

## SUPPLEMENTARY MATERIAL

### EXTENDED METHODS

#### Literature database search terms

The following key words and MeSH terms were used to carry out the search: (upper respiratory tract infection\* OR upper respiratory infection\* OR “common cold” OR cough OR “sore throat” OR “throat pain” OR influenza OR flu OR laryngitis OR nasolaryngitis OR naso-laryngitis OR rhinolaryngitis OR tonsillitis OR rhino-laryngitis OR pharyngitis OR nasopharyngitis OR nasopharyngitis OR rhinitis OR sinusitis OR nasosinusitis OR naso-sinusitis OR rhinosinusitis OR rhinosinusitis OR tracheitis OR supraglottitis OR epiglottitis OR rhinorrh\* OR “runny nose” OR “blocked nose” OR “stuffed nose” or otitis media or earache or “ear infection” or croup or coryza\* or tracheobronchitis or “cold” or catarrh\* or “inflamed throat” or uvulitis or \*pharyngitis or \*laryngitis or \*tonsillitis or \*sinusitis).

#### Estimating missing data values

For synthesis of results in the meta-analyses, we used mean difference in symptom score pre- and post-intervention. We therefore extracted mean difference and standard deviation of difference from included studies. These data were not directly reported by all studies; for those that reported just mean symptom scores, mean differences in symptom score were easily calculated by subtracting mean symptom score post-intervention from mean symptom score pre-intervention. The general strategy to estimate standard deviations was back-calculation from available data using the Revman calculator; to do this, we extracted whatever data were reported in the studies, typically standard errors and p values for significance, entered them into the Revman calculator, which estimated the standard deviation for difference.

If studies reported results in a graphical form, we estimated the data values by interpolation using an online tool, webplotdigitizer (URL: <https://apps.automeris.io/wpd/>), and then used the above methods, if necessary, to estimate mean difference and standard deviation of difference.

**Supplementary Table 1: Detailed methods for MD and SD estimation in the relevant studies.**

Study	Methods for estimation
Ahmadi 2013	Reported results were either ‘improved’ or ‘no change’ or ‘worse’. We converted these into a 3-point Likert scale, with differences in scores for cough severity and frequency (day and night) being related to improvement or lack thereof: -1 (improved) 0 (no change) +1 (worse).

	Mean differences and standard deviations were then calculated, using the Revman calculator. A sensitivity analysis was also included.
Canciani 2014	Mean differences were calculated by interpolation from the graph; SD for mean difference estimated by taking a mean of SD pre-intervention and SD post-intervention. A sensitivity analysis was also included.
Cohen 2017	Mean differences were reported; SDs for mean difference were back-calculated using reported SEs in the Revman calculator.
Paul 2007	Mean differences were reported; SDs for mean difference were back-calculated using the Revman calculator, using SEs reported in a Cochrane review that also analysed this study.
Raeessi 2011	Mean differences were reported; as a p-value for mean difference was only reported for group 3 (coffee & honey intervention), SD for mean difference could only be estimated for this group. The Revman calculator was used to do this, and the estimated SD for mean difference we obtained was used for the other two groups (coffee-only intervention, and honey-only intervention). A sensitivity analysis was also included.
Raeessi 2013	Mean differences were reported; SDs for mean difference were not. Authors reported p-values for significance obtained using the Wilcoxon rank sum test, while the Revman calculator uses t-test p values; we used the reported p values in the Revman calculator to back-calculate SDs for mean difference. A sensitivity analysis was also included.
Shadkam 2010	Mean differences were reported; SDs for mean difference were back-calculated using p values for significance in the Revman calculator. Additionally, we combined the placebo and supportive treatment arms in our calculations.

## EXTENDED RESULTS

### **Honey vs placebo**

See Supplementary Figure 1.

### **Honey vs usual care**

See Supplementary Figure 2.

### **Honey vs dextromethorphan**

See Supplementary Figure 3.

### **Honey vs diphenhydramine**

See Supplementary Figure 4.

