# 3D PRINT YOUR DINNER

Take molecular gastronomy to the next level with a pioneering robot that prints your food

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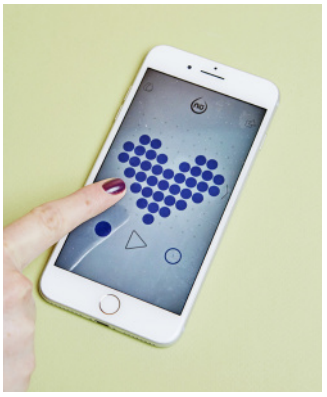
A decade after Heston Blumenthal introduced the concept of molecular gastronomy to the masses, a digital design agency in Cambridge has taken it one step further, creating a robot that 3D prints food. Invented by Dr Vaiva Kalnikaité of Dovetailed, Nufood is a pioneering machine that takes specially formulated flavoured liquids and turns them into soft, jelly-like structures. While limited in scope for now (it can only produce small garnishes and toppings), you could soon be adding one to your kitchen next to your sous-vide and spiralizer, as they will be available to buy within the next few months. *Stylist* visited Dovetailed HQ (navigating their fingerprint entry system en route) to put Nufood through its culinary paces.

**Step 1:** Smaller than a coffee machine, the chrome-and-white Nufood drops tiny spheres of liquid into a dish of distilled water. As each droplet lands, it forms a membrane, which joins it to the adjacent spheres, layering them up to create a 3D shape.

**Step 2:** Sadly, you can't just squeeze in HP Sauce. The Nufood team have pre-mixed 40 intensely flavoured liquids – including wasabi, blackcurrant and marmalade – in glass bottles. But they can create bespoke flavours on request. We opted for beetroot ketchup.

**Step 3:** Pour the liquid into one of two trays (you can print in two different flavours at a time) – it's not unlike filling up the fabric conditioner drawer in your washing machine. Each bottle can create approximately 20 shapes. Bonus points: trays are dishwasher safe.



**Step 4:** Using the Nufood app, tap your finger on a grid to create a shape, adding layers one at a time. It's ridiculously easy – we freestyled this heart in 30 seconds – but there are also pre-installed designs, as well as a flavour-pairing library with recipe suggestions.

**Step 5:** After pressing play, the robot whirrs into action, trickling droplets of your chosen liquid into the water. It looks like jelly, but there is no gelatine or animal product in the patent-pending formula (hooray for vegans!). Fish-shaped vinegar bursts for your chips, anyone?

**Step 6:** It takes a few minutes to create most shapes and, once finished, the machine folds up and you fish out the finished product with a slotted spoon. They're less delicate than they look and, though best consumed quickly, can be kept in the fridge for a day.

**Step 7:** To garnish a starter, we made this black-olive pyramid. It tastes unusual, but not unpleasant, with tiny bubbles that burst in the mouth like caviar. Consistency varies with the liquid used and this is thick, tangy and a perfect foil for the crunchy crostini and sweet fig.

**Step 8:** Go full Heston by serving your 3D-printed beetroot heart with micro greens. Throw in roasted squash and toasted quinoa and this is a chef-level main course – the beetroot heart adds a burst of sweetness and unexpected texture.

**Step 9:** For dessert, serve a passionfruit-flavoured snail (with a non-edible shell, made by a normal 3D printer). The pops of fruit pair perfectly with a chocolate brownie. You can even add a scent such as rose water to the solution to intensify the experience.

**Step 10:** Surprise guests by switching up flavours and colours – the red honey garnish on this negroni is like a shot of molten sweetness. Or make alcoholic bubbles – blue curaçao is popular for its vivid hue. 3D-printed booze? We can hardly wait.

**ROBOT INTEL**

Nufood was created by Dovetailed, a digital design studio in Cambridge. The project began back in 2014 when Dr Vaiva Kalnikaité decided to combine 3D printing technology with her love of food. Nufood has been through five different prototypes since then and will finally be available to buy later this year, with its price tag on launch expected to be around £1,200.

**For more info, visit nufood.io**

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