

Editorial

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As with last year (Calder, 2006a) I wish to use my January editorial to inform readers of changes that have taken place within the journal, to report the most recent impact factor and related indicators of article citation, to compare these between the *British Journal of Nutrition (BJN)* and other journals within the Nutrition and Dietetics category and to highlight the most highly cited recently published papers in the *BJN*.

The most important change that occurred during 2006 is that the *BJN* is now published by Cambridge University Press. The handover from CABI Publishing occurred over the period July to September. However, authors and readers will not have noticed any change in appearance of the journal with the change of publisher. Cambridge University Press is committed to supporting the development of the *BJN*, to enhancing what is offered to authors and readers and to maintaining the reputation of the *BJN* in terms of both the excellence of the science published and the quality of journal production. Last year I announced that online subscribers to the *BJN* would be able to access a pre-publication version of accepted articles (the corrected proof of the article in PDF form) and that the full archive of *BJN* articles (dating back to volume 1, no. 1, published in September 1947) would be available with articles now becoming freely available to all users 1 year after publication. Both of these exciting developments were achieved during 2006. Cambridge University Press has agreed to continue to make the corrected proofs of articles accepted for publication in the *BJN* available online via Cambridge Journals On-line. The mounting of articles in this way will happen quite quickly and will make authors' findings available, at least to online subscribers, earlier than final publication. The online *BJN* archive is being transferred to Cambridge Journals On-line and this process will be completed in the early months of 2007.

In order to be successful a journal must provide a good service to authors in terms of the speed and fairness of the reviewing process, the speed of the publishing process and the appearance and availability of published articles. Furthermore, a journal must publish articles that other researchers wish to read and to cite, i.e. the articles must represent good quality science in fields of activity in which others engage. Assessment of achievement, of quality and of progress has become paramount in many walks of life, notably within both academia and publishing. One means of making such assessments is the use of the impact factors of journals in which papers are published. Although this approach has been criticised, impact factors have become well established: publishers and editors use them to assess the relative performance of journals, while funders and academic institutions use them to assess and compare the relative performance of researchers either singly or collectively. It is important that comparisons of impact factors between

journals be done within a subject category rather than between categories. The impact factor of a journal is issued annually by the Institute for Scientific Information, calculated as the number of citations of papers published in the previous 2 years divided by the number of papers published in those 2 years. Thus, the impact factor for 2005 (issued in 2006) is based upon the number of citations during 2005 of papers published in a particular journal in 2003 and 2004 divided by the number of papers published in that journal in 2003 and 2004. Clearly, this favours very rapidly moving areas of research. Hence journals such as *Nature*, *Science* and *Cell* have high impact factors (29.3, 30.9 and 29.4, respectively, for 2005). My predecessor frequently used Editorials to update readers on progress of the journal as assessed by impact factor and to highlight recent highly cited papers (Trayhurn, 2002, 2003, 2004, 2005) and I have continued with this exercise (Calder, 2006a,b). The *BJN* is listed in the Nutrition and Dietetics category of Institute for Scientific Information Journal Citation Reports®. In 2005 there were fifty-three journals listed in this category, including review journals and journals in the areas of obesity (e.g. *Obesity Research*, *International Journal of Obesity*) and lipidology (e.g. *Progress in Lipid Research*, *Lipids*). For the past 4 years the two highest ranked journals in the Nutrition and Dietetics category have been *Progress in Lipid Research* and *Annual Reviews in Nutrition*, with impact factors of 11.4 and 8.6, respectively, for 2005. Table 1 lists the impact factors for the *BJN* and nine comparator journals over the period 2001 to 2005 inclusive. The comparator journals all publish a similar range of material as does the *BJN*, including molecular, cellular, whole body, human, clinical, public health and experimental animal nutrition and, in most cases, also farm animal nutrition. It is evident that the *American Journal of Clinical Nutrition* is firmly established as the highest ranked journal in this category that is not solely limited to publishing review articles. However, it is also evident that the *BJN* is firmly ranked in the top ten nutrition and dietetics journals. In 2005 it was the third ranked journal in this category if review journals and journals devoted solely to obesity are excluded. It is also very clear that the impact factor of the *BJN* has increased year-on-year since 2001 and that the magnitude of this increase is comparable with that seen for the *American Journal of Clinical Nutrition* and the *Journal of Nutrition* (Table 1). The increasing impact factor is an indication that authors see papers published in the *BJN* as being increasingly worthy of citing, perhaps an indication of increasing quality (real or perceived) of the material that we are publishing. Readers may be interested in the impact factors of our sister journals. For 2005 these were 2.65, 2.05 and 1.92 for *Proceedings of the Nutrition Society* (ranked 10/53), *Nutrition Research Reviews* (21/53) and *Public Health Nutrition* (22/53), respectively.

