

CONFUSED ABOUT NUTRITION NEWS?

Tips for identifying reliable information online (part 1)

Which type of publication did the nutrition article appear in?

Credibility can vary:



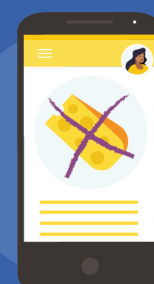
ACADEMIC JOURNALS



WEBSITE OF TRUSTED ORGANISATION



NEWSPAPER/MAGAZINE



BLOG/FORUM



SOCIAL MEDIA



By choosing a credible source, we can minimise our risk of falling for fake news!

Is the author qualified?



1

WHO IS THE AUTHOR?

Check out the **author's credentials**. Is there a link to the author's profile? If no author is listed, it's often reasonable to be suspicious.

2

WHAT QUALIFICATIONS DO THEY HAVE?

Do they have a **degree or professional experience** relevant to the topic.



Remember, many claim to be nutrition experts, but many are unqualified.

If a headline sounds too good to be true, it probably is!

Eating chocolate halves the risk of heart disease



RELATIVE RISK VS. ABSOLUTE RISK

Presenting risks as relative rather than absolute can make effects seem bigger than they actually are.

www.eufic.org/en/understanding-science/article/absolute-vs.-relative-risk-infographic

I lost 10 kg in two weeks thanks to a low-carb diet!



ANECDOTES ARE NOT EVIDENCE

A single person's experience doesn't provide an objective picture. We are all very different, what worked for one individual won't work for everyone!

CONFUSED ABOUT NUTRITION NEWS?

Tips for identifying reliable information online (part 2)

Does the article single out a specific food?

*A litre of **olive oil**
a week slashes the risk
of breast cancer*



*How to reduce your
risk of cancer?
Eat more **potatoes***



Remember, there are no miracle foods!
Different foods provide different nutrients,
and a balanced and varied diet is key.

Is there a link to the original study?



link



A link to the scientific study can help
us judge the quality of the science behind
the headlines. If an article doesn't cite any
scientific studies, it can be hard to tell if
claims are backed up by evidence.

CONFUSED ABOUT NUTRITION NEWS?

Tips for spotting sound science

Strength of evidence: (strongest to weakest)



1

SYSTEMATIC REVIEWS / META-ANALYSES

Gather and summarise all relevant studies on a particular topic, lowering the chance of bias. This is the strongest available evidence.



3

OBSERVATIONAL STUDY

These studies are used to identify correlations and develop hypotheses for further testing, they can't prove cause and effect!



2

INTERVENTION STUDY

For instance, in a randomised controlled trial, study participants are split into two random groups. 1 group is exposed to a treatment (intervention), 1 group is not exposed (control). These studies can prove causation but remember not to generalise too readily!



4

LABORATORY STUDY

Remember that whilst the results from animal or cell studies may provide an indication of the likely effects, they can't be directly applied to us!

- We are not mice!
- Isolated cells in a laboratory behave differently than cells in our body.

Sample

1

HOW LARGE WAS THE STUDY?

The more people involved in a study, the more reliable and representative the results will be of the population.

2

IS THE STUDY POPULATION GENERALISABLE?

If a study was only carried out on a specific group of people (for example, middle-aged women suffering from diabetes), the study may not be applicable to the wider population.

3

HOW WERE STUDY PARTICIPANTS CHOSEN?

Random sampling avoids bias. With this method everyone in a population has an equal chance of being chosen, this ensures a generalisable set of results.



Duration

HOW LONG DID THE STUDY LAST?

Short-term studies may not be representative of the long-term effects of dietary patterns and changes. Longer studies will provide more realistic data.

A
↓
B

Correlation doesn't equal causation!

Just because there is a connection between two study variables, doesn't mean that one is caused by the other. Think twice when you see big headlines stating that 'eating carrots causes cancer in smokers'. It's more likely due to smoking itself!



Potential confounding

DID THE STUDY ADJUST FOR POTENTIAL CONFOUNDING EFFECTS?

The result of the study may be affected by hidden factors that researchers did not anticipate. Therefore, the effect of the study may be attributed to the wrong factors/causes.



NOT
TRUE
↓
☒
☒
☒

Sources of potential bias

Self-reported data, for instance, through the use of food frequency questionnaires, can introduce response bias. People tend to over/under-report, or simply forget. Read the 'conflicts of interest' section towards the end of the paper to judge if there was any potential bias.



TREATED

Control group

DID THE STUDY HAVE A CONTROL GROUP?

The effect of an intervention is determined by comparing the results of the experimental group (treated) with the control group (not treated). Without a control group, we can't tell what caused the effect.



NOT
TREATED