EXCLUSIVE

By Jenna Sloan

WOULD YOU PUT THESE 'MILKS' IN YOUR CUP OF TEA..?

With a baffling array of plant-based milks on sale, it's claimed dairy may be on the way out. But are the alternatives as healthy or sustainable as they claim? And what do they REALLY taste like on your breakfast cereal?

ONE OF THE LOOKS: Environmental scientist Angela Terry, left, with water-ban dairy critics and traditional pasteurised. Below, four-year-old Nathan Murphy shows her dislike for new potato-based milk

TASTE TEST: Nutritional scientist Hulah Murray, left, favoured oat milk while her family Carlisle preferred cow's milk

THE TRADITIONAL pint of semi-skimmed could be facing extinction in the next 10 years according to industry experts, as the plant milk revolution gathers pace. Soya and oat milks are recognisable to many of us, but supermarket fridges are now stocked with varieties made from plants including nuts, hazelnuts, almond and coconut.

Now Swedish firm Dug has launched a milk made from potatoes, which it claims is ideal for use in cups of tea, on cereal, in smoothies and in porridge.

Research from trade magazine The Grocer suggests that 62 per cent of us have now bought a plant-based milk, and data from analysts Nielsen show that sales of plant milk in the UK soared by 107 per cent in the past two years and are now worth £276million. British inventor Jim Mellon, who specialises in the alternative food market, has even predicted alternative milks are so popular that "the dairy industry as it is today will be gone within 10 years".

So what is behind the surge in plant milk popularity? For shoppers conscious of their carbon footprints, intolerance or dairy-phobic milks don't contain lactose, a type of sugar found in milk which can cause digestive problems), vegans and those who are simply adventurous in their tastes, they have become increasingly popular.

An older adult will not be at the risk of osteoporosis if they swap dairy for plant-based milk as long as they check the label for calcium fortification. Plant-based milk alternatives usually have calcium, except when they are labelled as organic.

But just how great are they and what do they taste like? Not all compare favourably to dairy and, pint for pint, they all work out more expensive than traditional cow's milk.

ENVIRONMENTAL scientist Angela Terry, founder of green consumer website One Home, says: "There's no secret dairy milk is not great for the environment. Cows need to be much more, and we are having more and more water scarcity around the world. Cows also produce methane through burping and flatulence, which is 30 times more harmful as a greenhouse gas than carbon dioxide. Plant-based milks are better for the planet than dairy, as experts say and see which one you like best."

Large tests also produce mountains of shifty results (we hadn't too much and pants).

With a baffling array of plant-based milks on sale, our panel tasted some of the main brands – trying international editions where possible – giving marks out of 20 for taste, nutrition and sustainability.

Angela and Hulah Murray, a nutritional scientist at Manchester Metropolitan University, were joined by pro-adviser Bethan Murphy, four, and London test Sonny Carlisle, 14.

PEA MILK

Mighty Pea milk, 1 litre, £2

(made from yellow split peas)

Angela said: "Growing pulses improves soil fertility and means less energy-intensive fertilisers are necessary, and they are also very water efficient, especially compared to other non-dairy drinks. Pulses also have a far smaller carbon footprint than wheat or cattle."

Rating: 3.5/5

Hulah said: "Split peas are a great source of protein, carbohydrates and healthy fats. Lentils, pulses and peas are also full of fibre and this milk is also not too high in sugar."

Rating: 3/5

Sonny said: "This is a bit like chalk but otherwise you wouldn't know it's not dairy. I tried it in tea and it was fine. The chalkiness kicks in if you drink it straight in a glass though."

Rating: 4/5

Bethan said: "I would maybe have this in a milkshake, it's a little bit creamy."

Rating: 3/5

TOTAL: 13.5/20

SOYA MILK

Alpro soya milk, 1 litre, £1.25

Angela said: "Growing soya beans produces low emissions of greenhouse gases, and is low in land and water use. But in South America hectares are growing soya to feed cattle, resulting in deforestation."

Rating: 4/5

Hulah said: "Soya is high in protein which helps you to feel fuller for longer and builds muscle. It's also high in fibre and soya contains a plant form of oestrogen (called phyto-oestrogen, which is good for women who have PMS or who are going through the menopause)."

Rating: 4/5

Sonny said: "This is thick like double cream but not in a tasty way. No flavour at first but then a bitter aftertaste. I would use it on cereal."

Rating: 3/5

Bethan said: "This looks like normal milk but it's a bit watery. I would have it in a smoothie."

Rating: 3/5

TOTAL: 14/20

ALMOND MILK

Blue Diamond Almond Breeze, 1 litre, £1.50

Angela said: "Almonds are grown intensively in California, an area which has had two drought years for several years. It takes up to 1,370 litres of water to produce a single glass of almond milk. Water shortages, sea level rises and flooding are the biggest impacts of climate change, and will get worse."

Rating: 1/5

Hulah said: "Almonds are a great source of vitamin E and calcium, iodine dense and very good for lowering cholesterol. However conventional almond milk can be very bitter, so be careful of the sugar which may be added to sweetened versions."

