

🕒 This article was published more than **9 years ago**

*Democracy Dies in Darkness*

## Can this company do better than the egg?

➦ 📌 🗒 0

By Sarah Henry

March 2, 2015 at 8:00 a.m. EST

In San Francisco's South of Market area, where tech start-ups sprout like edible weeds, three former fine-dining chefs with a molecular gastronomy bent are peering intently into a frying pan. Alumni of Chicago's avant-garde Moto restaurant, the trio watches as a yellow liquid thickens into moist curds. Chris Jones notes its gelling properties. Coworker Ben Roche talks up how it feels on the tongue. Trevor Niekowal, with spatula in hand, is consumed with creating a thin fringe in the nonstick pan. That's a coveted part of the scrambled egg equation for many eaters, he maintains, though his fellow chefs have their doubts.

What they're cooking, though, isn't even an egg. It's a top-secret plant protein prototype with three ingredients that these chefs and a crew of biochemists and data analysts are coaxing through the R&D phase before launching it as a food product. Dubbed Just Scramble, it's on schedule to debut in the food-service sector at the end of this year. And in case there is any doubt: This eggless innovation is being designed to compete against and even outperform the humble egg.

Just Scramble is being hatched by Hampton Creek. That's the little technology company best known for being sued last fall by food giant Unilever. The consumer goods behemoth argued that Hampton Creek's first retail product — Just Mayo, an eggless alternative to the ubiquitous condiment, based on Canadian yellow peas — was mislabeled. The \$60 billion multinational corporation maintained that mayonnaise, by definition, should include eggs. Unilever, whose products include Hellmann's Mayonnaise and I Can't Believe It's Not Butter! (a spread that is, in fact, not butter), withdrew its suit in December. The company ended up with egg on its face: Unilever was widely ridiculed on social media, and the lawsuit generated widespread press and goodwill for its target.

Hampton Creek is intent on disrupting business as usual in the food sector. In addition to Just Mayo and Just Scramble, the company has created Just Cookies, an egg- and dairy-free sorghum-based cookie dough used nationwide by food service provider Compass Group, which serves more than 8 million meals a day at college and university campuses, museum cafes and corporate cafeterias. Flavors include chocolate chip, sugar, oatmeal raisin, peanut butter and white chocolate macadamia nut. Hampton Creek is also working on plant-based alternatives to pasta, ice cream, ranch dressing and other foods. Its goal? To overhaul the food system in a way that's gentler on the environment, kinder to animals and more healthful and affordable for humans. Oh, and the resulting product should taste good, too.

Investors are biting. In December, Hampton Creek secured funding — to the tune of \$90 million — from high-profile moneymen, including Salesforce chief executive Marc Benioff and Facebook co-founder Eduardo Saverin. In February 2014, the company raised \$23 million in a round of funding led by Horizons Ventures, co-founded by Li Ka-shing, the Hong Kong billionaire business magnate. Early seed funding came courtesy of Silicon Valley-based Khosla Ventures.

Meanwhile, major supermarket chains are signing on. Just Mayo can be found on the shelves at Walmart, Target, Kroger, Costco, Dollar Tree, Safeway and Whole Foods. Hong Kong's ParknShop grocery chain sells it. In Britain, Tesco stores will carry it soon. Just Cookie Dough, an egg-free chocolate chip treat that can be cooked or eaten raw, is sold in Southern California Whole Foods and Costco stores and is slated to be in Kroger stores nationwide in March. Ikea and General Mills are considering Hampton Creek's egg-substitute powder for meatballs and muffins, respectively.

Hampton Creek officials decline to talk about sales figures or market share, but they do want to talk mission. "I believe in the power of business to change things, and we need change. There's a lot that's wrong with our food system," says Hampton Creek founder Josh Tetrick. "I want to work with big food manufacturing companies like Nestlé, Kraft and General Mills, along with big food service companies like Compass, to fix the problems. We're not some alternative, hippie Northern California niche thing. We want to connect with regular customers across the country and reach consumers on a large, global scale."

## How to improve on the egg?

Tetrick isn't your typical Silicon Valley techhead. A Fulbright Scholar with a law degree, he spent seven years working for nonprofit groups serving youth in Nigeria, South Africa, Kenya, Ethiopia and Liberia. "I was frustrated the entire time," he said. "Our impact was tiny, the pace slow and we had very stale solutions to gnarly, entrenched problems. It wasn't bold enough."

Tetrick wanted to improve the world's food, take risks and eventually partner with big business to bring about systemic change. But he had to start smaller, so Hampton Creek launched in his Los Angeles apartment in December 2011. He relocated to San Francisco in June 2012 because he needed space to grow his company. Hampton Creek now has about 60 employees, who share crowded quarters that are part science lab, part makeshift kitchen, part business office and all bootstrap tech start-up. The company is named after a friend's dog. The word "creek" was added when food company purchasing managers were polled and responded that Hampton Creek sounded like a company they could trust.

