

4. Do any of the pseudo-science red flags (on the last page) apply to the website? If so, in what way do they apply?

5. Write a paragraph giving your evaluation of the website. Do you think it is scientific? Why or why not?

How to Recognize Pseudo-Science

Look for one or more of the following **red flags**:

1. The claim is a medical treatment or medicine that has not been proved to be effective in a **double-blind controlled experiment** involving a large number of patients.

A **controlled experiment** is one including a control group. A **control group** is a group of patients who do **not** receive the treatment; in the case of medicine, they receive a fake pill (a **placebo**). To prove the treatment effective, the patients who receive the real medicine or treatment must respond better than the patients in the control group.

Double-blind means that neither the patients nor the doctors know who is in the control group and who is receiving the actual treatment.

2. It is claimed the discovery is being purposely suppressed by the scientific establishment as part of a **conspiracy**.

3. It is alleged that the government is covering up the truth.

4. The evidence is based on **anecdotes**, stories told by untrained people, not on observations made by experts.

5. The discovery is announced to the public but not published in a scientific journal reviewed by experts ("**peer review**.")

6. It is claimed the discovery is true because it has been believed for a long time.

7. The discovery is made by someone working in isolation and is not recognized by other experts in the field.

8. No plausible explanation is given of how the thing works.

9. The discovery violates the known laws of nature.

10. The discovery lies at the limit of detection, that is, the phenomenon wasn't clearly seen.

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