**Supplementary Table 2: Reasons for exclusion at full text screening.**

N=84

Reason for exclusion	Number of studies
Wrong study design	61
Wrong intervention	5
Wrong indication	3
Unable to obtain (1 despite world-wide search)	3
Wrong comparator	3
Wrong outcomes	3
Wrong patient population	2
Not an academic route of publication	2
Protocol only	1
Withdrawn prior to study	1

**Supplementary Table 3: Summary of usual care interventions in “infectious” group studies.**

Study	Usual care regimen
Ahmadi 2013	Liquid diphenhydramine solution (5mg/kg) – antitussive.
Ayazi 2017	Liquid diphenhydramine solution (2.5mL dose for children aged 1-6, 5mL for 6-12) – antitussive.
Cohen 2017	Carbocysteine syrup – mucolytic.
Gupta 2016	Marketed cough syrup (MCS), containing diphenhydramine, ammonium chloride and sodium citrate.
Miceli Sopo 2015	Dextromethorphan syrup or levodropropizine syrup (according to clinician preference) – antitussives.
Nanda 2017	Antibiotics, anti-inflammatory drugs and gargles.
Paul 2007	Artificially honey-flavoured dextromethorphan syrup (8.5mg/ dose, 17mg/dose and 34mg/dose in children 2-5, 6-11 and 12-18, respectively) – antitussive.
Pourahmad 2009	“Classic therapeutic regimen” comprising acetaminophen (325 mg/q 6 h), naproxen (250 mg/q 12 h), chlorpheniramine (4 mg/q 6 h) – analgesic, non-steroidal anti-inflammatory drug and antihistamine, respectively.
Raessi 2011	Instant coffee (25g dissolved in ~200mL water, every 8 hours).
Raessi 2013	Guaifenesin (25g dissolved in ~200mL water, 3 times daily) – expectorant.
Shadkam 2010	Diphenhydramine syrup (2.5mL/dose) and dextromethorphan syrup (2.5ml/dose – antitussives.

**Supplementary Table 4: Study characteristics.**

Ahmadi 2013

<b>Methods</b>	Double-blinded, randomised (randomisation strategy unclear) clinical trial study. No placebo control.
<b>Participants</b>	Enrolled n=126; all assumed to have completed. Age range 2-5 years.  Inclusion criteria: "a main complaint of acute severe cough, attending on the first or second day of symptom presentation. Additional symptoms were those consisted with a viral upper respiratory tract infection (low grade temperature (37.8-38.5 oral or 37.2-37.9 axilla), rhinorrhoea, sneezing, blocked nose, sore throat, cough, mild headache, hoarse voice and general malaise".  Exclusion criteria: "presence of symptoms consistent with a bacterial upper respiratory tract infection (moderate to high grade temperature, severe sore throat with painful swallowing, significant headache, nausea, vomiting or abdominal pain); symptoms of lower respiratory tract infection (high grade temperature, rigor, difficulty breathing, fatigue, pleuritic pain, tachypnoea, retraction); presence of associated otitis or sinusitis; presence of allergic symptoms (family history of allergy, symptoms of eye / nose pruritis, similar previous episodes, history of prolonged colds); symptoms of reactive airway disease including wheezing, shallow breathing, tachypnoea, tachycardia, sensation of tight chest"; use of medications prior to study; presence of "early signs of otitis, sinusitis, lower respiratory tract infection, and superimposed bacterial upper respiratory tract infection (purulent nasal discharge, high grade temperature, difficulty breathing, peri-orbital oedema and facial pain); non-concordance of prescribed medications; use of additional/ non-prescribed treatments; incomplete reports/ history from patient's carer".
<b>Interventions</b>	Liquid diphenhydramine, allocated n=63;  Honey (Mahram brand), allocated n=63;  Doses of 5mg/kg, 3 times a day (third recommended one hour before sleep).
<b>Outcomes</b>	Primary outcome measure was trend in frequency and severity of day-time and night-time cough (increase, decrease or no change).
<b>Notes</b>	

