



ADVERTISEMENT:

HOST: What do you eat? Your choices can transform the world. This applies to everything from the news you take into the stores you shop at, but this is particularly true when it comes to the food you eat. Irwin Adam urges us to look at what happens before our meals are on our plates.

Welcome to The Conversation Piece.

This is Irwin Adam, a creative scientist and food futurist.

IRWIN ADAM: Good evening. I'm Dr. Irwin Adam, founder, and creative scientist at future food studio based here in Toronto. So, to start things off, I'd like to ask everybody who here eats?

I need another round of that. Cause I I'm, I'm questioning the species of some of the folks around here. If they're not eating, if there's anything you remember from what I'm about to talk to you about today, cause I'm going to go on a bit of a rant. Every mouth in this room is going to transform our world tomorrow. Again, every single mouth in this room is transforming the world of tomorrow. Everything you eat, everything you consume changes, not only yourself, but also the world around you. As the founder and creative scientist is made up title of a future of food studio. I get to have the privilege of leading a interdisciplinary team of creatives, whether that's designers, architects, um, my work with technologists, chemists chefs, engineers, and we really bring together all our different perspectives to re-imagine the future of food and eating a lot of the work that we do revolves around creating what we describe as moments of delight that create food intent and food consciousness, whether those are edible clouds, you know, re-imagining the way we can experience taste and flavour or creating systems that allow us to taste data.

What does that even mean? How can you interpret in a quantitative way, the world around you through the sense of taste and potentially the sense of flavour? This journey though has really led us into diving deeper and deeper into the systems that our eating experiences are really built on and really exploring the fundamentals of not only how food works today, but how food is changing today and how it'll be transformed tomorrow. The way we break that up is really into kind of three different areas. First, we about what is food, then we consider how food is made or how it's produced. And then we consider how we experience food. So I'll give you a little bit of a tour of what those three areas look like and really kind of reinterpret what you think about food as not just these changes happening tomorrow in the future, but really things that are happening today.



One of the biggest questions in what is food today, and one of the areas of interest is really looking at the way we can and human protein. We currently consume hundreds of millions of kilograms of animal products on an annual basis, but we know that from a fundamental systems level, it doesn't really make sense. 15,000 kilograms of water. I needed to make one killer, a gram of beef. Does that make sense?

Thirty per cent or a third of our arable land in the world is used to create food for animals, which then we take those animals and then we have to process them to eat. It's a very inefficient process. So, we really do consider this diversification of protein and really start looking into new sources of proteins, whether those are plant-based proteins, we're seeing some incredible emergence companies coming up out of California right now that are exploring how we can use plants in order to create the protein products like eggs, meat, um, dairy that we're so accustomed to consuming, but really have these unsustainable processes built around. We also see a lot of emerging companies possibly over a hundred in the last year or two that are looking at using insects as a source of protein, creating protein-based flours. So, we can have protein bars or, or put this protein into all kinds of food that we're eating. And really for London, North Americans, you know, folks are a little bit concerned. They're like, well, why would I want to eat insects? But the realities are about 2 billion people in the world today consume insects on a daily basis. There's a far more sustainable, far more efficient process of, you know, getting protein into our bodies. Then kind of taking a bit of a leap and thinking to the actual things that we do on a daily basis. How many of you had a bottle of water today?

I'm on more than one person. There we go. I'm really going to judge you now. Um, and I'm going to make you really feel bad about yourself, but it's true. I do this myself, right? One bottle of water. If you were to fill it up a third of the way or a quarter of the way with oil, that's how much petroleum product was used to make that bottle 50 billion plastic bottles are being used today. And it really makes you just look yourself in the mirror and say, does this make sense? Hopefully the answer is no, but maybe it does. Um, and so that has led to another area of which is really around edible packaging. You know, what are materials that we can use in order to completely transform the way that we package consumer goods and actually make them so that they don't have this horrific impact on the environment.

Let's jump into how we make food. We see a lot of research exploring closed system farming. Perhaps some of you have seen some of these kind of boxes that can be plopped down anywhere in a city and we can start growing crops in them. This is a really great idea and really exciting. But again, if you actually start jumping into the math of it, it doesn't always make sense because it turns out the



sun and the rain are really good at growing things really efficient, regardless of any arguments around led lighting and power efficiency. The sun is real good. Um, we're starting to see small farmers have more opportunities in terms of, uh, growing out their businesses because they have access to technologies like drones and robots to come and help perform the functions of their fields. We're seeing scientists to bring technologies from tissue engineering and start creating lab, cultured meat and lab cultured milk. And we're starting to see the implementation of tools like 3D printing in order to actually create those structures that we need to say, have a stake that didn't necessarily come from a cow. So everything that I'm presenting to you today really is meant to be a thought starter for yourself and for you to really consider how your mouth will affect the world around you and how it not only will transform yourself, but how it transforms the world tomorrow. Thank you.

HOST: Irwin Adam spoke at The Walrus Talks Disruption in 2017 and he's just one of the over 800 fantastic Canadians who have walked, wheeled and webcammed to the stage of The Walrus Talks.

If you enjoyed this podcast, leave us a starred review on Apple iTunes and share this episode with your friends.