

Podcast: The misused meta-analysis—How statistical trickery yields impressive but bogus study results

A [meta-analysis](#) allows researchers to compile data from many smaller studies and, hopefully, find more conclusive answers to critical public health questions. Their implicit power to generate significant results places these studies in the headlines, where they are often used to sway public policy and reshape how consumers think about a variety of issues—pesticides, tobacco and cell phones are all relevant examples.

Over the past three decades, there has been an explosion in meta-analyses. Unsurprisingly, this has facilitated widespread abuse of the study design, allowing researchers to make inappropriate comparisons, massage inconvenient statistics and overstep the data to draw sensational conclusions that generate attention and more research funding.

On this episode of Talking Biotech, cancer epidemiologist Geoffrey Kabat offers a critical look at the phenomenon of headline-grabbing but ultimately flawed meta-analyses, and offers some possible solutions to bring this gross misuse of an important scientific tool to an end.

https://geneticliteracyproject.org/wp-content/uploads/2020/04/232_Fkabat2.mp3

Geoffrey Kabat is a cancer epidemiologist and the author of [Hyping Health Risks: Environmental Hazards in Daily Life and the Science of Epidemiology](#) and [Getting Risk Right: Understanding the Science of Elusive Health Risks](#). He is a GLP board member. Follow him on Twitter [@GeoKabat](#)

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