Editorial

How to let your data shine

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When preparing your manuscript, clear presentation of the data and concise writing are key. In this Editorial, we offer tips on how to better communicate your results.

At *Nature Metabolism*, many manuscripts that we see at the initial submission stage are diamonds in the rough: they contain exciting information but would benefit from some polishing. Although these improvements are made during peer review and by editorial input, authors are well advised to spend time on improving data presentation even before the first submission of their manuscript.

As editors, we consider manuscripts on the basis of the advance for the field and the quality of the science, and not on the aesthetics of the writing or figures. However, if a manuscript is difficult to read and data are presented in a chaotic manner, it might be more challenging to overcome the first editorial hurdle and to convince reviewers about the importance and validity of the results. Every manuscript tells a story and it is up to the authors to draw the readers in. You should thus think about the key question that your study is trying to answer, explain why it is important for the field and frame your manuscript accordingly, instead of just listing results.

There are also other aspects to consider when preparing your manuscript. The title is the first thing your readers take note of, so it should be accurate, concise and clear to attract maximum interest. It is also what potential reviewers see when the manuscript is sent out for peer review. A vague, obscure, lengthy or technical title can put off potential readers or reviewers. Similarly, you should make sure that your abstract explains the rationale of the study well, highlights all of the main findings and lays out the broader implications of your study. The abstract should also be succinct and omit details that are not essential to supporting the key conclusions. The *Nature* journal guidelines for abstracts are a helpful framework for writing a compelling abstract. It is not required, however, to write your abstract in this specific format when submitting to a Nature Portfolio journal.

When preparing the main text and the figures, it may help to ask yourself whether the data are clearly and accurately presented (both in the text and the figures) and whether the flow of the data is logical. This will help the editors as well as the reviewers to follow your narrative as you lay out the conclusions. You might also consider whether the manuscript is accessible, so that it can be understood even by someone who is not an expert in your specific field. Having a colleague from a different field read your manuscript can provide pointers on how to make it more accessible to a broader audience. Unnecessary abbreviations and jargon should be avoided.

It may be tempting to include as much data in a figure as possible. But too many panels and small fonts will make figures difficult to understand and obscure the take-home message. When it comes to figures, less is sometimes more. It may be better to highlight only the most crucial data in well-organized main-text figures; data that are tangential to the main thrust of the study should be presented in the Extended Data or Supplementary Information, or left out entirely for the sake of clarity.

The 'Discussion' section should not just reiterate the results but highlight the main impact of the findings. This is where you place your findings in a big picture context and where authors can speculate about the future prospects of their work. Importantly, the conclusions of the work should not be overstated and the limitations of the study should be acknowledged and discussed.

Although our journal does not have strict formatting requirements for initial submissions, it is important to include detailed information about replicate numbers and statistical tests. The Methods should be as detailed as possible to provide readers with all of the information needed to understand how experiments were conducted and the data were analysed. We also encourage authors to make source data and code available as early and completely as possible, as well as to follow the guidelines for submitting work related to human studies. Adhering to these guidelines not only provides editors and reviewers with essential information to evaluate the work, but also enhances transparency and reproducibility (for instance, if the initially submitted version of a manuscript is shared publicly as a preprint).

Lastly, your submission should be accompanied by a cover letter, which offers you the opportunity to give an 'elevator pitch' for the study directly and confidentially to the editor. Use it to explain the importance and novelty of your findings! In addition, you should highlight in the cover letter related papers that are under consideration at other journals, as per our journal policies, and can suggest or exclude reviewers. We honour the exclusion of up to three individuals.

Ultimately, it is our job as editors to recognize good science no matter how the data are presented. However, after spending so much time and effort generating it, you do not want to miss out on the opportunity to let your data truly shine.

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