy and grow outside the animal," Uma explained. This innovative approach allows for the production of real meat without the need for slaughter, significantly reducing the environmental impact.

The company's first product, cultivated chicken, was chosen for its global popularity and familiarity. "Chicken is the number one consumed meat in the world, so we wanted to pick something very familiar to people," Uma noted. The decision to start with chicken also aligns

with Upside Foods' strategy of introducing a widely recognized product to ease consumer acceptance of cultivated meat.

Challenges and Strategic Decisions

The journey from concept to commercialization has not been without its challenges. Transitioning from the medical field to the food industry was difficult, particularly due to the latter's focus on cost efficiency and scale. "Medicine is built on enormous amounts of research and development. But in food, the focus is all on raises in margins and high-volume production," Uma shared.

One of the biggest hurdles has been scaling the production of cultivated meat to make it economically viable. "When you do very small scale, it costs 10 to 100 times more than the traditional product," Uma explained. Despite these challenges, Upside Foods is committed to bringing down costs over time, with a goal of achieving price parity with conventional meat within the next decade.

Impact and Future Vision

Upside Foods offers a transformative solution to the environmental, ethical, and health issues associated with traditional meat production. By growing meat in a lab environment, the company can significantly reduce the use of land, water, and greenhouse gasses. "With the earth's population growing, we are asking the conventional industry to raise another hundred billion animals, which is going to be devastating for the environment," Uma emphasized.

The ethical implications are equally significant. "We've never figured out how to have our meat without having to raise and slaughter animals," Uma said. Upside Foods provides an opportunity to enjoy meat without the ethical concerns, marking a major shift in how we think about food production.

Looking ahead, Uma envisions a future where cultivated meat becomes a mainstream option, available at prices comparable to conventional meat. He also sees potential for this technology to improve global food security, particularly in regions with limited resources. "As we get closer and closer to the price of conventional meat, it's in a country's interest to have diversified sources to grow food," he noted.

Conclusion

Upside Foods is leading a revolution in the meat industry, offering a sustainable, ethical, and healthier alternative to traditional meat production. By leveraging cutting-edge science and technology, the company aims to address some of the world's most pressing challenges related to food production. While the path to widespread adoption is complex, the potential benefits of cultivated meat make it a promising innovation for the future. As Uma succinctly put it, "This is a problem that was worth solving, and I didn't want to look back and say I didn't do it."

You can find their products at <u>upsidefoods.com!</u>

Adam's Takeaway

Uma described something that was really interesting to me: the ethical sacrifice made when slaughtering animals for food. As humans, we have always been burdened with the ethical implications of killing animals, but we have paid that price to eat meat. Now, with the onset of

lab-grown meat, we can rid ourselves of that burden, but what will the implications be? Will they stay on the positive side, or will our food be uprooted and an unbalance created?	