TOXIC!

How Tesco sells products containing forever chemicals

FOOD RISE

New research into a range of animal-sourced food products from Tesco has revealed the **presence of toxic PFAS (commonly known as 'forever chemicals') in every single food item that was tested.**

As a result, we are calling on Tesco's CEO, Ken Murphy, to:

- Ensure that Tesco urgently recalls **ALL** products found to contain PFAS.
- Adopt a precautionary approach to food safety to prevent PFAS contamination in food products. This should include adding PFAS to the list of environmental pollutants Tesco routinely tests for.
- Transparently outline to customers what steps Tesco will take to monitor, report, and disclose PFAS content and ensure the safety of its food products across the board.
- Continuously review and adapt Tesco's approach in line with government advice and expectations outlined in the PFAS Plan.

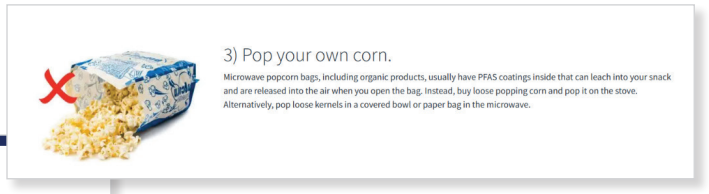
Tesco profits while selling food containing PFAS

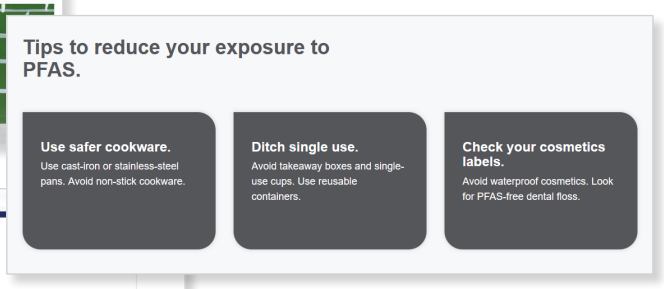
Foodrise commissioned the University of Birmingham, led by Chair of Environmental Chemistry, Professor Mohamed Abdallah, to test 30 animal-sourced food products from Tesco for PFAS.

We chose Tesco over other retailers because it is the UK's biggest supermarket by market share, with 28.3%.[1] In 2025, Tesco brought in an operating profit of £2.7 billion,[2] and claimed £1 of every £10 spent nationally on all UK retail.[3] We wanted to focus our study where it would have the most impact; with such a high market share, Tesco shapes the nation's food.

Despite Tesco's — and its competitors' — dominance over food available on the UK market, guidance on how to limit PFAS exposure has hitherto mainly been found in the press. While media articles provide sensible advice such as opting for PFAS-free cookware, expecting families to make lifestyle changes to protect themselves from PFAS exposure places an unrealistic and unfair burden on individuals, while enabling supermarkets such as Tesco to avoid accountability for their role in retailing foods containing PFAS.

Examples of articles suggesting lifestyle changes to limit PFAS exposure.





The study focused on animal sourced products since there is some evidence pointing to a high likelihood of PFAS occurrence in animal products, due to PFAS bioaccumulating in organic tissue.[4] To our knowledge, this is the first study to test the PFAS contents of supermarket food products in the UK.

We tested a range of meat, fish, eggs and dairy products, with a combination of branded and unbranded, organic and non-organic products, in various packaging types including tin cans, glass bottles, plastic packaging, and cardboard.

PFAS were present in every single one of the 30 food samples tested. The two food items with the highest PFAS concentrations were fish species — cod and sardines — with concentrations exceeding 1 nanogram per gram (wet weight). The full results are listed in **Table 1** (see Appendix).

As there no legally binding limits on PFAS levels in food products in the UK, Tesco responded to our findings by pointing to the EU legal limits. These exist for a limited number of exclusively animal-based foods.[5] The European Food Safety Authority has set a maximum safety threshold of 4.4 nanograms per kilogram of body weight per week.[6]

While the results for the individual products we tested are below the EU legal limits, which Tesco uses as guidance, PFAS' ubiquity in common food products is deeply concerning given the way PFAS accumulate in our bodies.[7] Over time, repeated exposure, even through products that are under the legal limits, can add up to PFAS levels that have been linked to a variety of negative health outcomes.

Table 1 shows EU PFAS concentration limits in some food groups[8]

Food Category	EU PFAS concentration limit µg/kg wet weight
Beef, pork, poultry (except offal)	1.3
Wild Salmon/ Wild Trout	8.0
Eggs	1.7
Crustaceans and bivalves	5.0

PFAS are making us sick

Per- and poly-fluoroalkyl substances (PFAS) are a group of over 4,000 synthetic substances, with a wide range of applications in our daily lives, including in food packaging, non-stick cookware, and waterproofing.[9] PFAS feature a carbon-fluorine bond, a type of chemical bond that is very resistant to degradation, meaning they do not break down naturally or easily.[10] This also means they build up in our bodies and increased exposure can harm our health over time.[11]

PFAS exposure is linked to a range of negative health impacts, including certain cancers,[12] impacts on the immune,[13] reproductive and hormone systems,[14] as well as reduced response to vaccinations,[15] and delayed neurodevelopment in children.[16]