Ayazi 2017

<b>Methods</b>	Randomised, un-blinded clinical trial. No placebo control
<b>Participants</b>	Enrolled n = 92; completed n=87. Age range 1-12 years.  Inclusion criteria: presence of a "viral URTI-induced cough lasting up to 7 days, in a previously healthy subject with no past medical history, +/- rhinorrhoea".  Exclusion criteria: "signs and symptoms shared with pneumonia, laryngotracheobronchitis, sinusitis, asthma, allergic rhinitis; frequent hospitalisation; recent use of diphenhydramine in children; use of honey, cough or cold medication the night before entering the study; medications affecting parents' sleep (e.g. benzodiazepines, antihistamines)".

<b>Interventions</b>	Honey 1 (Kimia honey), analysed n=42; Honey 2 (Shahde-Golha honey), analysed n=25; Diphenhydramine, analysed n=20.
<b>Outcomes</b>	Primary outcome was nocturnal cough and sleep difficulty score, as assessed using a validated 5-item 7-point Likert scale questionnaire. Parents carried out the questionnaire.
<b>Notes</b>	

## Canciani 2014

<b>Methods</b>	Double-blind, randomised, placebo-controlled clinical trial.
<b>Participants</b>	Enrolled n=102; all analysed in intention-to-treat analyses, but completed n=91. Age range 3-6 years.  Inclusion criteria: presence of persistent cough (7 days-3 weeks duration) not treated with any other antitussive. No other inclusion or exclusion criteria detailed.
<b>Interventions</b>	Grintuss syrup, allocated n=51, completed n=47;  Placebo, allocated n=51, completed n=44.
<b>Outcomes</b>	Primary outcome measures were changes in day-time and night-time cough scores, assessed daily by parents using a validated questionnaire (adapted from Chung et al. (2002)).
<b>Notes</b>	

## Cohen 2012

<b>Methods</b>	Double-blinded, randomised, placebo-controlled trial.
<b>Participants</b>	Enrolled n=300; completed n=270. Age range 1-5 years.  Inclusion criteria: 1-5 years of age; nocturnal cough attributable to upper respiratory tract infection (defined by "presence of cough and rhinorrhea of $\leq 7$ days' duration" with other symptoms including, but not limited to, "nasal congestion, fever, sore throat, myalgia, and headache".  Exclusion criteria: signs or symptoms of asthma, pneumonia, laryngotracheobronchitis, sinusitis, and/or allergic rhinitis; use of any cough/ cold medication/ honey (but not analgesics) the night before the study.
<b>Interventions</b>	Eucalyptus honey, allocated n=75, analysed n=64;  Citrus honey, allocated n=75, analysed n=62;  Labiatae honey, allocated n=75, analysed n=73;  Silan date extract placebo, allocated n=75, analysed n=71.
<b>Outcomes</b>	Primary outcome was cough frequency (authors measured change in cough frequency between night 1 and night 2). Secondary outcome measures: "changes in the cough severity, the bothersome nature of the cough, the effect of the cough on sleep for both the child and the parent, and the combined score of these five

	measures".
<b>Notes</b>	Silan date extract chosen for similarity in structure, appearance and taste, to honey.  All interventions in same packaging - 10g plastic containers. Dose/ instructions: 10g intervention within 30 minutes of child going to sleep.

