

Transparent Reporting for Essential oil & Aroma Therapeutic Studies

TREATS Checklist



In addition to conventional research reporting guidelines, research involving essential oils and aromatherapy should meet requirements for clear reporting and reproducibility. Complete reporting facilitates study replication and the advancement of research programs. For in-depth explanations and clarity for each item, please use the companion TREATS Explanatory Document.

This tool was created to support those reporting their work in aromatherapy. This checklist can be used to ensure necessary items are reported for case studies or other types of research.

Reviewer:			
Article reviewed:			
Citation (DOI):			
Delivery method:	Topical ☐	Inhalation ☐	Both ☐

*Asterisk indicates primary items. If not reported, the study's reproducibility is compromised.

Category (see Explanatory document for more details of each item)		Page #	Comments
Section 1: Essential oils (EO)			
1*	Essential oil (EO) binomial (botanical) name (<i>Genus species</i>)		
2	Production method		
3	Plant part		
4	Cultivation Method		
5	Country of Origin		
6	Source		
7	Batch number of the EO		
8*	Identification of plant constituents		
Section 2A: Topical Application- Complete ONLY if topical delivery method used			
9*	Dilution of EO (if applicable)		
10*	Dose of EO		
11	Body surface area EO contacts		
12*	Frequency of EO		
13*	Duration of EO		
14*	Description of control or placebo		
15*	Carrier(s) name, including full binomial		
16	Source of carrier or delivery system		
Section 2B: Inhalation- Complete ONLY if inhalation delivery method used			



17*	Mode of inhalation		
18*	Dose of EO		
19*	Frequency of EO		
20*	Duration of EO		
21*	Description of control or placebo		
22*	Carrier(s) name, including full binomial		
23	Source of carrier or delivery system		
Section 3: Aromatic Intervention			
		Page #	Comments
24*	A clear description of the aromatherapy intervention that has sufficient detail to allow for replication		
25*	The rationale for EO(s)		
26	Theoretical or conceptual framework		
27	A professional aromatherapist consulted		
28*	Safety considerations		
29*	Report of allergic and adverse reactions		
30	Safety considerations of EO storage during trial		
Section 4a: Olfactory function questions (Asked prior to trial)			
31	Anosmia		
32	Previous use of EOs		
Section 4b: Olfactory bias questions if practical in an experimental setting (Asked as part of the trial. If not asked, the researcher may give an explanation for excluding these steps.)			
33	Olfactory testing		
34	Odor recognition testing		
35	Participants' expectations stated		
36	Odor preference bias		
37	Perceived aroma intensity		
38	Any adverse effect from olfaction testing		

We strongly recommend using this checklist in conjunction with the TREATS Explanatory Document.

Citation:

Reven, M. E., Bowles, E. J., Audia, D. D., Cohen, M. M., Joswiak, D. J., Kurkas Lee, B. A., May-Fitzgerald, A. C., Peppers-Citizen, M., Resnick, J. A., Tomaino, J. M., & Unger, B. J. (2024). Quality appraisal of research reporting for aromatherapy and essential oil studies in humans: Proposed checklist for "Transparent reporting for essential oil and aroma therapeutic studies". *Journal of Integrative and Complementary Medicine*, <https://doi.org/10.1089/jicm.2023.0006>

ADDITIONAL REVIEWER COMMENTS:

