

Is Pond Scum the Future of Food?

By Maxwell Williams

May 30th, 2017



Non/ food's inaugural product will be the non/bar – a protein bar made from an algae protein isolate and duckweed

Sean Raspet, co-founder of non/food, a Los Angeles-based company that is developing micro-algae-based food products, says the concepts he's working on are "as much blue raspberry as Bauhaus." Regarding the former, he's referring to the idea, dating back to the 1950s, that food and flavors can be innovated and manipulated on a molecular level – and that a sci-fi creation like a blue raspberry can be introduced.

As for the Bauhaus part, Raspet and his co-founder, Lucy Chinen, are adherents of the 1920s German architectural school. "Bauhaus wanted art to be present in everyday life," Chinen says.

Though their company, non/food, is not an art project, Raspet is an artist and Chinen an artist-writer, and their approach to non/food has a conceptual feel. Raspet has created art that relies on our less-emphasized senses of smell and taste since his breakthrough 2014 exhibition "New Flavors and Fragrances" at New Galerie in Paris. He more recently spent time as the flavorist for the Soylent product from L.A.-based Rosa Labs, helping to formulate Soylent Nectar, a drink that was released last year.

"If you really look at what's out there, not in art but in foodstuffs, it's extremely conservative, and it has been a certain way for a long time," Chinen says. "So I think when you start to explore food through art, then you see all the [things] that are missing from the daily food intake and the limits of food culture."

One limitation that particularly struck them is the lack of plant-based foods high in protein. So they set out to make a protein-rich, plant-based staple food that is environmentally sustainable. That's where algae comes in: The stuff associated with pond scum is an environmentally efficient protein alternative.

"If you look at the overall food industry and what needs to be done to feed a world of 8 billion people, the limiting factor is protein," Raspet says. "Plant-based food is the most efficient, while meat is much less efficient, because you have to use all these plants to feed the animals. One of the problems is that there's not a lot of great sources of protein from plants. That's one thing that algae does very well."

Algae doesn't require pesticides, the water it's grown in can be recirculated, and it doesn't require soil. And because micro-algae can be eaten as a whole food, it retains its vitamin values.

Non/food's inaugural product will be the non/bar — a protein bar made from an algae protein isolate and duckweed (another little-used, fast-growing aquatic plant); it's available for pre-order on non/food's website and will ship in late July. Next up will be the non/coco, a "chocolate bar" made of about 40 percent algae and duckweed, coconut oil and natural sweeteners such as monkfruit, and a dose of polyphenol, the antioxidant that makes chocolate healthy.

Algae, as a food ingredient, has been used for millennia — the Aztecs skimmed spirulina from lake tops and made it into a cake — but it also has been the source of debate over the last few years. After reports surfaced of a breakout of foodborne illness caused by Soylent's Food Bar product, the company pinpointed algal flour as the probable cause of the illness, which reportedly caused violent vomiting and diarrhea.

But Raspet is quick to come to algae's defense. "I think it was a really good thing of Soylent to be including algae, and they were doing it for all the right reasons — making their product ecologically efficient," Raspet says. "I think it's unfortunate that there's this blowback. They did the only thing they could do, which was to take it off the market. I hope that they get back into algae."

Soylent reported in a press release that complaints were logged from .03 percent of the Food Bars that they sent out, a number much lower than, say, peanut or shellfish allergies or lactose intolerance. But since algae is a newly popular food ingredient, it drew more attention, Raspet says.

"I can understand people being scared of technology," Chinen says. "But people [shouldn't be] scared of food products if those food products are making a consideration for an environment whose resources are dwindling."