

Hatty Willmoth explores how to unlock tofu's potential

hough delicious when cooked right, tofu is easy to get wrong. My own first impression of tofu was less than pleasant. Served soggy and bathed in mushroom gravy, it made me think of soft meat gristle. But I have since discovered that tofu is what you make it.

With a neutral flavour, tofu can be used in savoury or sweet foods, absorbing sauces, herbs and spices like a sponge. It also comes in a wide range of textures which, depending on what you use it for, should be treated differently. All of that does make for a sizeable margin of error, but tofu can be amazing as long as you know what you're doing. It's also a great choice for those trying to cut down on animal products without losing out on protein and minerals.

#### What is it?

Sometimes referred to as 'bean curd', tofu is made by coagulating soya milk (made from soya beans) and pressing the resulting curds into solid white blocks that are then stored in water. Soya beans, water and a curdling agent: that's all it is.

Texture depends on how much water is pressed out. Silken tofu is like a firm yoghurt, whereas extra firm tofu has been pressed until almost crumbly.

Tofu is a totally plant-based complete protein (i.e. it contains all essential amino acids); for every 100g of firm tofu, you get nearly 20g of protein. Iron, Tofu is a totally plant-based complete protein...i.e. it contains all essential amino acids...

phosphorus, magnesium and zinc are also found in tofu, as well as calcium — depending on which curdling agent has been used.

Because it is a soya-based protein, tofu also contains isoflavones. These plant compounds are associated with a range of health benefits, from antioxidant and anti-inflammatory properties, to lowering cholesterol, decreasing blood glucose levels, and lowering heart disease risk.<sup>1,2</sup>

## Navigating the aisle

Pitfall number one, however, is picking your tofu. This is important; try to make a grilled vegan steak out of silken tofu and you'll end up with a gloopy mess. When following a recipe, pay close attention to what type of tofu is recommended. But as a general rule of thumb, you will need firm or extra firm tofu to make solid blocks, and silken tofu when you want something creamy. For tofu novices, extra firm can be a good place to start because it takes less prep too.

## Preparation

To get the best out of firm (rather than extra firm) tofu, be prepared to do some pressing. Because it's immersed in

water when you buy it, tofu often comes soggier than you want it, so you may need to press out that excess moisture.

In the absence of a tofu press, which can be a great little investment for anyone who plans on eating tofu regularly, this is an opportunity to get creative with kitchen roll, tea towels, a mixing bowl, a chopping board and tins from the cupboard. Wrap the tofu in the kitchen roll and/or tea towels, pop it in a bowl, and build a weighty tower to squeeze that water out. The heavier the weights and the longer you leave it, the more liquid will be removed, but as a general rule leaving it under pressure for about half an hour should do the trick.

#### Recipe ideas

- For chewy bites with an umami punch, oven bake little tofu blocks drizzled in sticky teriyaki sauce and sprinkled with sesame seeds. Serve with rice and veg.
- Coat small cubes in cornflour with tarragon, salt and pepper, and fry in butter for crispy-on-the-outside, softon-the-inside herby goodness — great for salads or wraps.
- Grill a thin, slab-like tofu steak, seasoned with paprika, rosemary, salt and an optional drizzle of brown sauce — pair with chips and coleslaw.
- Marinate strips overnight, perhaps with soy or miso sauce, ginger, chilli and spring onions, to make plump pieces bursting with flavour. Add to stir fries, noodles and poke bowls.
- Crumble firm tofu into a mince and cook it with onions, chopped tomatoes, basil and a teaspoon of yeast extract such as Marmite (for umami) for tofu bolognese — and serve with your pasta of choice!

# **HUNGRY FOR MORE?**

If you fall in love with tofu and want a little more adventure, why not try tempeh? An Indonesian staple, tempeh could be described as tofu's less famous cousin. Made from whole, fermented soya beans rather than soya milk curds, it's less processed than tofu and more textured. Even better, tempeh boasts at least the same nutritional benefits as tofu — but more than double the protein and six times the fibre content.

