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BMJ INVESTIGATION

Food industry has infiltrated UK children's education: stealth marketing exposed

BMJ investigation reveals widespread influence of food and drink brands in schools and nurseries—through breakfast clubs, nutrition guidance, and healthy eating campaigns. Experts say the tactics require much greater scrutiny and pushback, writes **Emma Wilkinson**

Emma Wilkinson *freelance journalist*

Academics, public health experts, and campaigners are calling for a pushback against food industry influence in UK schools and nurseries in response to *The BMJ*'s findings that the food industry has infiltrated children's education and childcare over many years—through breakfast clubs, nutrition guidance, and healthy eating campaigns.

With grants and funding, free educational resources, and campaigns, the food industry has been able to provide advice to children on "healthy" eating for decades, while rates of obesity in the UK have worsened. Experts say that the tactics are highly problematic and require much greater scrutiny in line with the pushback against alcohol and gambling companies funding education programmes in schools.[1]

In an open letter addressed to the secretaries of state for health and social care and for education, 38 doctors, researchers, peers, and others call on the government to end this stealth marketing to children (see supplementary file on bmj.com).

The organisations influencing food provision and education in schools include Kellogg's, Greggs, and a "policy development" charity that is funded by companies including Coca Cola, PepsiCo, Mars, Nestlé, and McDonald's.

In some cases identified by *The BMJ*, young children have been exposed to branded food marketing in school. Other widely used schemes enable the food industry to frame the solution to the obesity crisis as one of personal responsibility and deflect attention from how commercial influences affect choice and behaviour.

"Just in principle, an organisation sponsored by McDonald's, Mars, and Nestlé shouldn't be within 100 miles of children's food education," Rob Percival, head of food policy at the Soil Association, tells *The BMJ* (video 1).

Video 1 Food industry in influence

Sponsored breakfast clubs reach thousands of children

Kellogg's and Greggs have sponsored school breakfast clubs in the UK for more than two decades, reaching many thousands of primary school children (aged 4 to 11). The breakfast cereal manufacturer first opened school breakfast clubs in 1998; reports from the company say that 3000 schools have since been provided with cash grants of £1000,[2] free bowls, and Corn Flakes and Rice Krispies (which meet school food standards[3]) through partnership with the Magic Breakfast charity.

Critics point out that brand awareness and loyalty raised by exposure to healthier products can contribute to preference for and consumption of less healthy products in that brand's portfolio.[4] Research last year by Action on Sugar found that several Kellogg's cereals marketed to children, including Frosties, contain excessive levels of sugar.[5]

Schools have had access to branded activity sheets to entertain children attending the clubs. After being contacted by *The BMJ*, the company said: "Kellogg's does not provide any branded materials and has removed this from its website." In total, Kellogg's has donated £5.7m to UK schools.

Lindsey MacDonald, chief executive officer of Magic Breakfast, says that it has partnerships with several food brands, as well as other corporations, which means it is able to reach more children every school morning with a nutritious breakfast. "Food supplied as part of our breakfast provision meets government school food standards, and our team of engagement partners who support and monitor schools' provision ensures that any additional food also complies."

Branded aprons and lanyards

A 2023 impact report for the Greggs Foundation—a charitable arm part funded by the high street bakery chain with other partners—says that it now has 898 breakfast clubs supporting more than 62 000 children a day, with a target to reach 1000 clubs.[6] With a termly grant, schools buy their own food except for bread, which the bakery donates. Last year it donated 12 million breakfasts and almost half a million loaves of bread to schools. Critics have pointed out that many Greggs products, such as sausage rolls, pastries, and sweet treats, are high in calories, saturated fats, and added sugars.

The Greggs Foundation works with partners including food manufacturer General Mills, the American firm behind Cheerios and Häagen Dazs, and Findel, a company that provides educational resources. A spokesperson said that it did not ask schools to display any branding or materials, but some schools

have Greggs Foundation branded aprons supplied for volunteers.

The Greggs Foundation also supports a food education programme called Rethink Food—Agents of Change to teach children the importance of physical activity, healthy diets, and sustainability. The goal is to reach 600 schools after three years. By last year 27 000 children had accessed it. The report discussing its success has images of children in school uniforms wearing Greggs branded lanyards.[7] This food education programme is delivered by a charity. The lanyards were used for the children to create "agent" ID passes as a creative activity at the beginning of the programme, a spokesperson says.

Nathan Atkinson, director of Rethink Food, says that its programme is not just about healthy eating but promotes positive action on sustainability and health. "The Greggs Foundation funds the programme and does not influence any of the content. This is managed by qualified and award winning teachers and qualified and registered nutritionists," he adds. The Greggs Foundation logo was added to the lanyards provided to children in a small number of schools to recognise its support, he says.

