## EDITOR'S NOTE

## White hat bias: the need for authors to have the spin stop with them

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The Commentary by Cope and Allison<sup>1</sup> in this issue calls attention to the problem of bias in both the scientific literature and the lay media. Surprisingly, this is not about industry bias, but the reverse. The authors document that concepts that are 'politically correct' receive preferential or inappropriately positive treatment by scientists. Results that do not agree with prevailing opinion may not be published. In addition, when citing results of earlier publications, it is not uncommon for authors to cite the data incorrectly. Cope and Allison find that negative results may be ignored and secondarily positive analyses are cited as the conclusions of the study.

The handling of two sets of papers in the literature formed the basis of this study. The first were papers by James et al.<sup>2</sup> and Ebbeling *et al.*,<sup>3</sup> which looked at interventions to reduce sugarsweetened beverages in an attempt to reduce obesity. The first point to note is that the James paper actually looked at carbonated beverages, and included drinks containing sugar or artificial sweeteners. There was no overall effect on BMI in either paper, but an effect in overweight and obese children was seen in both. The vast majority of papers cited the papers incorrectly and focused on the data that were positive to the exclusion of the main outcomes of the paper. This unbalanced citation of papers addressing a topic that many individuals within and without the scientific community regard as 'bad' is similar to the 'spin' often seen in political circles. Such selective, inaccurate use of the literature is not helpful when there is a need for evidence-based, rather than belief-based, development of public health policy.

In what should be of major concern to the scientific community, an analysis of papers from industry-funded vs non-industry-funded studies showed that the industryfunded papers actually were more accurate in reporting data, especially in reporting negative data, than were the other papers. Cope and Allison suggest that if data that were not in the direction desired and did not prove that sugar-sweetened beverages were 'bad', they tended not to be reported when studies were funded from non-industrial sources.

The second set of papers involved breast feeding, which is regarded as beneficial to health by the scientific community and the lay public. Cope and Allison<sup>1</sup> noted that a meta-analysis by the World Health Organization<sup>4</sup> and subsequent reanalysis of the data<sup>5</sup> found evidence that if a study did not find a positive

outcome showing that breast feeding was beneficial, it was less likely to be published than one that did find a positive effect.

Authors who report their data accurately in the scientific literature cannot prevent their work from being cited incorrectly. However, Cope and Allison<sup>1</sup> document that press releases from authors' institutions are sometimes misleading. Such press releases are under the authors' control and authors should be extremely careful that their results are not 'spun' by the publicity officers of their institutions to report data in an inaccurate manner.

This is a time of great political foment regarding health-care reform in the United States and in some other countries of the world. Politicians who are not trained in science act on what is reported in the literature and in the media. Massive sums of money are being allocated, in some cases to actions that may or may not prove to be helpful, based on available scientific data. Accurate reporting of scientific data in both scientific journals and in press releases to the media is crucial. All scientists should strive to have the 'spin' stop with them.

## **Conflict of interest**

The authors declare no conflict of interest.

RL Atkinson<sup>1</sup> and I Macdonald<sup>2</sup> <sup>1</sup>Obetech Obesity Research Center, Richmond, VA, USA and <sup>2</sup>University of Nottingham Medical School, Nottingham, UK *E-mail: ratkinson2@vcu.edu* 

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