Why mess with eggs? They're a cheap source of animal protein, they taste good and they serve an impressive array of culinary functions. An egg is delicious on its own, whether boiled, fried, poached, baked or scrambled. In mayonnaise, egg yolks stabilize an emulsion of oil and acid. In baking, eggs leaven and create a light airy texture in cakes and cookies. Beaten egg whites add volume. Eggs bind ingredients in meatloaf and crab cakes. They thicken custards and sauces and glaze pastries and breads.

But Tetrick and company believe industrial-scale egg production is ripe for reinvention: Think unsustainable environmental inefficiencies (all that land, water and fossil fuels to produce chicken feed, all that animal waste runoff), high production costs, food-safety scares and animal cruelty concerns. Free-range eggs are a step in the right direction, he says, but mainstream Americans like his dad won't buy them because they cost more.

Egg-loving consumers, chicken farmers and gastronomes may shudder, but Tetrick thinks he can do a whole lot better than the egg — and at a lower price point — using plant-based protein sources. If Just Mayo is any indication, he might be right. In a taste test by the Web site Serious Eats, Just Mayo beat out not just other egg-free mayonnaises but also a leading conventional mayo that was included as a control group.

Tetrick, who grew up in Alabama on a diet of chicken wings, biscuits and grits, is vegan, simply because he thinks it's the right thing to do for the planet, his body and animals. But he knows that his dietary choice isn't for everyone — and that the idea of veganism might turn off some customers — so the word is deliberately absent from any company messaging, which focuses on the power of plants as an affordable and more healthful option. (It also downplays technology in its branding, stressing that this is real food with real ingredients for regular folk, not high-tech science experiments for adventurous eaters.)

Finding plant sources that can mimic the egg's functions, though, is no easy task. Hampton Creek has a database of 4,000 plant samples and their molecular structures, built in part by ex-Google maps engineer Dan Zigmond. Hampton Creek biochemists extract proteins from those plants and experiment with thousands of powder and liquid formulations in search of the blend that will offer the optimum taste, texture and performance to rival a chicken egg.

## Beginning with institutions

Hampton Creek is first targeting food-service companies with Just Scramble for a reason. "Food is an emotional issue; so much identity, culture and connection is associated with it," says the 34-year-old Tetrick. "Trying to compete in retail right now with this product, that would be a challenge. There's something about the romance of cracking an egg. But in an institutional setting, where liquid eggs make sense as an ingredient from an efficiency and economic perspective, we're close to cracking that."

News accounts suggest that the hen-laying industry is concerned that Just Scramble might poach egg farmers' business. American Egg Board chief executive Joanne Ivy has described one of Hampton Creek's egg alternatives as "a huge threat," as reported by agriculture trade publication WATTAgNet. And this past December, BuzzFeed reported that the AEB egg board was, for a time, running paid Google ads for its "Incredible Egg" campaign against search terms matching Hampton Creek.

In an email interview, Ivy defended industry practices, saying more than 80 percent of U.S. eggs are produced under audited guidelines that ensure the welfare of laying hens. At a modern egg farm, she said, "the air is clean, the hens well fed and cared for, and they're not fed antibiotics."

She said she doubts Hampton Creek could make eggs obsolete. "To the best of my knowledge, there is not a single product that can replace all the innate functionality and nutritional power of eggs," she said. "How can anything compete with Mother Nature?"

Tetrick concedes that there's work to be done before the product is ready for prime time. "On taste, Just Scramble is about a 6 out of 10 right now, and we won't release it until it's a 10," he says. He admits that the product has an undesirable vegetal aftertaste. Interestingly, the unwanted flavor goes away when the scramble is eaten with salt or used as an ingredient in French toast. "It has good gelling properties, the way it flows into the pan, the color is decent. I like that it has elements of texture that bring you back to a chicken egg, but Just Scramble still breaks apart too much in your mouth."

Food service providers and manufacturers are keeping tabs on its progress. "Probably our biggest problem overall in the total supply chain is liquid eggs that are affordable and meet our sustainability standards," says Maisie Ganzler of Bon Appétit Management, which is owned by Compass Group. Just Scramble "works really well as an ingredient. It's not quite there in terms of taste or mouth feel, but it's much closer than, say, tofu scramble, and I have faith they'll get there," Ganzler says. "I'm not saying [Just Scramble] is going to replace eggs benedict or a fried egg on top of bibimbap, but it could find a home in the large volume setting that uses liquid eggs. When someone orders French toast, they're not craving an egg. They're craving French toast."

Egg replacements are not a new concept. They've been around for many years. Currently, consumers can buy a product created with chia seeds and garbanzo beans and another made from potato and tapioca starch. But Hampton Creek is betting it can capture a healthy serving of the mainstream egg market.

"We don't think change is made by telling people to eat better for the world," says Tetrick. "Change is made by making a better-tasting mayo, cookie or egg."

Note: This article has been updated to include comments by Joanne Ivy of the American Egg Board.

Sarah Henry is a San Francisco Bay Area freelance writer. Find her at [sarahhenrywriter.com](http://sarahhenrywriter.com) and on Twitter [@lettuceeatkale](https://twitter.com/lettuceeatkale).