Table 1. Impact factor of the *British Journal of Nutrition* and comparator journals over the period 2001 to 2005*†

	Impact factor				
	2001	2002	2003	2004	2005
<i>American Journal of Clinical Nutrition</i>	5.02 (2/50)	5.60 (3/50)	5.69 (3/53)	5.43 (3/53)	5.85 (3/53)
<i>Journal of Nutrition</i>	3.25 (5/50)	3.62 (4/50)	3.32 (5/53)	3.25 (7/53)	3.69 (7/53)
<i>British Journal of Nutrition</i>	1.99 (16/50)	2.49 (7/50)	2.62 (9/53)	2.71 (10/53)	2.97 (9/53)
<i>Clinical Nutrition</i>	2.46 (9/50)	1.55 (22/50)	1.19 (32/53)	2.02 (18/53)	2.29 (15/53)
<i>European Journal of Nutrition</i>	2.13 (13/50)	1.64 (21/50)	1.68 (22/53)	2.09 (17/53)	2.26 (16/53)
<i>Journal of the American College of Nutrition</i>	1.53 (22/50)	2.17 (11/50)	2.98 (7/53)	2.80 (9/53)	2.21 (17/53)
<i>European Journal of Clinical Nutrition</i>	1.77 (20/50)	1.94 (18/50)	1.86 (19/53)	2.13 (16/53)	2.16 (18/53)
<i>Nutrition</i>	1.43 (23/50)	2.27 (10/50)	2.32 (11/53)	1.96 (19/53)	2.06 (20/53)
<i>Annals of Nutrition and Metabolism</i>	1.01 (31/51)	1.08 (28/50)	1.81 (20/53)	1.07 (35/53)	1.56 (29/53)
<i>Nutrition Research</i>	0.60 (37/50)	0.79 (35/50)	0.72 (39/53)	0.57 (41/53)	0.77 (40/53)

* Data are from Institute for Scientific Information Journal Citation Reports®.

† Values shown in parentheses indicate ranking amongst journals in the Nutrition and Dietetics subject category.

Table 2 lists the articles published in the *BJN* during 2003 and 2004 that were most cited in 2005. This table indicates the importance of review articles and the *Horizons in Nutritional Science* series to the improving impact factor of the journal. Although the articles published in 2003 continue to be cited (Table 2), they will not contribute to the impact factor for 2006, which will be based upon articles published in 2004 and 2005. Thus, it is very satisfying that the articles by Whanger (2004) and Trayhurn & Wood (2004) continue to be well cited. One of these articles is a review (Whanger, 2004) while the other was published as a *Horizons in Nutritional Science* article (Trayhurn & Wood, 2004), further indicating the importance of these types of article to the journal. These figures indicate that influential work in nutritional science, with high and immediate impact, is being consistently published in the *BJN*. Whilst highlighting highly cited articles, it is important to note that about 75 % of articles published in 2003 and 2004 have now been cited twice or more and that only about 11 % of articles have not been cited at all (yet).

One argument against the importance of impact factor in indicating the 'value' of a journal is that the time frame over which it is calculated is too short to really reflect the impact that the articles that a journal publishes will have. Thus, alternative measures of article citations are available. These include the total number of citations made to articles published in a journal and the cited half-life of articles. Table 3 lists the total number of citations made to articles published in the *BJN*, irrespective of their year of publication, during the years 2001 to 2005;

once again I list this information alongside that for the nine comparator journals. In 2005 articles published in the *BJN* were cited 7893 times (Table 3). It is apparent that the total number of citations of articles in the journal has also increased year-on-year and that, based upon these data, the journal is firmly ranked in the top four in the Nutrition and Dietetics category. The cited half-life of a journal is the median age of the articles published in that journal that are cited in the reporting year. Thus, publication of articles that remain important (or controversial) long after they are published will result in a long cited half-life. For 2005 *Nature*, *Cell* and *Science* have cited half-lives of 7.5, 8.4 and 7.3 years, respectively. Thus, these journals are publishing articles that are seen as important in the short term, as judged by the high impact factor, but which remain important for many years after publication. There may, of course, be other influences on cited half-life. For example, publication of articles of little interest by a journal that in the past has published articles that still remain of interest will result in a long cited half-life. The cited half life of the *BJN* for 2005 was 6.3 years, indicating that half of the citations to articles to *BJN* in 2005 were to articles published in 1999 or before. Thus, it seems to me that the *BJN* is publishing articles that are seen as important in the short term, as judged by the relatively high impact factor (within the journal category), but which remain important for many years, as judged by the cited half-life. For comparison the cited half-lives for the *American Journal of Clinical Nutrition* and the *Journal of Nutrition* for 2005 were 7.4 and 5.6 years, respectively.

