Popular belief that milk boosts phlegm production is a myth

No need to avoid in kids with asthma, cystic fibrosis, or common cold, says expert

The widely held and persistent belief that milk boosts phlegm production and worsens respiratory conditions from asthma to the common cold, is a myth, insists a children's health expert, in the journal ***Archives of Disease in Childhood.***

There is absolutely no need to avoid giving this nutritious and bone strengthening foodstuff to children with asthma, cystic fibrosis, or respiratory infections, argues children's respiratory consultant Dr Ian Balfour-Lynn, of London's Royal Brompton Hospital.

The notion that milk might generate excess phlegm–while chicken soup might get rid of it–was started in 1204 by Moses Maimonides, Jewish spiritual leader and court physician, in a treatise on asthma written for a relative, writes Balfour-Lynn.

And it was perpetuated by children's health guru, Dr Spock, in his highly influential book on baby and child care published in 1946–a tome that had sold more than 50 million copies by the time of his death in 1998.

But there isn't any evidence to back up these beliefs, says Balfour-Lynn, citing studies dating back as far as 1948.

A possible explanation for the link has been mooted, but has yet to be proved, he adds. This involves a protein produced by the breakdown of certain types of milk, which is known to boost the activity of a gene that stimulates mucus production.

But this all happens in the bowel, and could only affect the respiratory tract if the integrity of the bowel was weakened by infection, so allowing the milk protein to travel elsewhere in the body. It's highly unlikely that the common cold would do this, although it may be possible in people with cystic fibrosis, which is associated with gut inflammation, he suggests.

The more likely explanation lies in how milk feels in the mouth, he says. Milk is an emulsion, while saliva contains compounds that make it stickier and which quickly interact with the emulsion, boosting its volume.

"This could well affect the sensory perception of milk mixed with saliva, both in terms of its thickness coating the mouth and the after feel–when small amounts of emulsion remain in the mouth after swallowing," he writes.

"This may explain why so many people think there is more mucus produced, when, in fact, it is the aggregates of milk emulsion that they are aware of lingering in the mouth after swallowing."

It matters if children aren't given milk, because of this persistent myth, he adds. Milk is an important source of energy, calcium, and vitamins. Calcium is critical for good bone health and warding off osteoporosis in later life: the evidence shows that fractures are more common in children who don't drink milk, he notes.

This is particularly important in conditions like cystic fibrosis or asthma when sometimes repeated large doses of steroids, which sap bone strength, are part of the treatment.

"While certainly the texture of milk can make some people feel their mucus and saliva is thicker and harder to swallow, there is no evidence (and indeed evidence to the contrary) that milk leads to excessive mucus secretion," he concludes. "The milk-mucus myth needs to be rebutted firmly by healthcare workers."