

Editorial

Happy Birthday *BJN*!

This issue marks the 60th birthday of the *British Journal of Nutrition*. Volume 1, issue 1 of the *BJN* has the cover date September 1947. The founding Chairman of the Editorial Board (the title of Editor-in-Chief was introduced by Keith Frayn in 1998) of the *BJN* was S. K. Kon from the University of Reading. Table 1 lists the Chairmen and Editors-in-Chief to date. The first Editorial Board comprised thirteen members and this remained the size until the late 1960s. Since then the Editorial Board has gradually increased in size; currently it comprises almost sixty members. The lists of names of those serving on the Editorial Board over the years highlight the great and good of British nutritional science, with interests in both human and animal nutrition and in basic, applied, public health and clinical nutrition. The earliest Editorial Boards were comprised largely (often entirely) of British nutritionists, but a truly international flavour became evident in the 1990s, reflecting the wider authorship of the journal and the desire for it to be regarded as an international journal¹. Currently over half of the Editorial Board is from outside of the UK.

The first issue of the *BJN* states that 'it is devoted to reports of original work in all branches of nutrition'. This remains true today. However, the first issue of the *BJN* also incorporated abstracts and articles from two meetings of the Nutrition Society, the advent of the *BJN* being linked to (temporary) cessation in publishing of the *Proceedings of the Nutrition Society*, the first volume of which had been published in 1944. This cessation continued until 1953 when publishing articles from Society meetings in the *BJN* was abandoned and publishing them in the *Proceedings* was reinstated.

Three issues of the *BJN* were published in 1947, and four issues in each of the years 1948 to 1970. During that period the issues published within a year formed one volume. However, from 1971 to 1993 six issues were published each year and these formed two volumes. Since 1994 twelve issues have been published each year and these comprise two volumes. This represents an enormous increase in the number of articles published in the *BJN* each year. For example in 1950, the *BJN* published twenty-nine research articles; in 2006 the number was 267!

Reading through the early issues of the *BJN* uncovers a number of gems and highlights how little we have moved forward despite the large increases in our understanding of metabolism, endocrinology, genetics, and cell biology and the huge technological advances in biochemical analysis, cell and molecular biology, and, more recently in '-omics' technologies^{2–5}. The 'gem' of the very first issue of the *BJN* is Magnus Pike's paper describing the nutrient content of English prison diets in 1944⁶. Other articles in the first

issue describe a method for measurement of ascorbic acid⁷, and studies on reproduction and lactation in rats⁸, vitamin E deficiency⁹, and composition of sows' milk¹⁰. Two of the five articles in the first issue were from the University of Reading^{8,10} and two were from the Dunn Nutritional Laboratory, Cambridge^{7,9}. The 'proceedings' articles in that issue deal with a meeting dedicated to Education in Nutrition held in Glasgow; these include an article on 'The teaching of nutrition to medical students'¹¹, a topic which remains relevant today¹².

It is clear that the philosophy of the *BJN* has changed little since its inception – the desire is to publish novel and important original research in the field of nutritional science. However, the background against which the published research is conducted has changed greatly in the last 60 years. The way scientific research is funded has changed; communication has changed; the way scientific papers are published has changed. I am certain that the members of the first Editorial Board of the *BJN* probably lived with the certainty that British nutritionists would read all of the articles in the journal and would submit their best work to the journal. Times have changed. Few researchers now pick up a hard copy of a journal and read (or even browse) it all the way through – rather, key papers are identified *via* electronic alerts of papers published according to key areas of interest or through database searching according to key words. Likewise, researchers in nutritional science now have dozens of journals to consider sending their papers to for consideration. Thus, the *BJN* exists in a highly competitive environment, with authors seeking to publish their article in the 'best' possible journal in order both to reach their target audience and to enhance their CV. Authors also desire that their papers appear quickly once accepted and that they be accessible on-line before appearing in hard copy. At the *BJN* we have addressed these important points and will continue to monitor and improve them where possible. Time from acceptance of a paper to (hard copy) publication has been decreased over the last few years and I will strive to decrease this further. Corrected proofs of articles are now posted on-line as soon as they become available; this is generally within a few weeks of acceptance and allows authors' work to be viewed and accessed by others. Thus, we are striving to provide as effective and efficient a service to authors and readers (both hard copy and on-line) as possible. Whilst I am certain that the Editorial Board of the *BJN* in 1947 also desired to provide a good service to authors and readers, the way this was delivered was in many ways a world away from the situation that exists 60 years on, which is very much governed by the technologies that we have to hand. However, some things are pretty much unchanged since 1947 – the author still types up his

Table 1. Chairmen of the Editorial Board and Editors-in-Chief of the *British Journal of Nutrition* since its inception

Chairman of the Editorial Board or Editor-in-Chief	Years in post
S. K. Kon	1947–1965
C. C. Balch	1966–1969
T. G. Taylor	1970–1976
G. A. J. Pitt	1976–1982
R. H. Smith	1982–1988
M. I. Gurr	1988–1990
D. A. T. Southgate	1990–1995
K. N. Frayn	1996–1999
P. Trayhurn	1999–2005
P. C. Calder	From 2006

or her manuscript double spaced on A4 paper according to a prescribed set of instructions, which have not changed that much in 60 years, then submits the manuscript to the journal (in 1947 by post; nowadays electronically), and then awaits the outcome of peer review.