Healthy eating guidance positions companies as part of solution

Another example of food industry funded education is the British Nutrition Foundation's (BNF's) Food—a Fact of Life programme, which provides resources and training for teachers from reception to GCSE level. The BNF is funded by its members, which include British Sugar plc, Nestlé, Greggs, and McDonald's. They also include Coca Cola, PepsiCo, Kellogg's, and Mars—90% of whose brand sales are from unhealthy products.[8]

Food—a Fact of Life is free for schools and involves healthy eating weeks, activity packs, projects, and recipes. Its website describes it as "a comprehensive, progressive education programme which communicates up-to-date, evidence based, consistent, and accurate messages." It started life in 1991 as a partnership with the government, and later partnered with the Agriculture and Horticulture Development Board, which is funded by statutory levies from farmers, growers, and others in the supply chain.

The BNF is a registered charity and describes itself as a "sounding board for policy development." It has an "independent" board supported by an advisory committee and a scientific committee. One of its trustees is the director of communications at Kellanova, the rebranded name for Kellogg's since 2023, which has just merged with Mars. A senior director at PepsiCo is also on the advisory board.

A spokesperson for the BNF says that the content is based on school curriculums, developed by former teachers and overseen by its science director and independent education working groups. They added: "We recognise that the influence of the food environment and commercial determinants on food choice is a pressing issue for public health and that this is currently a gap in UK curriculums. We shall be recommending that this be addressed in our response to the government's current curriculum and assessment review."

Chris van Tulleken, associate professor at University College London and the author of a bestselling book on ultraprocessed food, says that there is consensus about the commercial products that have driven the obesity crisis yet the industry "always positions themselves as part of the solution."

Brands "laundering their reputation"

"This is them laundering their reputation," van Tulleken tells *The BMJ*. "They may be providing children with an apple and some sensible nutrition advice, but those children and their families are living in an environment that makes it impossible for many of them to follow that advice. There is also a problem with what is not included in the advice given: are kids being told clearly about harmful food?"

Nestlé has a global programme to promote "balanced diets and healthy lifestyle habits for children aged 3-12 years" including through school education. In the UK, since 2014 this has involved funding for the PhunkyFoods Programme, which provides training for teaching staff and lesson plans and says that it helps to create a "culture of healthy living" in schools. It reaches more than 54 000 pupils a year and says that it improves staff confidence in delivering "healthy lifestyle messages."

In 2019, Nestlé used the example of PhunkyFoods in its evidence to a House of Lords select committee consultation on food, poverty, health, and the environment, stating that it shared the concerns of government and others about obesity and diet related diseases.[9]

In response to *The BMJ*, Nestlé said that it was a proud partner of PhunkyFoods because "we support their mission to improve the dietary and physical activity habits of young children across the UK." But there was an agreement that it would never associate the programme with its products or influence content. The support is "entirely financial."

Schools "particularly vulnerable" to industry influence

The full extent to which schools make use of these resources in the UK is unclear. The chief medical officer for Wales, Frank Atherton, raised concerns about the food industry funding school education programmes in his 2023 annual report. He pointed to "large companies with huge distribution and marketing budgets and an overriding pursuit of profit over public health concerns." Funding education programmes in schools has been a "common strategy" used by food, alcohol, and gambling industries, he added.[10]

A survey in 2022 showed that more than one in six schools in Wales used commercially sponsored materials from supermarkets and trade organisations in teaching on food and nutrition. Around 7% used resources provided by fast food companies, and 6% used resources from soft drink and energy drink companies.[10]

Although Wales has adopted a new curriculum that gives health and wellbeing the same emphasis as traditional academic subjects, schools do not have the expertise—making them "particularly vulnerable to the influence of industry sponsored materials," the report noted.

Common industry tactics

Gerry Taylor, spokesperson for the commercial determinants of health at the Association of Directors of Public Health, tells *The BMJ* that there has been increasing awareness of the wider influence of the food environment—which is why some local authorities are taking action on food advertising and takeaways near schools. But when it comes to issues such as food industry branding on breakfast clubs, it can be harder to raise concerns, because children are getting fed, she adds.

In Taylor's annual report published in 2023, she noted that common tactics used by industry, including the food industry, were lobbying, shifting blame, aggressive marketing, sponsorship, industry funded research, self-regulation, and corporate social responsibility.[11] Through breakfast clubs sponsored by the food industry, children are potentially being exposed to branding for high fat and high sugar foods—but it is also a way for the company to say that they are being socially responsible and helping communities, she explains.