## References:

- www.sciencedaily.com/releases/2009/10/091006120510.htm
- 2. Doi.org//10.1161/CIRCULATIONA-HA.119.041306



Underrated in the British diet, mackerel comes with a host of benefits. *Hatty Willmoth* writes

he arrival of summer brings mackerel migrating to British shores. But despite being local to us at this time of year, this delicious fish is woefully under-represented on British menus — we generally prefer cod, tuna and salmon. In fact, mackerel is the UK's second biggest fish export, behind only salmon. In 2020, we exported 60,000 metric tons of mackerel to the EU alone.

#### Packed with nutrients

Classed as an 'oily fish', mackerel is packed with omega-3 essential fatty acids: crucial nutrients that the body needs but is unable to produce by itself.

Regularly eating oily fish such as mackerel has been associated with a multitude of benefits: a lower risk of heart disease, heart failure, stroke and heart attack;<sup>2</sup> less risk of kidney cancer;<sup>3</sup> maintenance of good eyesight;<sup>4</sup> lower levels of inflammation;<sup>5</sup> a healthy immune system;<sup>6</sup> and less risk of intense migraines.<sup>7</sup>

In fact, higher omega-3 levels have been associated with a significant increase in overall life expectancy — that's according to a study published last July. In a study of 2,200 people over 11 years, researchers found that regularly eating oily fish increased life expectancy by about five years; concluding that a 1% raise of omega-3s in the blood had the same effect on mortality risk as quitting smoking.8

As if that wasn't enough, mackerel is a great source of vitamin D. Oily fish contains, on average, between three and five times more vitamin D than lessfatty alternatives,<sup>3</sup> and this is in turn associated with supporting the immune system, protecting bone health, reducing inflammation and reducing risk of heart disease and diabetes.<sup>9</sup>

Mackerel also contains vitamins B6 and B12, iron, magnesium, niacin, phosphorus, folate, selenium and zinc.

# What to do with it

With a rich flavour and meaty texture, mackerel is a versatile ingredient in cooking, but works especially well when paired with spicy or acidic flavours. Grill it with black pepper and a squeeze of lime, add it to salads with a zingy vinaigrette, serve with potatoes, veg and horseradish sauce, or just spread it on toast straight out of a tin — you can even stick it on the barbecue!

#### Choose mackerel

Smoked mackerel is arguably the tastiest choice, but tinned mackerel contains the same nutrients, and is easy to find in supermarkets and relatively cheap; in the UK's biggest supermarket, tinned mackerel costs around half the price of smoked. Not to mention, tinned mackerel lasts for ages in the cupboard.

It's time we fell back in love with

With a rich flavour and meaty texture, mackerel is a versatile ingredient in cooking, but works especially well when paired with spicy or acidic flavours mackerel: a locally sourced, delicious, versatile, highly nutritious food. Why not add it to your shopping list this summer?

# TO SMOKE OR NOT TO SMOKE?

For those who enjoy the taste, smoked mackerel can be a great choice. Much of the 'smoked mackerel' available commercially is actually just flavoured with 'liquid smoke', otherwise known as 'wood vinegar': smoke that has been condensed and distilled in liquid form. This preserves the water content of the mackerel, making it softer, but it can also contain additives, such as caramel. Many of the carcinogenic compounds are filtered out of liquid smoke, so it can come with a lower cancer risk than real smoking. On the other hand, real smoking inhibits the formation of toxins and reduces the growth of bacteria, extending shelf life,10 and both real and liquid smoking can increase mackerel's antioxidant properties.

#### References:

- www.statista.com/statistics/1122463/uk-fishand-fish-preparation-exports-to-the-eu-bytype
- 2. Doi.org//10.1161/CIR.0000000000000574
- www.sciencedaily.com/releases/2006/09/060920092447.htm
- 4. www.sciencedaily.com/releases/2008/08/080808104925.htm
- 5. www.sciencedaily.com/releases/2005/03/050310100046.htm
- 6. Doi.org//10.1073/pnas.1221997110
- 7. Doi.org//10.1136/bmj.n1448
- 8. Doi.org//10.1093/ajcn/nqab195
- Doi.org//10.1016/j.maturitas.2009.12.013
- 10.www.grocentre.is/static/gro/publication/265/document/huong13prf.pdf



# Enjoyed reading this article?

Subscribe and read the full digital magazine for free at ion.ac.uk/digital