Table 2. Articles published in *British Journal of Nutrition* in 2003 and 2004 that were most highly cited in 2005*

	Type of article	Citations in 2005	Total citations to date
Trayhurn & Wood (2004)	Horizons	53	103
Zitterman (2003)	Review	45	102
Whanger (2004)	Review	27	50
Wood & Trayhurn (2003)	Horizons	23	63
Magee & Rowland (2004)	Review	20	35
Harrold & Williams (2003)	Horizons	16	30
Kay <i>et al.</i> (2004)	Full paper	15	21
Rayman (2004)	Review	14	25
Tully <i>et al.</i> (2003)	Full paper	13	33
Flint <i>et al.</i> (2004)	Full paper	13	18
Holven <i>et al.</i> (2003)	Full paper	12	25
Burdge <i>et al.</i> (2003)	Full paper	12	27
Trebbles <i>et al.</i> (2003)	Full paper	12	25

* Data were obtained from Institute for Scientific Information Web of Science® on 12 September 2006.

Table 3. Total number of citations of articles published in the *British Journal of Nutrition* and comparator journals over the period 2001 to 2005*†

	Total citations/year				
	2001	2002	2003	2004	2005
<i>American Journal of Clinical Nutrition</i>	24 081 (1/50)	25 118 (1/50)	27 083 (1/53)	26 010 (1/53)	28 998 (1/53)
<i>Journal of Nutrition</i>	13 971 (2/50)	16 622 (2/50)	18 359 (2/53)	19 891 (2/53)	21 707 (2/53)
<i>British Journal of Nutrition</i>	5360 (5/50)	6205 (4/50)	7144 (4/53)	7204 (4/53)	7893 (4/53)
<i>European Journal of Clinical Nutrition</i>	3588 (8/50)	4181 (7/50)	4798 (6/53)	4931 (7/53)	5826 (7/53)
<i>Nutrition</i>	1938 (15/50)	2646 (13/50)	2900 (13/53)	3060 (13/53)	3515 (12/53)
<i>Journal of the American College of Nutrition</i>	1687 (18/50)	1751 (18/50)	2095 (17/53)	2137 (18/53)	2527 (17/53)
<i>Clinical Nutrition</i>	1024 (25/50)	982 (24/50)	1007 (25/53)	1132 (24/53)	1588 (24/53)
<i>Nutrition Research</i>	1270 (22/50)	1434 (21/50)	1362 (23/53)	1383 (23/53)	1556 (25/53)
<i>Annals of Nutrition and Metabolism</i>	666 (30/50)	766 (28/50)	827 (29/53)	798 (30/53)	909 (30/53)
<i>European Journal of Nutrition</i>	154 (45/50)	250 (39/50)	373 (37/53)	514 (33/53)	756 (31/53)

* Data are from Institute for Scientific Information Journal Citation Reports®.

† Values shown in parentheses indicate ranking amongst journals in the Nutrition and Dietetics subject category.

At the same time that the influence, or at least the relative influence, of the *BJN* has been increasing, as judged by impact factor and total citations, so the journal has been publishing more articles. In 2000 the journal published 189 articles, while in 2005 the figure was 284, a 50% increase over 5 years. As I indicated in my Editorial in January 2006, one of the main future challenges will be the handling of the number of papers being submitted to the *BJN*. For many years the journal received between 250 and 300 manuscripts annually, but 402 submissions were received in 2003, 539 in 2004 and 650 in 2005. It appears likely that more than 750 submissions will be received in 2006. An increasing number of submissions increases the burden on the Editor-in-Chief, the Deputy Editors, the Editorial Board, referees and the editorial office. The Editorial Board has been enlarged and additional deputy editors appointed to help deal with the increasing number of submissions. I am currently looking at ways of speeding up the processing and refereeing of submitted articles in order that authors may hear decisions sooner. Working with the new publishers of the *BJN* I will endeavour to find ways to publish accepted papers as quickly as possible. I perceive the rise in the number of submissions to be a good sign and I believe that this strongly indicates that the appeal of the journal is increasing and, so, we must be doing most of the important things right. Finally, I wish to thank all who have supported the *BJN*, as authors and as referees, over the last year and I ask that you continue to support and to contribute to further improvements in this fine publication. *Floruit floreat.*

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