

# Word for Word

## Are control subjects *healthy*?



In case-control studies, the control subjects ideally match the case subjects in all parameters except the condition being studied. Frequently, the control subjects are referred to as *healthy* or *normal*. Both of these terms should be used with care.

The term *healthy* is sometimes problematic because even control subjects who have not been diagnosed with the condition being studied may have other serious health problems. Thus, some description of the control cohort—other than the fact that the members of this cohort do not have condition X—should be provided.

Example:

The control subjects did not test positive for tuberculosis. In addition, they had no history of cancer, diabetes, or respiratory

failure; and their complete blood counts all fell within the normal ranges.

Control subjects who are considered healthy generally should not be referred to as *patients*. They could be referred to as *participants*, *volunteers*, *donors*, *subjects*, *individuals*, or *persons* (men/women), as appropriate.

Conversely, not all patients are unhealthy. A patient may visit a health care provider for a flu vaccination, or a person who has completed a treatment regimen may be considered cured at a follow-up visit.

*Normal* should also be used sparingly. Note that *normal* can be applied to test results and parameters. However, a person or a group of persons should never be defined as *normal* because it implies that the other group of persons is *abnormal*, which is a dehumanizing term.

In summary, *healthy* and *normal* should be defined explicitly and used carefully.

## Bibliography

*AMA Manual of Style*, 10th ed. New York, NY: Oxford University Press; 2007.

—Lizzie Hess, ELS(D)

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