Monosodium glutamate and asthma – what is the evidence?

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The flavour enhancer, monosodium glutamate (MSG) was first implicated in causing adverse reactions in people with asthma in 1981, when two doctors wrote a letter to the New England Journal of Medicine proposing a possible association between MSG and asthma.

Since this time seven clinical trials to determine the relationship between MSG and asthma have been conducted throughout the world. Two of these trials have shown an association between MSG and asthma (1,2). However five trials, involving 45 subjects with a positive history of MSG-induced asthma, have shown no such association (3–7). A further trial, which assessed a range of food chemicals in adults with asthma, demonstrated MSG-induced asthma in one out of the eight subjects studied (8).

Attempts to clarify this issue have been limited due to methodological deficiencies, including the small number of subjects studied, inadequate blinding procedures, inappropriate withdrawal of asthma medications, poor dietary control and the use of effort-dependent measures of lung function. After reviewing the evidence that is currently available, it would appear that a causal connection between MSG and asthma has not been conclusively established.

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