In response to this criticism, Greggs points out that the Greggs Foundation is "an independent grant making charity" and that "the breakfast club programme is a long term initiative of 25 years that represents a strong commitment by the Greggs Foundation to support schools, pupils, and families where the need is greatest—this also includes crisis support for families through the hardship programme." A spokesperson adds: "Greggs is one of its funders and donates 1% of its annual profits to the foundation each year."

A Kellogg's spokesperson says: "We know that during trying times, breakfast clubs can help to improve children's school attendance and attainment, as well as alleviate hunger in some cases. Yet, it's not just the children that benefit. The commitment from Kellogg's to help schools, through its breakfast club grants, can also often be a lifeline to parents too."

Taylor says, "If you've got a food company sponsoring your breakfast club, you have to consider what they are providing and what are they getting out of it. The dilemma becomes: is it better to have a breakfast club sponsored by them than no breakfast club?"

Emphasis on personal responsibility over commercial influence

The same can be said of healthy eating campaigns backed by industry, Taylor adds. "When you have organisations providing advice to schoolchildren, around things like nutrition, alcohol, gambling . . . again, [the question is]: what is their motivation? Sometimes, you'll find that the advice is around personal responsibility—it's your fault if you end up eating the wrong foods or drinking too much—rather than the responsibilities of organisations not to be promoting things to children." She says: "However much they may be thinking about public good, obviously they've got conflicting outcomes that they're wanting to achieve: their main raison d'etre is to sell their product."

Writing in *The BMJ* in October 2024, two infant health experts called for education programmes in schools to help parents and children "recognise private sector influence, such as sponsorship of sporting events by the sweetened drinks industry that aims to deflect attention away from the health harms of their products."[12]

Research has shown that, in tackling obesity, changing food environments is more effective than measures that try to educate or change the behaviour of individuals.[13] A report published by the House of Lords committee on food, diet, and obesity in October 2024 castigated successive governments for their failure to tackle the obesity crisis over more than 30 years.[14] "This failure is largely because of policies that focused on personal choice and responsibility," said chair Joan Walmsley, and not enough on commercial determinants and the food environment.

The report called for a crackdown on the food industry, emphasising the need for mandatory regulation, including on advertising. It also called for "strong mandatory compositional and marketing standards for commercial infant foods."

Subtle issue

Percival from the Soil Association says that much of the influence in food education can be quite subtle. "My primary concern is not necessarily the materials being produced by that programme, it's more a matter of what those brands gain from that relationship, and that it is some sort of social licence. They're positioning themselves as part of the solution by getting behind and sponsoring this food education programme."

This is also one of the strong concerns held by May van Schalkwyk, specialist doctor in public health medicine and honorary research fellow at the London School of Hygiene and Tropical Medicine, who describes the issue as "subtle but very problematic." "There's no smoking gun here," she says. "It's not like the tobacco industry funding inhalers. But we have childhood food poverty [and] childhood obesity, and these are problems that are not shifting. We need to step back and ask: how can we do the best for our children in this context?

"We're talking about the most unevidenced, downstream, unsustainable approach. We're almost doing the least we could do by children by welcoming these interventions."

Far greater scrutiny of industry influence required

Van Schalkwyk is calling for far greater scrutiny. "It's classic industry activities: completely reframing the problem. We haven't even stopped to ask: is any of this acceptable for children?" She also points out that, at the same time as doing this corporate social responsibility work, the food industry also uses tactics including pushing back against plans to restrict unhealthy food advertising across Transport for London.[15]

Jennie Cockroft, director of Purely Nutrition, the organisation that runs PhunkyFoods, says that she "wholeheartedly" agrees with the concerns of the public health clinicians and academics about children being exposed to branding and marketing in schools—and that they have strict rules to ensure that does not happen. PhunkyFoods has taken a pragmatic approach by partnering with companies such as Nestlé, she says, but these companies have no influence on the content of PhunkyFoods' programme.

"Public health funding for school health across the UK is woefully inadequate and has been for years. If the food industry is part of the problem, then surely, they should be contributing to the solution—providing that this is done in the right way."

Greg Fell, president of the Association of Directors of Public Health, says: "Supporting youth education programmes is just one of a wide range of tactics that industries who produce harmful products use to influence our purchasing and consumption habits. There is a wealth of evidence to suggest that by being involved in school programmes, harmful products are normalised.[16 17] The evidence about the risks of harm is also often distorted and, instead, blame is shifted to individual choice and personal responsibility."

He adds: "We know that food and drink habits are formed at an early age, so we need to do more to protect children from targeted marketing, like industry influence on school breakfast clubs, and at the same time do more to create healthier environments, where food high in fat, salt, and sugar is not seen as the norm."

The government has announced plans to introduce free breakfast clubs in every primary school.[18] The open letter coordinated by *The BMJ* calls on the government to ensure that children are not exposed to brands that promote high fat, salt, or sugar products through government supported breakfast clubs.

