

URL: <https://stvp.stanford.edu/clips/let-the-challenge-consume-you>

Humankind has consumed meat for 2.5 million years, yet Beyond Meat founder, president and CEO Ethan Brown found a way to completely reimagine it. At some point, product improvement has to move beyond increasing efficiencies. He advises entrepreneurs pursuing a breakthrough product to lose themselves in the issue and let the problem become all-consuming.



## Transcript

- Was there a particularly impactful technical or product breakthrough that you can share, something that really made Beyond Meat Collexo? - So I think there's two things.. One, it was this mental concept, we knew that there was a massive issue with the amount of livestock on the other surface.. Enormous, right? And great land grant university in the United States, and they'll have really good meat science departments and those textbooks in there and those professors there will focus on how do you increase the efficiency of the model, right? And you can continue to tweak it and try to make it more efficient, but at the end of the day, we I think have reached the point of diminishing returns in that.. In fact, the consumer is rejecting efforts to make animal agriculture more efficient whether it's gestation crates, or other means.. And of course, the crowding and all the things we know now about disease.. So we had to take a step back and say, okay, we don't just want a faster horse, we want something entirely different.. And so you have to wrack your brain about that and I've talked about this before.. If you really want to be useful in something, marinate in the problem.. Just get into the problem, let it consume you ,think about it all the time and I've quoted him many times, Edwin Land, he's very good at this, you have to lose yourself in this issue.. And if you can kind of get it to the point where it's taking up all your mental energy, your brain often will find a novel way to think about something..

And so what started to occur to me was that we were fixated on the origin of meat, right? And we said, it has to come from a chicken cow or pig, that's what we know as humans or some other animal.. The history of agriculture 12,000 years, that's kinda been what we've done.. History of meat consumption, two and a half million years before even Homo sapiens and our predecessors, comes from an animal, right? But what if we just asked what meat is, right? And meat is a knowable entity.. It's five things, its amino acids, its lipids, its trace minerals and vitamins and its water.. None of that's stuff is mysterious.. Actually, if you think that the origins of life, amino acids and lipids are everywhere.. You think of that primordial soup, that's kind of what that stuff is, right? And so it's all around us.. The animal is simply a way of organizing it, right? So you can't get hung up on it has to come from an animal, you could start thinking about its composition, you make a breakthrough.. And so they had to start looking okay, what's the technology I can use to create a piece of meat directly from plants? It turned out there some guys that are connected with the University of Missouri, were doing something very interesting with some pretty established technology which was high moisture extrusion, but what they were doing was varying the inputs of heating, cooling and pressure, the parameters rather of heating, cooling and pressure to restructure the animal protein, sorry, that plant protein into the same general structure of animal protein.. So they were converting the architecture of plant material without adding any chemicals or anything just using heating, cooling and pressure into the structure of muscle..

I said what, that's what I wanted.. And it was very nascent and if they hadn't, commercialized it but they were willing to work with me and that was a godsend...