



NEWS

Cow's milk allergy guidelines are not evidence based and are beset by conflicts of interest, researchers warn

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The BMJ

Guidelines that advise doctors to manage common infant symptoms as cow's milk allergy are not evidence based and might be promoting overdiagnosis, a study has found.

Researchers from Imperial College London said that the advice was especially inappropriate for breastfed infants who are not directly consuming cow's milk and risked undermining confidence in breastfeeding.¹

The evidence review, published in *JAMA Paediatrics*, also concluded that cow's milk allergy guidelines were rife with conflicts of interest. Three of the guidelines it analysed were directly supported by formula manufacturers or marketing consultants, and eight in 10 guideline authors reported a conflict of interest with formula manufacturers.

The findings follow an investigation published in *The BMJ* in 2018,² which revealed that allergy to cow's milk protein might be acting as a Trojan horse for the global formula industry to forge relationships with healthcare professionals.

A key finding in the latest study was that for more than 99% of infants with proven cow's milk allergy, the breastmilk of a woman consuming cow's milk contained insufficient milk allergen to trigger an allergic reaction. Robert Boyle, deputy medical director and consultant paediatrician from Imperial College Healthcare NHS Trust and lead study author, told *The BMJ* that this showed that many guidelines were out of step with the evidence.

He said: "Half a teaspoon of milk is the typical quantity that someone needs [to trigger an allergic reaction]. Can you get anywhere near there by drinking milk and then breastfeeding your baby? The answer is absolutely not." Yet seven of the nine official guidelines published between 2012 and 2019 that the study analysed suggested considering cow's milk allergy as a cause of common infant symptoms, and seven recommended strict maternal cow's milk exclusion for managing common symptoms in breastfed infants.

The researchers also found that cow's milk allergy proven by food challenge affected only around 1% of infants, but troublesome crying, vomiting, or rashes were each reported in 15% to 20% of infants. They concluded that clinical trials do not provide consistent support for using maternal or infant cow's milk exclusion to manage common symptoms in infants without proven cow's milk allergy.

Boyle added: "I think a key message [for clinicians] is to make a distinction between infants receiving cow's milk formula who are inevitably having large quantities of cow's milk protein and breastfed infants who are receiving very little cow's milk protein.

"Obviously there's also a key message about conflicts of interest. Why are we not producing any non-conflicted guidelines?" The three guidelines identified by the study as being directly supported by industry were the 2014 Middle East Consensus Statement on Cow's Milk Allergy, funded by Danone Nutricia, CoMiSS from 2015, funded by Nestle, and the 2016 Turkish consensus statement on cow's milk allergy in infants and children, funded by a consultancy company that provides services to support marketing programs of drug companies.

Boyle said that current guidelines were prompting many healthcare professionals to actively advise women to exclude cow's milk from their diets without "any evidence to support that practice."

"To me, that's where the biggest danger lies," he said. "You will have introduced that idea that there's something wrong with a woman's milk at a sensitive time. This is why it works so beautifully for the formula companies. From a marketing point of view, if you're selling formula milk, you're going to make breast milk look problematic."

Chris van Tulleken, associate professor at University College London, who carried out the 2018 investigation for *The BMJ*, said that the latest findings about the concentrations of cow protein in human breast milk were particularly important.

"This illustrates that not only is the condition of CMPA [cow's milk protein allergy] in an exclusively breastfed infant epidemiologically very unlikely, it's also biologically implausible—which makes sense. Whilst some paediatricians were reported by the patients I spoke to as having described breast milk as 'poisoning' their infants, nothing could be further from the truth," he said.

1 Munblit D, Perkin MR, Palmer DJ, Allen KJ, Boyle RJ. Assessment of evidence about common infant symptoms and cow's milk allergy. *JAMA Pediatr* 2020. 10.1001/jamapediatrics.2020.0153. 32282040

2 Van Tulleken C. Overdiagnosis and industry influence: how cow's milk protein allergy is extending the reach of infant formula manufacturers. *BMJ* 2018;363:k505610.1136/bmj.k5056.

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