Start by figuring out exactly what the claim is, as well as what it isn’t. Keep in mind that correlation isn’t causation. Correlation is when two things change together—but the change could be due to chance, or to an unknown factor. Causation is a clear cause-and-effect relationship.

1. What’s the claim?

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2. Who says?

Be sure you know where the information came from. Any decent claim requires that someone stand behind it—preferably a well-respected source from a well-respected institution. Beware of “science by press release” and research funded by sources with vested interests.

3. What’s the evidence?

How much data was collected? The more information there is, the better. Numbers don’t (usually) lie, so always consider the actual evidence when assessing a claim. And be sure to scrutinize charts and graphs. Visual data can mislead, but it can also tell hidden stories.

4. How did they get the evidence?

Where evidence is concerned, the devil is in the details. No matter the field, data collected different ways can support different conclusions, and errors may hide where they’re least likely to be found. A systematic error is a flaw in a device or method that skews all the data. An uncontrolled variable is a factor that influences results, but hasn’t been taken into account.