

WHAT IS A REVIEW PAPER?

A **review paper** presents a balanced review of a particular topic so that a person who is not an expert on the subject will understand it.

The paper summarizes the current understanding by experts of the topic and discusses the findings of **recent research papers**.

A **review paper is NOT** a report on some references you found. It **IS** an analysis of several papers to produce a clear and logical argument about a topic. Some of the papers should be "Primary" papers that are the original research papers that many people will refer to when citing research. You probably will need help to decipher a primary paper.

Examples of scientific reviews can be found in:

- *Scientific American*
- the journal *Science*
- *Science News*
- *Nature* in the "News and Views" section
- Documentaries such as *Food Inc.* or *Dirt*
- Books...

You can often find primary articles by reading the references in a review article, or using the authors' names of the review article(s).

“A key aspect of a review paper is that it provides the evidence for a particular point of view in a field. A large focus of your paper should be a description of the data that support or refute that point of view. **In addition, you should inform the reader of the experimental techniques** that were used to generate the data.” In the case of GMO, this would include the techniques scientists use to take DNA from one organism and transfer it to another.

If you have an iPad and the app “Zite”, you can choose GMO in your “Quicklist” and you will get review articles that have been recently published, usually by non-experts, mostly “bloggers”. These are usually non-scientists...often aspiring journalists. They are often well written, but with very little scientific value since they are written by non-experts who usually reinterpret review articles without going back to any primary sources.

NOW FOR THE PROCESS of "Creation"

Before you begin, you need to be familiar with your subject. You will have great difficulty if you are not familiar with your subject matter. You have been taught this in English class and in composition class from at least the fifth grade. This is nothing new. Read many articles before you think of writing. The articles you begin with should be very general until you become more familiar with the subject. A science review article is different from a non-science article by having a very methodical story, without exaggerating, and using lots of data from reliable sources. To find reliable sources, you can start with Wikipedia and use its references as I described in class. This can be frustrating, but if you persevere, it will usually pay off. Using

<http://scholar.google.com> is often very helpful also. You can search for images in Wiki, Google, Bing, and directly from scientific articles.

Here are some 10 brief steps to follow when you write your paper

- 1) Choose a clear and captivating title.
- 2) Put your name below the title.
- 3) Begin with a clear statement of the subject and its importance in the world.
- 4) Create an introduction. Your introduction should be short and concise (~1page). Do not call the intro section the "introduction"... just begin writing.
- 5) Pictures and graphs can be very informative...use them whenever they make a visual point in the introduction...but keep them simple and on subject...do not ramble. Scientists love data...you can have as many pages of images you want...don't write more than a few single-spaced pages in the first draft.
- 6) Narrow your perspective by the end of the first page.
- 7) Once you have narrowed your subject, for egg sample (I had eggs this morning) from GMOs to GMO crops and how they damage the environment, try and give the reader a clear statement on what you will be reviewing. Try to present both sides of the issue...for example, if you chose to concentrate on transgenic crops, give the reader some evidence how it can be good, and how it can be bad for the environment,
- 8) The body of the paper should have many visuals...and amuse and inform the readers, or stimulate the readers' imaginations.
- 9) Wrap up your argument...some authors try and make this ending really thoughtful...
- 10) Give the references either at the end or as you go.

If you get stuck for wording, you can always put the words in quotes of another author...
Fides facit fidem...

Lastly, if you have trouble, either mail me or come see me, but I strongly suggest getting something written and we can begin there.

"The tin pan bended and the story ended"