

# Honey More Soothing Than Dextromethorphan

*Data show OTC remedies are not very effective for colds and are associated with serious adverse effects.*

BY MARY ANN MOON  
Contributing Writer

A bedtime dose of buckwheat honey was more effective than was dextromethorphan or no treatment at all for quieting cough and facilitating sleep in children aged 2-17 who had upper respiratory infection, reported Dr. Ian M. Paul and his associates at Pennsylvania State University, Hershey.

Honey decreased the frequency, severity, and “bothersome” nature of children’s coughs associated with upper respiratory tract infections, thus improving both their sleep and their parents’ sleep. Dextromethorphan wasn’t any better than no treatment at all in a study comparing the three strategies.

The findings, combined with those of a previous study by the same researchers that found that neither dextromethorphan nor diphenhydramine was superior to placebo for cold symptoms, “now provide a generally safe and well-tolerated alternative for practitioners to recommend,” they wrote.

Dextromethorphan is the most commonly used over-the-counter antitussive

for childhood cough, even though its use is not supported by the American Academy of Pediatrics or the American College of Chest Physicians.

The agent has been linked to serious adverse events including dystonia, anaphylaxis, and bullous mastocytosis at standard doses, as well as psychosis, mania, hallucinations, ataxia, dependence, and death at higher doses.

In contrast, honey, an alternative remedy used by many cultures and endorsed by the World Health Organization, is generally considered safe—with the exception of a risk of infantile botulism in children aged under 1 year.

Honey is thought to soothe the throat and to have antioxidant and antimicrobial effects, although there is “no scientific evidence to support” its use, Dr. Paul and his associates noted (*Arch. Pediatr. Adolesc. Med.* 2007;161:1140-6).

The researchers assessed the two cough remedies against no treatment in 105 patients at a single university-affiliated pediatric practice. The patients were randomly assigned to receive no treatment (37 children), buckwheat honey (35 children), or a honey-flavored dextromethorphan



Antioxidant properties of darker honey are believed to help relieve coughing.

children who received honey and two who received dextromethorphan, compared with none of the children in the no-treatment group. This could influence physicians’ recommendations in some cases, Dr. Paul and his associates said.

Among the limitations of this study noted by the researchers was that much of the improvement in all groups “can also be attributed to the natural history of [upper respiratory tract infections], which generally improve with time and supportive care.

“While additional studies to confirm our findings should be encouraged, each clinician should consider the findings for honey, the absence of such published findings for dextromethorphan, and the potential for adverse effects and cumulative costs associated with dextromethorphan when recommending treatments for families,” they added. The researchers explained that compared with other types, darker honeys, such as buckwheat, tend to have more phenolic compounds. These compounds have been associated with the antioxidant properties of honey that may have contributed to its relieving effect.

Further, they wrote, honey’s “topical demulcent effect may contribute to its benefits for cough as postulated by the World Health Organization review.” ■

## Antibiotics, Topical Steroids Show No Effect in Acute Bacterial Sinusitis

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Neither an antibiotic nor a steroid nasal spray is effective against acute bacterial sinusitis, according to a randomized study of 240 adults in the United Kingdom.

These findings add to the growing evidence that antibiotics do not yield useful clinical effects in this patient population, particularly when weighed against their disadvantages, and that topical steroids usually are not beneficial either.

The patients were recruited from 74 primary care practices between 2001 and 2005. The median age was 44 years, and the median duration of symptoms of bacterial sinusitis before the doctor visit was 7 days, Dr. Ian G. Williamson of the University of Southampton (England) and his associates reported.

The subjects were randomly assigned to receive 500 mg of amoxicillin 3 times per day for 7 days or a placebo, in combination with either budesonide or a placebo nasal spray once per day for 10 days. Patients reported

the frequency and severity of 11 symptoms in a diary.

The proportion of patients who continued to have symptoms after 10 or more days of treatment was 29% with amoxicillin and 33% with placebo, a difference that was not significant. Similarly, the proportion who continued to have symptoms after 10 days of treatment

**After 10 days, 29% of the amoxicillin patients still had symptoms compared with 33% of the controls, a difference that was not significant.**

with budesonide nasal spray was 31%—exactly the same as the proportion who continued to have symptoms with a placebo nasal spray.

There also were no differences between the study groups in time until cure was reported. The investigators said that 40% of the subjects in each group were cured by 1 week (*J. Am. Med. Assoc.* 2007;298:2487-96).

“Among patients with the typical features of acute bacterial sinusitis, neither an antibiotic nor a topical steroid, alone or in

combination, [is] effective in altering the symptom severity, the duration, or the natural history of the condition,” the researchers concluded.

“Our rigorous case definition of sinusitis is likely to mean that less-well-defined cases treated routinely by physicians in primary care will show even less effect from taking antibiotics” and nasal steroids, Dr. Williamson and his associates noted.

Topical steroids may be of some benefit in milder cases of bacterial sinusitis than those that were treated in this study, because drug delivery to the nasal mucosa may be more effective before thick secretions, closure of the ostium, and severe inflammation develop, they added.

The study was “the largest nonpharmaceutically funded double-blind, randomized, placebo-controlled trial assessing the effectiveness of amoxicillin in cases of acute [bacterial] sinusitis ... presenting to family physicians, and the only adequately powered trial of budesonide in this patient group,” they said. ■

## China Reports on First Human Cases of Avian Flu in 6 Months

China has confirmed the first human cases of the highly pathogenic H5N1 avian influenza virus in 6 months, international public health officials have reported.

The two cases are a father and son in the Jiangsu province, according to the World Health Organization, citing the Chinese health ministry. One of the close contacts being observed by public health officials, the 52-year-old father became sick on Dec. 3, at which time he was admitted to the hospital. The Chinese national laboratory confirmed his infection as H5N1 in early December, WHO said.

His 24-year-old son died on Dec. 2, 2 weeks after developing symptoms. The national laboratory confirmed the son’s infection as H5N1 on the day he died. Public health investigators have not traced any contact with birds by the two men, WHO said.

China has reported 27 human cases of H5N1—17 of which have been fatal—since its first reported case in 2003. Five cases, three of them fatal, have occurred this year, according to WHO.

In addition, WHO said, Indonesia has reported four cases of H5N1 since mid-October, all but one fatal. These cases in-

cluded the following:

► A 5-year-old girl from Tangerang District, Banten Province, who died in the hospital on Oct. 22.

► A 3-year-old boy from Tangerang District who became sick on Oct. 14 but recovered.

► A 30-year-old woman from Tangerang District who died in the hospital on Nov. 3.

► A 31-year-old man from Bengkalis District, Riau Province, who died in the hospital on Nov. 6.

WHO said the three cases in Tangerang District occurred in neighborhoods or households that were close to dead poultry, whereas the final case involves an investigation into a swallow farm near the home of the patient who died.

Including the most recent cases, Indonesia’s toll has been 113 human cases of H5N1, with 91 deaths. Of that number, 38 total cases (including 33 deaths) have occurred this year, WHO said.

In total, WHO said that 337 human cases of H5N1 have been reported since the first ones in 2003, 207 of which have been fatal. This year, 74 cases, 49 of them fatal, have been reported, according to WHO.

—Jonathan Gardner