

Review report on [Title of the article]

NB: If there is any conflict of interest, always state this in your email to the editors. Conflicts of interest occur when you know the author names and they are friends or colleagues of yours, or opposite.

General opinion and decision

Here you state your general opinion about the article. Subjects you can address include:

- Is the overall experimental approach (including subjects, study design, key methods, and data analysis) valid?
- Does the paper add anything relevant to the current knowledge of the subject?
- Is the subject interesting for the readers of RAMS?
- Can (bio)medical students understand the information and is it readable for them?
- Is the paper organized logically?
- Is all information needed, or can the article be shortened?
- Is information missing and should it be added?

Lastly, also mention your final decision (accept / minor revisions / major revisions / reject) and make that text bold.

For example:

*Congratulations on your excellent manuscript of fat oxidation disorders in children. The authors give a clear overview of the current knowledge and recent developments in this interesting field of medicine. Overall, the article is very readable and definitely interesting for (bio)medical students. Although some changes in the order of the paragraphs would improve the article, it is easy to understand. In some parts, information was provided with too many details, but in my opinion there was no missing information. In general, this was a very good article and therefore I would accept it with **minor revisions**.*

Major revisions (if applicable)

Here you state the major changes that you think would improve the article. Also mention important mistakes that the authors have made. A systematic review is an exhaustive review of the literature addressing a clearly defined question, which uses a systematic and explicit methodology to identify, select and critically evaluate all the relevant studies, and collect and analyse the data emerging from the studies included in it. The PRISM tool enables the methodical and critical appraisal of these aspects of the systematic review (**appendix 1**).

Points you should address here include:

- The appropriateness of the manuscript for RAMS; if not appropriate, the paper cannot be acceptable regardless of its scientific merit.
- Is the clinical question clearly focused with regard to population, intervention and outcome measures?
- Is the overall methodological approach (see PRISM criteria) valid?
- Is the literature search method clearly specified and according to the flow chart in **appendix 2**?
- Have the identified studies been critically appraised?
- Were the results consistent from one study to another?
- Are all possible risks of bias within and between studies identified?
- Are the conclusions reasonable on the basis of the results discussed?
- Are the major conclusions both novel and important (i.e., has sufficient new knowledge been gained)?

Try to formulate this as objective as possible and keep in mind that it is your job to help the author improve the article, not to criticize everything he worked hard for.

For example:

- *The current article counts 4,352 words, while the maximum amount is 3,000. Your methods section is too detailed for the average RAMS reader and I would suggest to make a summary and provide the extensive description as appendix. Furthermore, you repeat your argument about the relation between temperature and energy need (first mentioned on page 4, line 24) a lot (page 5, line 30; page 7 line 2; page 8 line 10). Please try to prevent too much repetition.*
- *Your introduction starts too detailed. Remember that the average RAMS reader does not know what carnitine is. Try to start with the big picture and zoom in into your own subject.*
- *In your results, there are no significant differences found. However, you seem to use the tendency towards significance ($p < 0,05-0,10$) as an equally valid argument. This is not true. I would suggest to make the paragraphs on this 'tendency towards significance' more objective and not use it as a strong argument.*

Minor revisions (if applicable)

In this section, please provide a detailed overview of smaller changes you think would improve the article. These changes include spelling mistakes, unclear sentences / formulations, abbreviations that are not explained, small changes of order of the paragraphs, etc.

For example:

- *Title: your title does not yet adequately describe the subject, please include the patient population*
- *Page 2: In your abstract, please use the same subheadings as in your article*
- *Page 2, line 3: change 'hael' to 'heal'*
- *Page 4, line 7: this is the first time you mention MSUD. Please first state what the abbreviation stands for and then the abbreviation itself. So please change 'MSUD' to 'Maple Syrup Urine Disease (MSUD)'.*
- *Page 4, line 20-41: this is a description of your methods and belongs in the methods section of your manuscript*
- *Page 7, line 3-17: it would make more sense if you first mention your argument on age differences. Please change the order.*

