

APPENDIX 1: SURVEY

Thank you for volunteering to participate in our survey.

This survey is being conducted by a project group of the GRADE Working Group. The Hamilton Integrated Research Ethics Board (HiREB) at McMaster University has waived the requirement for individual consent. Your answers to this survey will be entered into a large database and will remain confidential and anonymous (unless you provide your name so that we can contact you for verbal feedback). This survey should take about 15-20 minutes to complete.

We have been working on single statements to communicate the results of a systematic review. Some example statements could be "taking vitamin C daily probably reduces your risk of catching a cold" or "exercising 2 hours a week increases sleep duration slightly". How we write these statements are based on the importance/size of the effect (e.g., minimally important difference, thresholds), and the certainty of the evidence.

In this survey, you will be shown 5 examples of the results of a systematic review and asked how acceptable you think the single statement is. You can complete all 5 examples or stop any time. You will also be given space to provide general comments about the statements at the end.

The survey is not a test at all. Rather, we would really like you to provide your opinion about acceptable ways to communicate the results.

If you have any questions about this survey, please contact Nancy Santesso at santesna@mcmaster.ca

Background Information

* 1. What is your primary role related to systematic reviews and guidelines? (Select one that best represents your role)

- ☐ Methodologist who conducts systematic reviews
- ☐ Clinical expert who conducts systematic reviews
- ☐ Methodologist who has been involved in guideline development
- ☐ Clinical expert who has been involved in guideline development
- ☐ Methodologist not involved in systematic reviews or guidelines
- ☐ Clinician not involved in systematic reviews or guidelines
- ☐ Someone who reads systematic reviews

2. What is your education in epidemiology?

3. A systematic review compared the effects of cognitive behavioural therapy versus a waiting list for military suffering from post-traumatic stress disorder on depression.

It found that cognitive behaviour therapy reduced depression by 8 points more on a scale from 1-100 (95% confidence interval from 21 point reduction to 12 point increase). This reduction is small but important. The evidence came from a meta-analysis with very few people (91) and very serious concern that the studies were at high risk of bias because of unclear randomisation and large loss to follow-up.

The conclusion about the effect of cognitive behaviour therapy could be worded in the following three ways. Please indicate the acceptability of each statement.

	Unacceptable	Acceptable	Ideal
a. Cognitive behaviour therapy may reduce depression slightly more than no therapy but we are uncertain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. We are uncertain about the effect of cognitive behaviour therapy on depression.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. We are uncertain about whether cognitive behaviour therapy reduces depression more than no therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A systematic review compared the effects of co-enzyme Q10 versus placebo on blood pressure. A summary of the findings is provided below. Note that the 1.62 mm/Hg reduction in blood pressure is a small but important effect, but the evidence was assessed at 'very low quality/certainty'.

What was measured	Without co-enzyme Q10	With co-enzyme Q10	Quality of the evidence ^b
Diastolic blood pressure (2 studies, 71 people)	3 mm/Hg lower	Lower by 1.62 mm/Hg more (from 5.20 lower to 1.96 higher) ^a	⊕⊕⊕⊕ Very low

^b Details about the quality of the evidence: evidence was very low quality because it is unclear if the studies were well-conducted and there were very few people in the studies.

4. The conclusion about the effect of co-enzyme Q10 on blood pressure could be worded in the following three ways. Please indicate the acceptability of each statement.

	Unacceptable	Acceptable	Ideal
a. Co-enzyme Q10 may reduce blood pressure slightly but we are uncertain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. We are uncertain about the effect of co-enzyme Q10 on blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. We are uncertain about whether co-enzyme Q10 reduces blood pressure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please see the results of a systematic review of probiotics compared to placebo on the incidence of diarrhea in children.

Probiotics as an adjunct to antibiotics for the prevention of pediatric antibiotic-associated diarrhea in children					
Patient or population: children given antibiotics Settings: inpatients and outpatients Intervention: probiotics					
Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)
	Assumed risk	Corresponding risk			
	Control	Probiotics			
Incidence of Diarrhea: Probiotic dose (equal to/ greater than) 5 billion CFU/day Follow-up: 10 days to 3 mo's	223 per 1000	89 per 1000 (65 to 122)	RR 0.4 (0.29 to 0.55)	1474 (7 studies)	⊕⊕○○ low ^{1,2}

¹ 2 of 7 trials had a high risk of bias due to high loss to follow-up (29% for both). Furthermore, loss to follow-up across the 7 trials was also high (16%)

² Sparse data (225 events) and the 95% CI for the extreme-plausible ITT analysis (60% of children loss to follow-up in probiotic group and 20% loss to follow-up in the control group had diarrhea) is wide (touches the line of 1) which also indicates imprecision (RR 0.72; 95% CI 0.53 to 0.99; $I^2 = 57\%$; $P = .04$)

5. The authors of the review considered that the cut-off for a large effect is RR 0.60. Please indicate the acceptability of the statements below.

	Unacceptable	Acceptable	Ideal
a. Probiotics may result in a large reduction in the incidence of diarrhea.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Probiotics likely result in a large reduction in the incidence of diarrhea.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Probiotics appear to result in a large reduction in the incidence of diarrhea.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The evidence suggests that probiotics result in a large reduction in the incidence of diarrhea.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please see the results of a systematic review on the number of hip fractures older people living in the community experience when wearing hip protectors or not wearing hip protectors. Hip protectors are cushioned undergarments that could deflect or cushion the impact of a fall.

