

Health & Nutrition Sciences

How to Communicate Nutrition Science Effectively

Your go-to resource for understanding and interpreting nutrition science



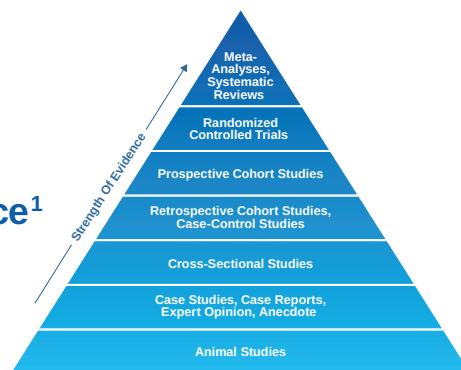
As a credentialed healthcare professional, you have the power to inspire trust and deepen the general public's understanding of nutrition through credible science communication. Let this guide help you to better understand scientific publications and to improve your effectiveness as a nutrition communicator.



Scientific Publications

- Researchers choose from different study designs to answer research questions and test hypotheses.
- Different types and levels of evidence span the hierarchy of scientific evidence.
- **This hierarchy can be a quick tool to rank research based on its strength for showing cause and effect.**

Hierarchy Of Evidence¹



Critically Reviewing Scientific Studies

Published research generally follows an established format to enhance communication among scientists and to facilitate replication of the study. Critical review of the research is essential to place results into the context of the body of scientific literature on a subject, and to accurately present the relevance of research.

Evaluating Sections of Scientific Publications¹

	What it is	Questions to Ask Yourself
Abstract	A concise summary of the completed research	Reminder: An abstract alone does not provide enough detail to assess its validity or quality. Keep reading!
Introduction	Establishes the context of the research	<ul style="list-style-type: none"> • What are the general limitations of the study? • Does it include a comprehensive background on the topic?
Methodology	Describes how the study was conducted	<ul style="list-style-type: none"> • Does the research design fit the study's purpose? • Do the researchers describe their research methods clearly so other researchers could reproduce the study?
Results	Shares the key results and findings of the study	<ul style="list-style-type: none"> • What is the statistical significance of these results? • How do these results compare to results from other studies on the subject?
Discussion and Conclusion	An in-depth exploration of the results and answers the main research question	<ul style="list-style-type: none"> • Do the data and results support the conclusions? • What influence might the limitations have on the results? • How does this study add to the body of knowledge and/or advance the field?

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Tips to Evaluate Scientific Quality

Use this list to help determine the credibility of scientific findings.

	Poor Quality Science	High Quality Science
Claims that sound too good to be true	✓	✓
The research is published in a reputable, peer-reviewed journal	✓	✓
Lists of “good” or “bad” foods	✓	✓
Recommendations made to help sell a product	✓	✓
The results are drawn from the totality of evidence, rather than just this one study	✓	✓
Recommendations based on studies published without peer review	✓	✓
The authors disclosed any conflicts of interest clearly	✓	✓
The research considers the broader ethical questions and societal implications of the study findings	✓	✓
Dramatic statements that are discredited by reputable scientific organizations	✓	✓
The study discusses limitations and accounts for confounding factors	✓	✓

Communicating Effectively



Science is a process, with the research cycle frequently moving in many different directions, generating questions, discussions, and debates along the way. This makes it challenging for communicators to share credible content in a timely manner.

Tips to Keep in Mind

- Consider all parts of the study publication, from abstract, introduction, methodology, results, discussion, and conclusions, and ask the key questions posed above.
- Reserve judgment about a study until consulting other studies and appropriate experts to help assess the findings of the study and gauge its level of importance.
- Discuss and debate the paper with trusted colleagues.
- Consider contacting scientists familiar with the topic (or even reaching out to the study authors themselves) and ask how this study fits with the body of research.
- Communicate what is known from the study as well as the broader literature, and then provide credible, actionable content.
 - If the current paper confirms previous research or departs from current thinking, the communicator’s role is to put all research into context for the general public.
 - Remember not to overstate the study findings beyond the population studied or to exaggerate conclusions beyond what is statistically significant or relevant for public health.

References

1. IFIC. (2024). Understanding & Interpreting Food & Health Scientific Studies: Guidance For Food & Nutrition Communicators. Retrieved 2024, from <https://foodinsight.org/wp-content/uploads/2024/03/IFIC-Science-Communication-Guidance-Document.pdf>.