## Cohen 2017

<b>Methods</b>	Single-blinded, randomised trial. No placebo control.
<b>Participants</b>	Enrolled n=150; completed n=141. Age range 2-5 years.  Inclusion criteria: 2-5 years of age; nocturnal and day-time cough attributable to upper respiratory infection (defined as "acute viral infection present for no more than 7 days where cough and rhinorrhea were the main symptoms. Other symptoms included, but were not limited to, nasal congestion, fever, sore throat, myalgia, fatigue, malaise and headache").  Exclusion criteria: signs/ symptoms of asthma, pneumonia, chronic cough, stridor or laryngotracheobronchitis, sinusitis, chronic cardiac or pulmonary condition, allergic rhinitis; use of steroids, antihistamines, other cough/ cold medications or honey up to 24 hours before presentation.
<b>Interventions</b>	Grintuss polysaccharide-resin-honey (PRH) syrup, containing "honey as well as specific fractions of resins, polysaccharides, saponins, flavonoids and sugars derived from <i>Grindelia robusta</i> , <i>Plantago lanceolata</i> and <i>Helichrysum italicum</i> ", allocated n=78, analysed n=75;  Carbocysteine syrup, allocated n=72, analysed n=66.
<b>Outcomes</b>	Primary outcome was change in night-time cough score between first pre-treatment night and first night of treatment, using a modified version of a previously-validated 7-point Likert scale questionnaire. Secondary outcomes - change in day- and night-time cough score from pre-treatment to end of study.
<b>Notes</b>	

## Gupta 2016

<b>Methods</b>	Double-blinded, randomised clinical trial.
<b>Participants</b>	Enrolled n=105, all assumed to have completed. Age range 18-65 years.  Inclusion criteria: history of acute non-productive cough due to any cause except those in exclusion criteria, and throat irritation for <1 week.  Exclusion criteria: history of acute lower respiratory tract infection e.g. pneumonia, bronchitis, whooping cough, chronic obstructive pulmonary disease/asthma, tuberculosis, systemic bacterial infections requiring specific drug therapy; any "underlying lung pathology such as lung abscess or cystic fibrosis", history of myocardial infarction within 4 weeks prior to enrolment; presence of known hypersensitivity to ingredients of study products; presence of "immediate life-threatening diseases such as pre-existing cardiovascular, liver, or neoplastic diseases"; use of any immunosuppressant, sedative, hypnotic or tranquilizer within 14 days prior to enrolment; hypertension & use of angiotensin-converting enzyme inhibitors; use of anti-histamines, cough suppressants, mucolytics,

	expectorants, or antibiotics 3 days prior to enrolment; history of Parkinson's disease treated with monoamine oxidase inhibitors; presence of "any psychiatric illness which may impair the ability to provide written informed consent form"; participation in any other clinical trial; pregnancy/ lactation; regular alcohol/ cigarette/ drug use (occasional users "included on investigator's discretion with instructions to restrict the use of cigarettes/alcohol during study participation"); presence of "any other condition due to which individuals were deemed unsuitable by the investigator" even if not stated in exclusion criteria.
<b>Interventions</b>	Honitus cough syrup, containing "extracts of herbal ingredients such as <i>Tulsi</i> ( <i>O. sanctum</i> , Lf.), <i>Yashti</i> ( <i>G. glabra</i> , Rt.), <i>Kantakari</i> ( <i>Solanum xanthocarpum</i> , Pl.), <i>Banaphsa</i> ( <i>V. odorata</i> , Aerial.), <i>Shunthi</i> ( <i>Z. officinale</i> , Rz.), <i>Pippali</i> ( <i>P. longum</i> , Fr.), <i>Vasa</i> ( <i>A. vasica</i> , Lf.), <i>Shati</i> ( <i>Hedychium spicatum</i> , Rz.) and honey", allocated n=53;  Marketed cough syrup (MCS) containing diphenhydramine, ammonium chloride and sodium citrate, allocated n=52.
<b>Outcomes</b>	Primary outcome measures were day/ night-time cough scores and throat irritation over a 3-day period, as assessed by 6-point and 5-point scales, respectively.
<b>Notes</b>	

