

SUPERLOAF, positive nutrition, food as medicine and tackling UPFs

As part of our quick founder questions series – or QFQs – we spoke to Melissa Sharp, founder of SUPERLOAF about Ultra-Processed Food, innovating alternative nutrition solutions and why bread is just the beginning.

Aged 36, I had the misfortune to be diagnosed with breast cancer and one day while receiving chemotherapy the ‘tea trolley’ was wheeled onto the ward looking like something from a Carry On film, except what was on it wasn’t remotely funny. It was stacked with chocolate bars, soda drinks and all manner of sugary snacks. Leo, my co-founder, was with me and I remember looking over to him in horror. I was just learning about the connection between sugar and cancer and yet here, on a cancer ward of all places, they were peddling the very worst kind of food without any awareness. That disturbed us both and we vowed to try and re-shape our careers towards a better food system. And why bread? Because it’s ‘the world’s favourite Ultra-Processed Food (UPF)’, so where better to start?

Tell me about the business

As our first ‘Alternative-Nutrition’ product on a supermarket shelf, SUPERLOAF, is a loaf of bread, people naturally assume we’re a food company. But we’re

not. We're a nutrition business, we innovate alternative nutrition solutions for Ultra-Processed Foods.

You could say our widget is nutrition.

What's unique about our research is that the startpointing for SUPERLOAF was human biology at a cellular level, so we have completely sidestepped the decades-old nutrient profiling model, because it's simply not working. Policymakers' reliance on yesterday's nutrient model to fix today and tomorrow's diabetes crisis is a blindspot that should concern everyone. HFSS-orthodoxy (of which the Nutrient Profiling Model is the cornerstone), along with the classification system for UPFs are a totally unsuitable basis on which to make widespread public health decisions, as such, much of what our Alt-Nutrition can achieve for the human digestive system is way outside all the decades-old existing health claims.

SUPERLOAF is made on the same high-speed machines that make the standard loaf that dominates supermarket shelves across the world. What's different is that our six years' of research has been focused on two key areas: firstly, replicating the nutrient profile found in a fruit, veg and whole grain diet from natural plant sources; and secondly, developing the processes required to integrate it into processed foods. It is packed with better nutrition, derived principally via selected prebiotic plant fibres, bioactive plant compounds and targeted fermentation.

The UK Government and Innovate UK have recently awarded SUPERLOAF with a £450,000 grant to help us tackle the growing UPFs problem. This latest grant was awarded as part of the 'Better Food for All: Innovation for improved nutrition' scheme, as we continue to drive positive change in the increasingly unhealthy UPFs sector. The grant starts next month and it's an intensive 12-month programme to transfer our platform technologies into wider food groups.

'The world's favourite UPF', the industrial loaf, is generally regarded as the most challenging staple food to produce, which is why we have initially focused on bread, and now sweet bakery. Breakfast cereals and pasta are the next two staples currently being reformulated by our team. Breakfast cereals are among the most misunderstood of all UPFs, their phenomenally high levels of refined carbohydrates (fast carbs) have somehow been lost in all the marketing noise around breakfast being the most important meal of the day. However, the manufacturing process of breakfast cereals lends itself to being reformulated

with our fermented Alt-Nutrition ingredient blend, and our research team is highly optimistic about much improvement we can bring to this staple and reframe breakfast cereals as a vehicle for positive nutrition. It's pretty much the same story for pasta, but with the added intriguing dimension of further increasing resistant starch levels through re-heating once cooked.

How has the business evolved since its launch?

We've streamlined in all sorts of areas – decision making has got easier as our purpose has intensified, and as our business model has emerged we can run on a much smaller team. By having our mission front and centre of everything we do, it gives everyone in our business a lens and purpose. And this mission can take us into new food types to ultimately create more nutritionally complete Alt-Nutrition foods.

SUPERLOAF has uniquely shown that carb-based UPFs can be re-engineered to become a vehicle for positive nutrition, or 'food as medicine' – by combining the economic and format advantages of being produced at scale, while being packed with better nutrition, principally via selected prebiotic plant fibres, bioactive plant compounds and targeted fermentation. But why stop at bread? We are already applying our breakthrough Alt-Nutrition ingredient more widely; formulating a broader range of staple foods for positive nutrition in the same way that we have already reformulated ultra-processed bread. Ultimately, obesity and diabetes poses an immense threat to public health in the UK and worldwide, and our wider ambition is to reframe UPFs as a health-positive food.

Tell us about the working culture at SUPERLOAF

We are a small, tight team who are all incredibly committed to knowing and understanding the power of good nutrition. We work closely with five different research organisations ranging from cell and molecular bioscience to food technology.

We had the opportunity early on to build our own lab space, but we quickly realised that out-sourcing our science was a much better model, because it gave the R&D side of the business the space and the autonomy to really mine into how we could collectively re-engineer the UPF industry. A lot of what the team does is to manage external projects with this aim.

Everyone in our team has made personal sacrifices to come on our journey and

that breeds a very special camaraderie. I think we embrace each other's nuances and different characters; we often finish each other's sentences, but it's very collaborative and a lot of fun. It's fast past and long hours running a disruptive nutrition business, but we have an amazing team culture. Leo continually exaggerates elements to make his points, whereas if Ken can't find his car keys they'll almost certainly be in the walk-in fridge!

How are you funded?

A key reason we've managed to make this breakthrough in nutrition is because we've been very lucky in winning six consecutive grants from the UK government for our research. The total investment behind our Alternative-Nutrition technology is now around £4M. Although I still can't believe how we've come this far on so little funding in truth! The positive side of that is that Leo and I have never been diluted within the business which means we have been able to really keep our mission central to our core operations. As we now shift from stealth-mode to scale-up we are in a really solid position to release some of that equity to fund the ambitious growth we have planned. We will be looking at a Series A in Q1 2024, perhaps even sooner.

What has been your biggest challenge so far and how have you overcome this?

Being a small fish in a big pond, we really do operate in a gigantic industry that is only growing. We imagined that large food manufacturers would leap at the opportunity to get behind new nutritious packaged foods, not least because premiumisation is the holy grail, but their rejection was brutal in the early stages. We overcame it by going directly to the large retailers who were crying out for innovation, especially around nutrition.

The other challenge has been keeping all the plates spinning during 'stealth-mode'.

How does SUPERLOAF answer an unmet need?

We believe people are looking at ultra processed foods in the wrong way. We need to change how we deliver them. That is a huge opportunity and one we have to tackle in order to feed the planet.

What's in store for the future?

Emerging from six years in stealth-mode is very exciting, as we're now really looking at how we commercialise the business in order to make an even bigger positive impact. That means exploring new partnership opportunities with interesting individuals and businesses who have a passion for innovative nutrition.

What one piece of advice would you give other founders or future founders?

It's probably a bit cliched but I would say plan for the best, be prepared for the worst. This is something we live and breathe every day running a disruptive startup in the UPFs space. We're a challenger brand in the truest sense.

And finally, a more personal question! What's your daily routine and the rules you're living by at the moment?

I love looking after myself, something I didn't do prior to my breast cancer diagnosis. For me, everyday involves some sort of exercise whether that be just a dog walk, reformer pilates, yoga or some hiit training. Eating right is also crucial for me. It's important for us as a team to reap what we sow, which means ensuring our bodies are fueled with the right nutrition.

Melissa Sharp is the founder of *SUPERLOAF*.