Provision of hip protectors for preventing hip fractures in older people

Patient or population: older people
Settings: institutional and community settings
Intervention: provision of hip protectors

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)
	No hip protectors provided	Hip protectors provided			
Hip fractures at 1 year older people living in the community Follow-up: 6-28 months	Moderate risk¹ 10 per 1000	12 per 1000 (8 to 16)	RR 1.15 (0.84 to 1.58)	5614 (5 studies)	⊕⊕⊕○ moderate²

¹ Median risk in people not provided with hip protectors across randomised controlled trials.

² Participants were not blinded and results are imprecise due to few reported events; however, baseline risk and absolute effects are small, therefore quality of the evidence was only downgraded from high to moderate quality.

6. The authors indicate that the effect found was less than their cut-off for an effect.

Please indicate the acceptability of the statements to communicate the effects of hip protectors compared to no hip protectors on the number of hip fractures.

	Unacceptable	Acceptable	Ideal
a. Hip protectors likely do not reduce hip fractures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Hip protectors likely result in little to no difference in hip fractures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Hip protectors probably do not reduce hip fractures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Hip protectors probably result in little to no difference in hip fractures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please see below the results for the effect of oral leukotriene receptor antagonists on daytime nasal symptoms compared to placebo.

Question: Should oral leukotriene receptor antagonists vs placebo be used for treatment of seasonal allergic rhinitis?

Bibliography: Rodrigo G.J., Yanez A. The role of antileukotriene therapy in seasonal allergic rhinitis: a systematic review of randomized trials. Ann Allergy Asthma Immunol, 2006;96:779-786.

Quality assessment							Summary of findings				
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect		Quality
							oral leukotriene receptor antagonists	placebo	Relative (95% CI)	Absolute	
Daytime nasal symptoms (follow-up 2 to 4 weeks; Better indicated by less)											
6	randomised trial	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	2512 ¹	2512 ¹	-	SMD -0.24 (-0.16 to -0.33)	⊕⊕⊕⊕ HIGH

7. Please indicate the acceptability of the statements below to communicate the effect of antagonists compared to placebo on daytime nasal symptoms.

Note: the authors considered the SMD and confidence interval a small but not important effect.

	Unacceptable	Acceptable	Ideal
a. Antagonists result in a small effect that may not be an important reduction in daytime symptoms.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Antagonists result in a small possible unimportant reduction in daytime symptoms.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Antagonists do not result in an important reduction in daytime symptoms.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Please take 5 minutes to review this list of options for statements to communicate results at various levels of evidence and size of effect. If you'd like, please provide any general comments about the statements below.

Standardised wording of results and interpretation

Note: the outcome mortality is used as an example and a reduction is desired; substitute 'mortality' for your outcome name and the direction of desired effect (e.g., reduce, increase, improve)

Size of effect	Suggested wording
Certainty of evidence: HIGH (does, results in, will)	
Large effect (it's always based on importance of the outcome and size of the effect)	X results in a large reduction in mortality
Moderate effect	X reduces mortality X results in a reduction in mortality
Small effect (important)	X reduces mortality slightly
Small effect (not important)	X results in a small effect that may not be an important reduction in mortality X results in a small possibly unimportant effect in mortality X does not result in an important reduction in mortality
No effect	X does not reduce mortality X results in little to no difference in mortality
Certainty of evidence: MODERATE (likely, probably)	
Large effect	X likely results in a large reduction in mortality X probably results in a large reduction in mortality
Moderate effect	X likely reduces mortality X probably reduces mortality
Small effect (important)	X probably reduces mortality slightly
Small effect (not important)	X likely results in a small effect that may not be an important (or unimportant) reduction in mortality X likely results in a small possibly unimportant effect in mortality X probably results in a small effect that may not be an important (or unimportant) reduction in mortality X probably results in a small possibly unimportant effect in mortality
No effect	X likely does not reduce mortality X likely results in little to no difference in mortality X probably does not reduce mortality X probably results in little to no difference in mortality
Certainty of evidence: LOW (may, suggests, appears to)	
Large effect	X may result in a large reduction in mortality X appears to result in a large reduction in mortality The evidence suggests that X results in a large reduction in mortality
Moderate effect	X may reduce mortality X appears to reduce mortality The evidence suggests X reduces mortality
Small effect (important)	X may reduce mortality slightly X appears to reduce mortality slightly The evidence suggests X reduces mortality slightly
Small effect (not important)	X may result in a small effect that may not be an important (or unimportant) reduction in mortality X appears to result in a small effect that may not be an important (or unimportant) reduction in mortality The evidence suggests that X results in a small effect that may not be an important (or unimportant) reduction in mortality X may result in a small possibly unimportant effect in mortality X may result in a small effect that may not be an important (or unimportant) reduction in mortality X may result in a small possibly unimportant effect in mortality
No effect	X may not reduce mortality X may result in little to no difference in mortality X appears to not reduce mortality X appears to result in little to no difference in mortality The evidence suggests that X does not reduce mortality
Certainty of evidence: VERY LOW	
Effect	X may reduce mortality but we are very uncertain We are uncertain about the effect of X on mortality We are uncertain about whether X reduces mortality

9. If you would like to provide additional comments verbally, please provide your contact information and we will contact you.

10. One last question:

Do you agree in principle that conclusions should be based on the concepts of the importance/size of the effect and the certainty of the evidence?

☐ Yes

☐ No

Please provide comments if you'd like.