Appendix 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	

Guide for Reviewers – Critically Appraising a Systematic Review

Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	

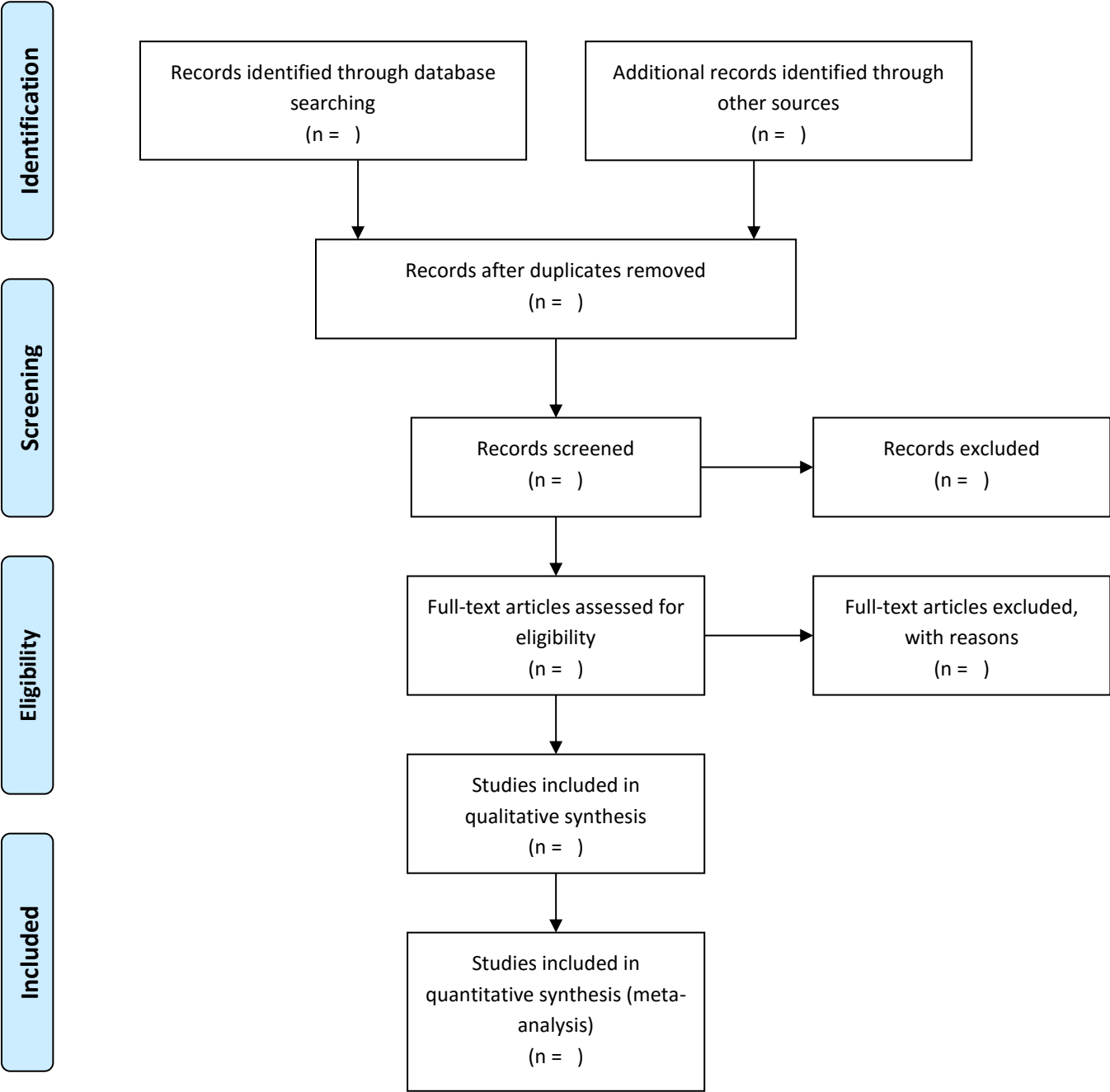
Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	

Guide for Reviewers – Critically Appraising a Systematic Review

Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of Ken	

Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement*. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

Appendix 2. Flow-chart literature search



Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097