How to Spot Junk Science

Click-Bait Headlines

Does it sound sensational? Does it sound ridiculous? Or does it just sound too good to be true? If the answer to any of these is true, your gut feeling is most likely correct. While we all like to believe that coconut oil reduces cholesterol, lowers our risk of heart disease and whitens our teeth, we now know the majority of such claims to be false. Remember - if it sounds like click-bait, that's most likely what it is.

Kooky Claims and Misconstrued Results

Choose your news sources wisely! The study may be fine, but the findings could be misinterpreted for a sexier headline. Remember to get your information from trustworthy sources!

Conflict of Interest and Funding

Who funded the research? If the study is funded by a company or a non-profit organization, dig a little deeper. A company may need to research a product fully before it can be legally sold and provide its findings to regulatory agencies (think pharmaceuticals, pesticides, etc.). Or there could be a vested interest behind the study and its conclusion in an effort to prove a point. It is never a bad idea to look a bit further into the details.

Study Structure

Are the results replicable by independent research? Was the sample size small? Are the samples representative of the population? Was a control group used? Were responses self-reported by participants? These are just a few of the details in a study to pay attention to in order to validate its findings.

Correlation and Causation

Correlation means there is a pattern between two sets of data, and causation means one thing causes another. Just because two things are correlated doesn't mean that one caused the other. For instance, Internet Explorer's market share has decreased since 2006 along with the murder rate in the U.S. which means there is a correlation. We can all agree, however, that the decline of Internet Explorer didn't cause fewer murders although Google Chrome may have had something to do with the decline in Internet Explorer's popularity.