## **Random Claims Exercise**

This is a useful exercise, but be warned: Finding out a belief is completely inaccurate (e.g. the world really ISN'T flat) often doesn't make people change their minds about their beliefs, and it *can*, instead, make them surprisingly upset at the person challenging their long-held belief!

This is an exercise in researching and digging to check the sources of a claim. Many of these are physical science issues rather than social science issues, so we *should* be able to reach some degree of certainty. If there's any doubt on the issue, then it's a matter of determining the *most credible* claim.

## EXAMPLES OF RANDOM CLAIMS - pick one!

- homeopathic supplements work better/worse than pharmaceuticals (pick a specific one e.g. oil of oregano)
- vaccinations do/don't cause autism
- climate change is/isn't leading to the extinction of species (including our own)
- fluoride should/shouldn't be added to drinking water
- GMOs are/aren't going to harm us (pick a specific one e.g. Flavr Savr tomatoes)
- the Earth is/isn't flat
- 5G wifi radiation is/isn't harmful
- coconut oil does/doesn't heal wounds
- acupuncture does/doesn't cure disorders
- mindfulness does/doesn't improve cognitive abilities
- vaping is/isn't harmful
- wind turbines are/aren't harmful to people and animals nearby
- other....

Copy and paste this chart to complete - see <u>this example</u> on "there are no bad foods":

In a nutshell, look at the actual study being cited, the number of studies and independent articles on each side, and the primary authors of the studies and/or articles, and check out the journal's ranking for all of them. Then look carefully at the study design and the sample. Finally, check for any funding that might indicate a conflict of interest.

	One side:	Other side:
original studies (linked to the source)		
number of studies and/or authors		
primary author's		

credentials (linked) (just the first named author)	
journal's ranking (scale is here)	
study design: tracking of behaviours, falsifiable, repeatable, etc.	
study sample: size random sample matched pair sample random assignment	
conclusions drawn fit with the results and scope of method	
funding (Could the funding company benefit from this position enough to pay a researcher to falsify the evidence?)	

Your assessment (which side has more credible evidence?):

What kind of study would be necessary to prove the opposite case?

## HINTS:

- to find the original studies, see if you can find news articles, then google the study's author to try to find a journal article or document of some kind
- to assess the credibility of the primary author, or to dig up information on any group or organization, google their name and these words, one at a time: award, praise, evidence, proof, credential, criticism, problem, false, lies... ALWAYS search positive AND negative terms to get a clear picture of the person, but ALSO check the credibility of those sources.