## Miceli Sopo 2015

<b>Methods</b>	Randomised, un-blinded clinical trial, no placebo control.
<b>Participants</b>	Enrolled, n=134, all analysed. Age range 2-14 years.  Inclusion criteria: presence of cough $\leq 7$ days in duration, attributable to upper airway infection, with or without fever; basal score of $\geq 12$ in Paul et al. cough score questionnaire before treatment.  Exclusion criteria: presence of asthma, pneumonia, streptococcal tonsillitis, sinusitis, bronchitis, allergic rhinitis; use of "analgesic medications for cough over the counter (OTC, including natural, herbal and homoeopathic products), oral antihistamines, cortisone given in all forms, non-steroidal anti-inflammatory drugs (NSAIDs), including ibuprofen but not paracetamol, or honey" in the week before the study; parental refusal.
<b>Interventions</b>	Dextromethorphan, allocated n=29;  Milk & wildflower honey (paired with DM group), allocated n=37;  Levodropropizine, allocated n=34;  Milk & wildflower honey (paired with LDP group), allocated n=34.
<b>Outcomes</b>	Primary outcome was percent achievement of therapeutic success in each group. Therapeutic success defined as "a decrease in Paul's cough questionnaire higher than 50% compared with baseline values". A validated 5-item 7-point Likert questionnaire was used to obtain cough scores.
<b>Notes</b>	3 participants (DM, M&H-DM and LDP groups, respectively) did not complete post-treatment questionnaire and so were considered failures as per "worst scenario analysis".  "DM (Lisomucil antitussive syrup, Sanofi-Aventis, Milan) was administered at doses of 7.5mg/dose for children aged 2-5 years, 15mg/dose for children aged between 5 and 11, and 30mg/dose for children between 12 and 14 years of age.

	LDP (Levotuss drops, Dompé, Milan) was given at the dose of 1 drop/kg until a maximum of 20 drops. Both DM and LDP contained some excipients such as sucrose and fruit aromas. Children assigned to the honey group received 90ml of warm pasteurised cow's milk mixed with 10ml of wildflower honey (milk and honey, M&H). All treatments were administered 30minutes before bedtime during three consecutive evenings. If body temperature was $\geq 38.5^{\circ}\text{C}$ , children were allowed to take, in addition to the randomised treatment, paracetamol. Extra doses of honey were prohibited."
--	--

## Nanda 2017

<b>Methods</b>	Randomised, placebo-controlled trial. Blinding unclear.
<b>Participants</b>	Enrolled n=200; remaining at day 10* n=183. Age range 18 to >60 years.  Inclusion criteria: above 18 years of age; presence of signs and symptoms of sore throat.  Exclusion criteria: diabetes; history of pollen/ bee allergy; honey allergy; unwillingness to consume honey.
<b>Interventions</b>	Honey along with supportive treatments (antibiotics, anti-inflammatory drugs, antiseptic gargles), allocated n=100;  Control (supportive treatments alone), n=100.
<b>Outcomes</b>	Primary outcomes were time to recovery from all symptoms; subjective symptom scores (examples "pain in throat, difficulty in swallowing and fever"); oropharyngeal congestion; complications from sore throat (requirement for hospitalisation due to e.g. "high-grade fever, dehydration, and severe painful swallowing"); patient satisfaction; side-effects of honey.
<b>Notes</b>	*in this systematic review, values for day 10 assessment were used. Participants were instructed to use interventions until total recovery from sore throat, or up to a maximum of 15 days.

## Paul 2007

<b>Methods</b>	Partially double-blinded*, randomised, clinical trial.  *study investigators assessing symptoms were blinded; parents of control group were not blinded, but parents of honey and DM groups were blinded.
<b>Participants</b>	Enrolled n=130; completed n=105. Age range 2-18 years.  Inclusion criteria: 2-18 years of age; presence of cough attributable to upper respiratory infection (URI defined as "the presence of rhinorrhea and cough for 7 or fewer days' duration", with other symptoms including congestion, fever, sore throat, myalgias, and headache).  Exclusion criteria: presence of signs/ symptoms of "more treatable disease eg, asthma, pneumonia, laryngotracheobronchitis, sinusitis, allergic rhinitis"; history of reactive airways disease, asthma or COPD; use of selective serotonin reuptake inhibitors or other drugs that affect dextromethorphan metabolism; use of antihistamines/ DM hydrobromide up to 6 hours before bed on the night prior to the study; use of DM polistirex up to 12 hours before bed on the night prior to the study.



