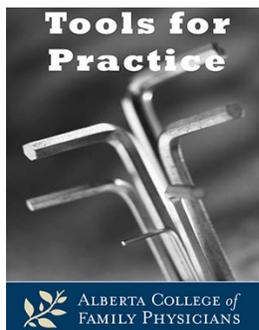


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Evidence Updated: RCT added
Bottom Line: Unchanged
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Pediatric Cough: Do OTC cough suppressants or honey help?

Clinical Question: Do Over-The-Counter (OTC) cough suppressants or honey improve cough due to Upper Respiratory Tract Infection (URTI) in children?

Bottom-line: OTC cough suppressants should not be used in children under six and are likely ineffective in older children. The evidence supporting honey is positive for a small effect but the evidence is at high risk of bias.

Evidence:

- OTC Cough Suppressants: A systematic review¹ considered eight Randomized Controlled Trials (RCTs) with 616 children, mean ages 2-7.5. Studies were done primarily in pediatric/primary clinics and were generally poor quality.
 - Statistical improvements were infrequent, inconsistent and of doubtful clinical significance.
- Honey: Three RCTs.
 - 105 children, mean age five (range 2-17): one night-time dose of honey, dextromethorphan (DM), or nothing.²
 - Statistically significant cough/sleep score improvement in:
 - Five of five three-way comparisons: superiority in order of honey over DM over nothing.
 - Neither honey or DM reached clinically important improvement
 - 139 children, mean age three (range 2-5): one night-time dose of honey, DM, diphenhydramine (DPH), or supportive care.³
 - Statistically significant improvement in:
 - All groups after 24 hours: Mean improvements were 59% for honey, 45% for DM and DPH, and 31% for supportive care.
 - Honey superior to DM and DPH, which were superior to supportive care.
 - 270 children, median age 2.4 (range 1-5): one night-time dose of three different types of honey or placebo (silan date extract).⁴

- Statistically significant cough/sleep score improvement in:
 - Five of five comparisons for all honey types over placebo with no difference between honey types.

Context:

- The magnitude of honey's benefit cannot be determined due to study design.
- Methodological issues in honey trials: randomization not assured,²⁻⁴ no blinding,³ excluded patients deviating from protocol,³ substituting clinicians rating for parent/child,^{3,4} funding by the Honey Board,^{2,4} and limited clinical significance.²⁻⁴
- Due to poor evidence of benefit and possible harms, Health Canada⁵ recommends OTC cough and cold medicines not be used in children under six.
- Honey should not be used in children in age ≤ 1 due to risk of infantile botulism.

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