Health Impacts of PFAS

Immune response

- In a systematic review of over 100 animal and human studies, the US National Toxicology Program has linked PFAS to reduced resistance to disease.[17]

Cancer

- The International Agency for Research on Cancer, which is part of the World Health Organisation has classified 2 types of PFAS as Class 1 and 2 carcinogens.[18]

Fertility and child development

- A study of 1,400 mothers and their babies in Denmark, undertaken by researchers from UCLA, showed an association between PFAS concentrations in the mother's blood and (low) birth weight.[19]
- A study of nearly 400 women in Singapore found that women with higher levels of forever chemicals in their blood have a 40% lower chance of becoming pregnant within a year of trying to conceive.[20]
- A review of 61 studies between 2008 and 2024 found that PFAS exposure in early life is linked to reduced cognitive, motor and language development, and increased behavioural issues.[21]

Retailers are failing to protect us from forever chemicals

PFAS enter our food via a variety of routes. They can be transferred to food directly through packaging such as greaseproof paper or plastic, or when non-stick cookware is used.[22] Water and soil can become contaminated by PFAS from industrial waste, firefighting foams, and sewage sludge used as fertiliser.[23] This is absorbed by crops or ingested by livestock, passing through the food chain and ending up in food products.[24] The same is true for fish and shellfish sourced from waterbodies contaminated with PFAS.[25]

In February 2026, the UK government published its PFAS Plan which lays out how it intends to address and manage the risks associated with PFAS. Specifically, it has outlined plans to continue to monitor and review evidence on PFAS in food contact materials, such as food packaging and takeaway boxes, but has so far fallen short of committing to eradicating PFAS from them.[26] What's more, while the PFAS Plan mentions future testing and monitoring of PFAS in foods, there is no clear timeline or scope for this testing.[27]

In a February 2026 blog post, Defra recommends the public opt for PFAS-free items, such as cookware and waterproof clothing, if they are concerned about exposure, redirecting responsibilities from businesses, and making no mention of food or supermarkets.[28]

In April 2026, the UK Parliament's Environmental Audit Committee published a report titled "Addressing the risks from Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)", which made 20 recommendations on how to address PFAS. In its response, the government states the importance of industry leading improvements related to the provision and sharing of information related to PFAS in consumer goods but does not explicitly lay out the responsibilities of food retailers.[29]

As such, at present retailers do not carry any formal responsibility for PFAS concentrations in the food they sell, despite controlling much of the food people have access to.

To better protect people's health, Foodrise calls on Tesco to:

- Ensure that Tesco urgently recalls **ALL** products found to contain PFAS.
- Adopt a precautionary approach to food safety to prevent PFAS contamination in food products. This should include adding PFAS to the list of environmental pollutants Tesco routinely tests for.
- Transparently outline to customers what steps Tesco will take to monitor, report, and disclose PFAS content and ensure the safety of its food products across the board.
- Continuously review and adapt Tesco's approach in line with government advice and expectations outlined in the PFAS Plan.

Appendix

Table 2: PFAS concentrations in food samples tested by Foodrise and UoB

Product	Brand	Packaging type	Concentration of PFAS (ng/g)
Boneless Cod Fillet	TESCO	plastic package	1.198
Sardines in Brine	TESCO	can	1.192
8 Turkey Sausages	TESCO	plastic package	0.899
8 Hotdogs in Brine	kingsfood	can	0.838
Smoked Mackerel Fillets	TESCO	plastic package	0.605
Whole 3.7% Milk	TESCO	plastic	0.564
Organic Whole Free Range Milk	TESCO	plastic	0.494
Semi Skimmed 1.8% Fat Milk	TESCO	plastic	0.379
Battered	TESCO	paper box and plastic film	0.316
Boneless Salmon Fillet	TESCO	plastic package	0.204
4 Traditional Black Pudding Slices	the bury	plastic package	0.203
Cooked Mussels	TESCO	plastic bag	0.196
British Beef Rump Steak	TESCO	plastic package	0.18
12 Salami Slices	TESCO	plastic package	0.155
Cooked and Peeled King Prawns	TESCO	plastic package	0.146
British Sliced Pork Liver	TESCO	plastic package	0.143
Organic Semi Skimmed Free Range Milk	TESCO	plastic	0.139
8 British Pork Sausages	TESCO	plastic package	0.121
Mature Cheddar	TESCO	plastic package	0.111
6 Free Range Eggs	TESCO	cardboard box	0.106
Raw Patagonian Scallops	TESCO	plastic package	0.065
Corned Beef	TESCO	plastic package	0.062
Greek Style Yoghurt	TESCO	plastic	0.046
British Chicken Drumsticks	TESCO	plastic package	0.043
2 Boneless Sea Bass Fillets	TESCO	plastic package	0.036
Tuna Chunks in Spring Water	TESCO	can	0.035
10 Smoked Back Bacon Rashers	TESCO	plastic package	0.031
8 Hotdogs in Brine	wikinger	glass bottle	0.015
Cooked Ham	TESCO	plastic package	0.003
Lamb Hearts	TESCO	plastic package	0.002

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Foodrise is a charity transforming the food system for climate, nature and justice.

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All reasonable attempts have been made to verify the nature and status of the primary and secondary sources collected here in good faith and in the public interest. Any opinions expressed are honestly held and based on facts true at the time of publication.

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