



Abstracts: Descriptive and Informative

During the workshop on **Writing Scientific Papers and Reports** I explain that there are two kinds of abstracts.

1. Descriptive abstract

A descriptive abstract gives a generic description of the subjects covered but does not provide any specific details. This is like the description of a cookbook which tells the type of cuisine (French, Indian, Italian, Mexican, ...) and types of dishes (starters, beef, pork, chicken, fish, salads, desserts, ...) the reader would find inside *IF* they bought and read the cookbook.

Descriptive abstracts are only appropriate for review articles.

This is because a review covers so many papers that it is impractical to summarise the principal results and conclusions from each paper.

Unfortunately, descriptive abstracts are easier to write since they require the least thought and effort. This makes them favourites of lazy research scientific writers who use them for research papers. The disadvantage of a descriptive abstract when used for a research paper is that it is inherently vague. This then means they are not very useful to prospective readers.

2. Informative abstract

An informative abstract is short, specific and presents only the essential details of the research. This is like a single recipe.

Informative abstracts are appropriate for research papers.

An informative abstract should be approximately 10% of the total length of the paper with an upper limit of approximately 250 words. It will present simply and specifically:

- the context and importance of the research question which is addressed;
- the reasons for and important details of the methods used;
- the principal results obtained; and
- the conclusion(s) derived from these results.

Informative abstracts require more thought and effort to write, but they are far more useful to potential readers. The specific details within the abstract give a clear representation of what is in the paper and the reader is able to make an informed assessment of whether that paper is relevant, useful or novel.

As an illustration of these ideas, I have written two samples for the "experiment" of making chocolate brownies. Notice which one is more specific and therefore more useful to the reader.

Chocolate brownies are very popular with many people in many countries around the world. This recipe describes how quantities of various food substances can be combined in proportions suitable for the production of chocolate brownies. The recipe also describes the method and sequence of this combination as well as the baking time and expected quantity of the final product.

The ingredients are:

- ½ C honey
- ¾ C (100 g) sifted white flour
- 2 beaten whole eggs
- ½ C (100 g) melted butter
- 100 g melted chocolate
- ½ tsp baking powder
- ½ tsp vanilla

The procedure is:

1. Pre-heat oven to 180 °C (350 °F).
2. Melt butter and chocolate together in a double-boiler. Then add the honey and vanilla. Mix well and then remove and leave to cool for several minutes.
3. Mix the sifted flour and baking powder together.
4. Add the beaten eggs to the cooled mixture and mix well.
5. Add the eggs, butter, chocolate, honey and vanilla mixture to the flour and baking powder and whisk until smooth.
6. Pour into a baking tray to a depth of approximately 2 cm.
7. Bake for approximately 20-30 minutes. Check the brownies to confirm when they are cooked. Remove brownies from the oven and leave to cool to room temperature.
8. Cut the brownies into approximately 7 cm x 7 cm squares, making 12 - 16 brownies.