

By **LOUISE ATKINSON**

**W**HAT kind of cereal should you be pouring into your breakfast bowl?

Making the right choice has become trickier, following revelations that many are 'ultra-processed foods' (UPFs) — products research has now linked to health problems including heart disease, type 2 diabetes and depression.

A study earlier this summer by Imperial College London has shown they are also linked to childhood obesity — with the higher the proportion of UPFs children consume, the greater their risk of becoming overweight or obese.

These foods have permeated our diets: from that biscuit with your cuppa, the bread in your sandwich, the pizza or lasagne for your evening meal and the hot chocolate before bed, UPFs are everywhere. It's estimated one in five British adults eats a diet that is 80 per cent UPF.

They are often cheap, convenient and ultra-tasty — many are also enhanced with added vitamins or fibre enabling them to make 'healthy' claims, too.

So what makes a food 'ultra-processed'? Essentially, it's anything that's been 'formulated mostly or entirely from substances extracted from foods or derived from food constituents or synthesized in laboratories' according to a definition devised by experts at the University of Sao Paulo in Brazil, who have led the way in identifying this food and its risks.

But as a rule, they're foods that contain ingredients you wouldn't find in your kitchen — and come wrapped in plastic.

**T**HE problem is that ultra-processed foods are not only often easier to chew and swallow, but they bypass our bodies' natural understanding of fullness.

Indeed, research by Dr Kevin Hall, a nutritional scientist at the U.S. National Institutes of Health, shows we eat almost 60 per cent more calories per minute with UPFs than with unprocessed foods.

This seems to make it too quick for our bodies and brains to notice just how many calories we're consuming.

And one of our main sources of UPFs are packet breakfast cereals. Most are ultra-processed even if they look 'healthy', because they contain added sugar, salt, colouring, flavourings and preservatives, as well as being puffed or processed.

'Sadly, children's breakfast cereals are a nutritional disaster,' says Dr Anthony Fardet, a research scientist who specialises in preventive diets and processed foods, including cereal products (and the author of peer-reviewed studies and books on the subject).

'Almost 100 per cent of breakfast products are ultra-processed and it's no longer cereals but sweets that we give to our children.'

As well as generally being high in sugars and fat, and (usually) lower in fibre and protein, they have less

'Ultra-processed' food, which includes many family favourite cereals, is being linked to obesity and heart disease. So how do you spot them — and are there tasty alternatives?

# How to avoid the breakfast CEREAL offenders

demanding chewing textures.

Their "re-combined" and artificial textures mean we chew less and the food spends less time going through the digestive tract — both of which are necessary to stimulate the release of the satiety hormone, leptin,' he explains.

Take, for instance, Sugar Puffs — now known as 'Honey Monster wheat puffs'. This cereal is 22 per cent sugar (with two-and-a-half teaspoons in a 30g bowl), with another eight items on the ingredients list, including more 'sugar' (glucose syrup, honey, soluble gluco fibre, caramelised sugar syrup) plus a stabiliser, sunflower

oil and vitamins and minerals.

Even healthy-sounding cereals such as Shreddies and Weetabix contain malted barley extract which seems innocuous but is not a natural product, says Dr Fardet. It's a mark of ultra-processing and a way of adding sugar without 'sugar' in the ingredients list.

The addition of sugar, syrups and sugar derivatives drive up a cereal's glycaemic index (GI) — a measure of how swiftly the food is converted into blood sugar in the body: the lower the figure, the longer it takes to digest and more slowly it raises your blood sugar levels.

Table sugar has a GI of 65, but

Dr Fardet says that barley malt extract is metabolised very quickly by the body, like high-maltose syrup, which has a GI of over 80. As well as providing sweetness and a brown colour, malt extracts and glucose syrups are added to improve food texture and prevent the sugar content crystallising.

Among other common breakfast cereal additives is 'sunflower lecithin' (in Curiously Cinnamon, for instance), an emulsifier which helps to stabilise a fat-sugar mix.