The letter asks that the government includes schools and nurseries (and clubs, activities, educational materials, and resources therein) in all future regulation of food and drink advertising and marketing. It also says that schools and nurseries, and clubs and activities in schools and nurseries, should reject all future branded sponsorship of, and educational materials and resources branded by, high fat, salt, or sugar food and drinks businesses and their representative organisations.

A government spokesperson says: "We encourage all schools to promote healthy eating and provide nutritious food and drink, and all maintained schools and academies must comply with the School

Food Standards. Separately, we will fix the NHS and create the healthiest generation of children in our history by shifting our focus from treatment to prevention, starting by banning junk food ads aimed at children."

Kellogg's said that it thought there was still a role for it in supporting breakfast clubs, including through secondary schools and in providing complementary grants for primary schools. Greggs also said it would continue to support schools and their pupils where need is greatest.

Industry influence in the early years: Ella's Kitchen's sensory food play bus

The First Steps Nutrition Trust has raised concerns about a campaign in the early years setting by Ella's Kitchento encourage sensory food play.

Although framed as educational,[19] it is also "a massive opportunity to push their inappropriate, high sugar commercial baby foods," says Vicky Sibson, director of the trust.

The campaign includes a bus that will come to the nursery to offer sensory food play activities. It is not the education element of the campaign, which is evidence based, that presents a problem, but that it is all being done under Ella's Kitchen branding, Sibson says. "There is a massive conflict of interest, and the concern is that their product range is not in line with public health recommendations for feeding babies and young children." Ella's Kitchen markets its first stage pouches of baby food purées as being suitable from 4 months of age; both NHS public health advice and World Health Organization guidance is to wait until around 6 months, "so no products should be allowed to be marketed as '4 months plus,'" says the British Dental Association.

The British Dental Association has warned about high levels of sugar in some baby pouches, naming Ella's Kitchen as a "boutique brand" with products that have higher levels of sugar than "traditional" baby food brands or own brand alternatives.[20] Sibson also highlights the brand's savoury snacks, including its "puffs" and "sticks," that are marketed as "finger foods"—which, she points out, "is the phrase the NHS uses to refer to real fruits and vegetables." Public Health England has raised concerns about the growth of the commercial baby finger food market.[21]

A spokesperson for Ella's Kitchen says: "Our finger foods are intended to be enjoyed as part of a meal to help with the development of fine motor skills and have never been intended to replace fruit and vegetables, nor have we ever marketed them in that way.

"All of our products are fully compliant with both UK and EU regulations on nutrition and age of weaning. Our baby food products only contain sugar that is naturally present in the fruit and vegetables we use to make them . . . Any differences in sugar content within our own products in comparison to competitors or own brands is purely down to varying types and quantities of fruit and vegetables in each of the products. We reduced sugar across our range by 20% between 2016 and 2019, and . . . we have a policy of only introducing new products that have 10% less sugar than the range average."

Regarding the sensory food play campaign, the spokesperson says: "At no point would any child have been exposed to any Ella's Kitchen products or marketing through the delivery of these lessons." Other than a small logo there is "deliberately no branding, marketing, or advertising attached to any of these resources" for children, she adds. "The truck that accompanied this campaign followed the same theme, with only the logo, and no other branding or advertising attached." The programme is about encouraging children to eat whole fruit and vegetables, she says, and the resources were developed by a developmental psychologist and expert in sensory food education.

Headteacher spearheads non-branded food education

Jason O'Rourke, headteacher at Washingborough Academy in Lincolnshire, has been involved in food education policy for a decade. In the past, this included British Nutrition Foundation (BNF) committees, but he no longer works with the organisation. He favours an approach that has children being involved in growing and experimenting with food. His primary school has its own beehives. The school cook makes all meals including breakfast and uses produce they have grown on site. They are moving to a more plant based menu.

"One in four children in reception is now obese, which is one in three by the time they leave primary school. We take a whole school approach, and the real interest of the kids is so infectious. The BNF can get itself into quite a lot of schools and it prides itself on that. It has Nestlé, etc on its board, and it's not there for the good of it; it's to get its share prices up. It is incredibly powerful. It is sugar washing."

As a counterpoint, O'Rourke set up TasteEd with food writer Bee Wilson. It offers teachers support and training around helping children to love new foods, through being exposed to fresh fruit and vegetables in the classroom. The lessons focus on sight, smell, touch, hearing, and taste; there is no pressure to try, and no science about what they "should" be eating.

Now in 2000 schools, they were offered the chance to partner with Innocent Smoothies but declined because the company is owned by PepsiCo. "We do so much with our children—but then they go to secondary school and it's three steps back because then it's all about access to vending machines and doughnuts."

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