<b>Interventions</b>	Buckwheat honey, analysed n=35; Dextromethorphan, analysed n=33; Control (no treatment), analysed n=37.
<b>Outcomes</b>	Primary outcome measure was cough score, assessed using a validated 5-item 7-point Likert questionnaire.
<b>Notes</b>	DM was made to look and taste like honey through addition of artificial honey flavouring and colouring.

Pourahmad 2009

<b>Methods</b>	Single-blinded, non-randomised clinical trial*. No placebo control.
<b>Participants</b>	Enrolled, n=60; completed n=60. Age range not given; mean age of honey + classic therapeutic regimen group = 24.4 years $\pm$ 7.4 years, mean age of classic therapeutic regimen only group = 27.4 years $\pm$ 6.2 years.  Inclusion and exclusion criteria not reported.
<b>Interventions</b>	Honey + classic therapeutic regimen comprising acetaminophen + naproxen + chlorpheniramine, allocated n=30;  Classic therapeutic regimen only, allocated n=30.
<b>Outcomes</b>	Duration of signs and symptoms of common cold (rhinitis, muscle pain, fever, throat congestion, cough and sneezing) assessed by investigators.
<b>Notes</b>	* Study investigators assessing signs and symptoms were blinded, but it is unclear if there was participant blinding; additionally, patients were selected consecutively.

Raessi 2011

<b>Methods</b>	Double-blind, randomised clinical trial. No placebo control.
<b>Participants</b>	Enrolled, n=84; completed n=74. Age range 21-65 years.  Inclusion criteria: persistent post-infectious cough >3 weeks in duration.  Exclusion criteria: presence of other causes of chronic cough; presence of systemic disease; abnormal routine laboratory test results.
<b>Interventions</b>	Coffee, allocated n=16, analysed n=14 (dissolve 25g of prescribed product, each 600g containing 70g instant coffee, in 200ml warm water, take every 8 hours);  Honey, allocated n=14, analysed n=12 (dissolve 25g of prescribed product, each 600g containing 500g honey, in 200ml warm water, take every 8 hours);  Honey plus coffee, allocated n=54, analysed n=48 (dissolve 25g prescribed product, each 600g containing 70g instant coffee and 500g honey, in 200ml warm water, take every 8 hours).
<b>Outcomes</b>	Primary outcome measure was cough frequency, assessed by physician using a cough questionnaire.
<b>Notes</b>	

Raessi 2013

<b>Methods</b>	Double-blind, randomised, placebo-controlled clinical trial.
<b>Participants</b>	Enrolled n = 97; completed n=85. Age range 21-65 years.  Inclusion criteria: persistent post-infectious cough >3 weeks in duration.  Exclusion criteria: smoking; presence of other types of chronic cough "unless first treated by study authors"; presence of systemic disease; abnormal routine laboratory tests.
<b>Interventions</b>	Honey plus coffee, allocated n=33, analysed n=29;  Steroid (prednisolone), allocated n=33, analysed n=30;  Placebo (guaifenesin as supportive treatment) allocated n=33, analysed n=26.
<b>Outcomes</b>	Primary outcome was cough frequency; used as a measure of cough severity, and assessed using a validated 4-point Likert scale questionnaire.
<b>Notes</b>	

## Shadkam 2010

<b>Methods</b>	Un-blinded, randomised clinical trial study. No placebo control.
<b>Participants</b>	Enrolled n=160; completed n=139. Age range 24-60 months.  Inclusion criteria: presence of an upper-respiratory infection-induced cough.  Exclusion criteria: presence of asthma, pneumonia, laryngotracheobronchitis, sinusitis, allergic rhinitis, chronic lung disease, congenital heart disease, malignancy, and diabetes; use of antihistamines, diphenhydramine, dextromethorphan 4 hours before sleeping; use of cytochrome p450 inhibitors, drug/ herbal medications that affect sleep.
<b>Interventions</b>	Honey ("natural" honey), allocated n=40, analysed n=33;  Dextromethorphan, allocated n=40, analysed n= 36;  Diphenhydramine, allocated n=40, analysed n=34;  Control (supportive interventions e.g. saline nose drops, water vapour, acetaminophen for fever, cleaning blocked nose), allocated n=40, analysed n=36.
<b>Outcomes</b>	Primary outcome measure was cough score, assessed using a validated 7-point Likert cough questionnaire (adapted from Paul (2007) questionnaire).

