

Salami Slicing

The "slicing" of research that would form one meaningful paper into several different papers is called "salami publication" or "salami slicing".¹

Unlike duplicate publication, which involves reporting the exact same data in two or more publications, salami slicing involves breaking up or segmenting a large study into two or more publications. These segments are referred to as "slices" of a study.²

As a general rule, as long as the "slices" of a broken up study share the same hypotheses, population, and methods, this is not acceptable practice. The same "slice" should never be published more than once.³

The reason: according to the U.S. Office of Research Integrity, salami slicing can result in a distortion of the literature by leading unsuspecting readers to believe that data presented in each salami slice (i.e., journal article) is derived from a different subject sample.² This not only skews the "scientific database" but it creates repetition that wastes readers' time as well as the time of editors and reviewers, who must handle each paper separately. Further, it unfairly inflates the author's citation record.

There are instances where data from large clinical trials and epidemiological studies cannot be published simultaneously, or are such that they address different and distinct questions with multiple and unrelated endpoints. In these cases, it is legitimate to describe important outcomes of the studies separately.^{1,4,5} However each paper should clearly define its hypothesis and be presented as one section of a much larger study.³

Most journals request that authors who either know or suspect a manuscript submitted for publication represents fragmented data should disclose this information, as well as enclose any other papers (published or unpublished) that might be part of the paper under consideration.^{2,5}

Guide to Salami Slicing and How to Prevent It*

Action	What is it?	Is it unethical?	What should you do?
Breaking up or segmenting data from a single study and creating different manuscripts for publication	Publishing small 'slices' of research in several different papers is called 'salami publication' or 'salami slicing'.	Yes. Salami slicing can result in a distortion of the literature by leading unsuspecting readers to believe that data presented in each 'slice' is derived from a different subject sample. ²	<ul style="list-style-type: none"> ■ Avoid inappropriately breaking up data from a single study into two or more papers. ■ When submitting a paper, be transparent. Send copies of any manuscripts closely related to the manuscript under consideration. ■ This includes any manuscripts published, recently submitted, or already accepted.⁵

*When in doubt, always consult with your professor, advisor, or someone in a position of authority who can guide you to the right course of action.

References

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3. Committee on Publication Ethics (COPE) (2005). Cases: Salami publication. Available at: <https://publicationethics.org/search/site/salami>. Accessed on June 17, 2017.
4. Angell M, Relman AS. Redundant publication. *N Engl J Med* 1989; 320:1212-1214
5. Kassirer JP, Angell M. Redundant publication: a reminder. *N Engl J Med* 1995; 333:449-450