Rating: 3/5

Sonny said: "I really don't like this. It tastes like syrup and ruining the cow's milk."

Rating: 0.5/5

Bethan said: "This tastes sour, if it was on my Cheerios I wouldn't eat them."

Rating: 0.5/5

TOTAL: 5/20

HAZELNUT MILK

Innocent hazelnut milk, 750ml, £1.75

Angela said: "Hazelnuts are grown on trees, which means new trees are actively taking carbon out of the atmosphere. However they are difficult to mass produce."

Rating: 3.5/5

Hulah said: "Research has suggested that eating nuts – including hazelnuts – leads to a reduction in weight gain, and better control of weight. Hazelnuts are a good source of protein, which is filling, and also healthy fats. However the rise in this milk means it has a high sugar content, which anyone with Type 2 diabetes should be aware of."

Rating: 2/5

Sonny said: "This is thin but tasty. It doesn't taste as weird as almond. It's not as nutty. I would drink a glass of this in the morning."

Rating: 2/5

Bethan said: "This is like chocolate milk, it makes me think of nutella. I'd like a glass when I get home."

Rating: 3/5

TOTAL: 10.5/20

OAT MILK

Oatly original whole, 1 litre, £1.80

Angela said: "In terms of the environment, oats are great. They can be grown easily here in the UK, do not lead to water shortage problems and are not associated with deforestation. Co-organic for even better sustainability."

Rating: 5/5

Hulah said: "Oats are really as rich tying as a superfood, but oats are the closest you're going to get. They are great for fibre and help to stabilise your blood sugar. They are also high in iron, something which is often lacking in people who follow a vegetarian or vegan diet. Oats also contain vitamins B1 and B3 which are good for the metabolism. A great choice."

Rating: 5/5

Sonny said: "This has a creamy taste. I would have it in my C3 was desperate, but not with cereal."

Rating: 3/5

Bethan said: "It's creamy and I'd like this warm just before going to bed."

Rating: 4/5

TOTAL: 17/20

COCONUT MILK

Koko coconut milk, 1 litre, £1.60

Angela said: "Coconuts come from exotic climates and are not easy to grow. Farmers are often paid poorly and they should be saved for food based populations. I use coconut milk in a curry when I need it, but it should be used sparingly."

Rating: 2/5

Hulah said: "Coconuts are high in calories and some of that does come from saturated fat. However coconut has a high nutritional density, contains Vitamin C and is also a good source of selenium, good for the metabolism."

Rating: 3/5

Sonny said: "This is really thin. There are bits of coconut but they are not overwhelming. I would drink it on its own but not in cereal. If I had no other options, I'd drink it in tea."

Rating: 2/5

Bethan said: "This does not taste good, it's a bit like lemons. I'd use it to water the plants in the garden."

Rating: 1/5

TOTAL: 8/20

POTATO MILK

Dug unsweetened potato milk, 1 litre, £3.00*

**Available only via Amazon as a three-pack (regular, barista and unsweetened) priced £11*

Angela said: "Potatoes are one of the lowest carbon foods you can get, and are way better than cow methane. Its name of greenhouse gas emissions, stands are the king. I'm intrigued to see how people milk will be received."

Rating: 4/5

Hulah said: "The humble potato is a great source of fibre and has lots of antioxidants. Potatoes are also great for gut health as they contain resistant starch, which helps to promote healthy bacteria in the large intestine. Potato milk is also lactose, gluten and dairy free and not classed as an allergen, so it should be suitable for most people."

Rating: 4/5

Sonny said: "Watery, potatoey and creamy all at the same time. There's sort of a rice pudding taste. The sweetened version would be better in tea. This might be good in cakes."

Rating: 1/5

Bethan said: "This one is the worst milk I've ever tasted. I would never want to have this again."

Rating: 0/5

TOTAL: 9/20

COW'S MILK

2 pints semi skimmed, (1.136ml), £0.89

Angela said: "Dairy uses lots of water and energy, and dairy farming takes up large amounts of land and produces large amounts of methane, which is 30 times more harmful as a greenhouse gas than carbon dioxide. If you love dairy and want to reduce your carbon footprint, then buying whole milk and sourcing it down is a good way to reduce how much your household consumes."

Rating: 0.5/5

Hulah said: "Cows' milk has been part of our diet for centuries, however intensive farming means the milk we buy now contains added hormones and antibiotics. If you can afford to buy organic milk this is better. Cows' milk is a great source of calcium, iodine and vitamin B12. Milk is also an accessible and cheap source of protein which is essential for children."

Rating: 4/5

Sonny said: "We always have skimmed milk in our house so I'm used to drinking loads. I have it in tea, with Weetabix and on its own. Full-fat tastes strange to me now."

Rating: 4/5

Bethan said: "This is my favourite to have on my cereal. It tastes good on cornflakes. I like it when the milkman brings our milk too."

Rating: 4/5

TOTAL: 12.5/20