## Waris 2014

<b>Methods</b>	Double-blinded, randomised, placebo-controlled clinical trial.
<b>Participants</b>	Enrolled n=145; completed n=133. Age range 1-12 years.  Inclusion criteria: presence of "uncomplicated acute upper respiratory infection".  Exclusion criteria: use of "any cough mixture, study agents, oral anti-histamines, nasal decongestants, steroids or antibiotics" up to 48 hours before study start; history of asthma, atopy or chronic lung disease; hospitalisation for lower respiratory tract infection in the past 6 months.

<b>Interventions</b>	Honey, allocated n=57, analysed n=53; Salbutamol syrup, allocated n=43, analysed n=41; Placebo (brown-coloured sugar syrup), allocated n=45, analysed n=39.
<b>Outcomes</b>	Primary outcome measure was cough score, as assessed by a validated 5-item 7-point Likert questionnaire.
<b>Notes</b>	Honey, salbutamol syrup and placebo were all similar in appearance and texture.

Supplementary Table 5: Studies with adults only.

Comparator	Outcome	Studies (n)	Pooled effect estimate including all studies	Studies (n)	Pooled estimates for studies with adults only**
Placebo	Combined symptom score	2 (372)	SMD -0.63, 95% CI (-1.44 to 0.18), I <sup>2</sup> = 91%		NA
	Combined symptom score	3 (333)	MD -3.96, 95% CI (-5.42 to -2.51), I <sup>2</sup> = 0%		NA
Usual care	Cough frequency	8 (832)	SMD -0.36, 95% CI (-0.50 to -0.21), I <sup>2</sup> = 0%	3 (234)	SMD -0.19, 95% CI -0.47 to 0.09, I <sup>2</sup> = 4%
	Cough severity	5 (598)	SMD -0.44, 95% CI (-0.64, -0.25), I <sup>2</sup> = 20%		NA
	Improvement	2 (317)	OR 1.01, 95% CI (0.45 to 2.27), I <sup>2</sup> = 56%	1 (200)	OR 0.73, 95% CI 0.42 to 1.27
	Throat pain recovery by day 5	1 (200)	OR 0.75, 95% CI 0.43 to 1.32		No change
	Fever recovery by day 5	1 (200)	OR 2.58 95% CI 1.22 to 5.46		No change
	Combined symptom score	1 (68)	MD -2.32, 95% CI (-5.88 to 1.24)		NA
*Dextromethorphan	Cough frequency	2 (137)	MD -0.52, 95% CI (-1.51 to 0.46), I <sup>2</sup> = 0%		NA
	Cough severity	2 (137)	MD -0.56, 95% CI (-1.65 to 0.53), I <sup>2</sup> = 0%		NA
	Combined symptom score	1 (87)	MD -5.31, 95% CI (-7.96 to -2.67)		NA
*Diphenhydramine	Cough frequency	4 (385)	MD -0.29, 95% CI (-0.58 to -0.01), I <sup>2</sup> = 46%	1 (105)	MD -0.01, 95% CI -0.40 to 0.37
	Cough severity	3 (280)	MD -0.50, 95% CI (-0.88 to -0.13), I <sup>2</sup> = 53%		NA

Pooled results compare honey, meta-analysed with Mantel-Haenszel random effects models.

Key: Studies number of included studies reporting outcome, n total number of participants, OR odds ratio, SMD standard mean difference, MD mean difference, CI confidence interval,  $\chi^2$  Chi-squared statistic, p p-value, NA Not applicable as these studies were not in the primary analysis so results are unchanged.

\* = subgroup of usual care

\*\* Gupta 2016, Raessi 2011, Raessi 2013, Nanda 2017