Tocopherols also crop up in many cereal products — like ascorbyl palmitate, another popular additive, these are preserva-

tives, but Dr Fardet says both also conveniently raise vitamins E and C content to allow nutritional claims on a cereal box label. We're often told vitamins and minerals added to breakfast cereals make them a source of nutrients.

Michael Gibney, a professor of food and health at University College Dublin, told Good Health: 'Added vitamins do help achieve a good intake of micronutrients', although he points out that 'if milk is added it will be the dominant source of micronutrients'.

Professor Gibney, a former chair of the International Breakfast Research Initiative (part-funded by Nestle's parent company to investigate the nutritional impact of breakfast), adds that all the food additives have been 'exhaustively examined and approved for use across the world' — and 'commercial breakfast cereal with added milk is a low-fat, nutrient-dense food that is inexpensive, tasty and convenient'.

Added vitamins are not regarded as markers of ultra-processing. However, says Dr Fardet, 'they do not make these foods healthier — these breakfast cereals are no better than confectionary sprinkled with micronutrients'.

**B**UT 'puffing' or 'extruding' (a process which transforms a wheat or rice grain into a 'biscuit', 'pillow' or 'petal') are markers of UPF, Dr Fardet argues.

'Puffing and extrusion-cooking use "denaturing" technological processes which render the starch highly digestible, which greatly increases the glycaemic index,' he says. So while a grain of wheat might have a GI of 41, and porridge is 61, Shredded Wheat is 69, Weetabix, 70, Rice Crispies, 82, and Cornflakes, 84.

Indeed as the British Dietetic Association explains: 'A bowl of bran flakes is as much a UPF as a chocolate rice cereal or cereal based on choc-chip cookies.'

'This is despite the bran flakes being a good source of fibre and being fortified with numerous vitamins and minerals, and often being relatively low in added sugar.'

Shredded Wheat is an exception. Although it has a higher GI than whole wheat (the finer the particle, the higher the GI), it doesn't count as a UPF as it is 'mechanically processed', says Dr Fardet.

This distinction, he says, is key to the way our body metabolises the cereal. 'Flakes' are grains crushed, steamed and dried — showing a mix of brown husk and white core, as you might find in your natural muesli.

'Petals' are whole or broken grains steam cooked with sugar, malt and salt, rolled into shapes and roasted — such as cornflakes.

Thankfully there's a growing selection of boxed cereals with only natural ingredients, minimally processed, as we explain, left.



## WEAN YOURSELF ONTO THE HEALTHIER OPTIONS

SO HOW can you persuade your family to switch from their favourite, but ultra-processed breakfast cereal to a healthier option?

Dietitian Dr Sarah Schenker ([sarah-schenker.co.uk](mailto:sarah-schenker.co.uk)) suggests mixing unprocessed and ultra-processed cereals 50:50 and gradually changing the ratio as your taste buds become accustomed to lower sugar levels.

She says berries and natural Greek yoghurt can be added to plain cereals for sweetness. Or, scatter unprocessed cereal with raisins or dried apricots.

The following cereals are minimally processed and contain very limited and highly recognisable ingredients with no additives, colourings or preservatives.

### SHREDDED WHEAT

£2.10 for 24 'biscuits'

**INGREDIENTS:** 100 per cent whole grain wheat



### BITE SIZED SHREDDED WHEAT

£2 for 370g

**INGREDIENTS:** 100 per cent wholegrain wheat



### DORSET CEREALS SIMPLY DELICIOUS MUESLI

£3 for 650g

**INGREDIENTS:** oat flakes, wheat flakes, dried fruit, barley flakes, sunflower seeds, nuts



### RUDE HEALTH BIRCHER MUESLI

£3 for 400g

**INGREDIENTS:** oats, apple, raisins, banana



### QUAKER OAT SO SIMPLE PORRIDGE SACHETS,

£2.75 for 10 sachets

**INGREDIENTS:** rolled oats



### JORDAN'S NATURAL MUESLI

£2 for 1kg

**INGREDIENTS:** wholegrain cereals, dried fruit and nuts