Through publishing, authors disseminate their work in order that others may see it and act upon it in some way. This is one of the ways that the scientific community interacts and exchanges information. It has become increasingly important that the influence of an author's body of work, or of an individual publication, or of an entire journal somehow be assessed. The importance of such an assessment is viewed differently in different countries, institutions, and disciplines and by different individuals. However, one method of assessment that has become well established is the use of impact factors. I have used previous editorials to keep readers informed of the most recent impact factor of the *BJN* and to analyse it in relation to those of comparator journals and to temporal changes^{13,14}. The impact factor of a journal is issued annually by the Institute for Scientific Information (ISI) 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 2006 (issued in 2007) is based upon the number of citations during 2006 of papers published in a particular journal in 2004 and 2005 divided by the number of papers published in that journal in 2004 and 2005. Clearly this favours very rapidly moving areas of research. Hence journals such as

Nature, *Science* and *Cell* have high impact factors (29.7, 30.0 and 29.2, respectively, for 2006). The *BJN* is listed in the Nutrition and Dietetics category of ISI Journal Citation Reports®. In 2006 there were fifty-five journals listed in this category, including review journals and journals in the areas of obesity (for example, *Obesity Research*, *International Journal of Obesity*) and lipidology (for example, *Progress in Lipid Research*, *Lipids*). For the past 5 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 12.2 and 10.4, respectively, for 2006. Table 2 lists the impact factors for the *BJN* and nine comparator journals over the period 2001–6 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. Unfortunately, in 2006, the impact factor of the *BJN* slipped from 2.97 to 2.71 (1403 of citations in 2006 to the 518 articles published in 2004 and 2005) and it fell below its previous consistent ranking within the top ten nutrition and dietetics journals. Nevertheless, in 2006 it was the fourth ranked journal in this category if review journals and journals devoted solely to obesity are excluded. To match the impact factor for 2005 would have required 1538 citations of articles published in 2004 and 2005. I have calculated that if each paper published in the *BJN* in 2004 and 2005 had been cited just once more than it actually was, the impact factor would have been 3.7! Readers may be interested in the impact factors of our sister journals. For 2006 these were 3.41, 2.49 and 2.12 for *Proceedings of the Nutrition Society* (ranked ninth out of fifty-five journals), *Nutrition Research Reviews* (fourteenth out of fifty-five journals) and *Public Health Nutrition* (twenty-first out of fifty-five journals), respectively.

Table 3 lists the articles published in the *BJN* during 2004 and 2005 that were most cited in 2006. 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 2004 continue to

Table 2. Impact factor and ranking of the *British Journal of Nutrition* and comparator journals over the period 2001–6*

Journal	Impact factor and ranking†					
	2001	2002	2003	2004	2005	2006
<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)	6.56 (3/55)
<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)	4.01 (5/55)
<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)	2.71 (12/55)
<i>Clinical Nutrition</i>	2.46 (9/50)	1.55 (22/50)	1.19 (32/53)	2.02 (18/53)	2.29 (15/53)	2.47 (15/55)
<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)	2.45 (16/55)
<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)	2.36 (18/55)
<i>Nutrition</i>	1.43 (23/50)	2.27 (10/50)	2.32 (11/53)	1.96 (19/53)	2.06 (20/53)	2.23 (20/55)
<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)	2.12 (22/55)
<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)	1.62 (30/55)
<i>Nutrition Research</i>	0.60 (37/50)	0.79 (35/50)	0.72 (39/53)	0.57 (41/53)	0.77 (40/53)	0.73 (44/55)

* Data are from ISI Journal Citation Reports®.

† Ranking amongst journals in the Nutrition and Dietetics subject category is shown in parentheses underneath each impact factor (for example, *British Journal of Nutrition* ranked seventh out of fifty journals in 2002).

be cited (Table 3), they will not contribute to the impact factor for 2007 which will be based upon articles published in 2005 and 2006.

One argument against the importance of the 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 4 lists the total number of citations made to articles published in the *BJN*, irrespective of their year of publication, during the years 2001–6; once again I list this information alongside that for the nine comparator journals. In 2006 articles published in the *BJN* were cited 8665 times (Table 4). It is apparent that the total number of citations of articles in the journal has increased year-on-year and that, based upon these data, the journal is firmly ranked in the top five 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 2006 *Nature*, *Cell* and *Science* have cited half-lives of 7.9, 8.7 and 7.7 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 2006 was 6.8 years, indicating that half of the citations to articles to *BJN* in 2006 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 7.3 and 6.0 years, respectively.

As I indicated in my previous editorial¹⁴, the *BJN* is receiving more submissions and is publishing more articles than ever before. This suggests that the journal is in very good health and is viewed favourably by researchers within the discipline. It is not entirely clear what future the founders of the *BJN* anticipated for the journal, but I am absolutely certain that the Founding Editorial Board of the *BJN* would be very proud of their legacy as the Journal now enters its 61st year. Happy Birthday *BJN*!

Table 3. Articles published in the *British Journal of Nutrition* in 2004 and 2005 that were most highly cited in 2006*

	Type of article	Citations in 2006	Total citations to date
Trayhurn & Wood (2004) ¹⁵	Horizons	79	169
Magee & Rowland (2004) ¹⁶	Review	28	59
Whanger (2004) ¹⁷	Review	25	67
Rayman (2004) ¹⁸	Review	22	41
Milder <i>et al.</i> (2005) ¹⁹	Full paper	19	27
Kay <i>et al.</i> (2004) ²⁰	Full paper	16	31
Flint <i>et al.</i> (2004) ²¹	Full paper	15	33
Arts <i>et al.</i> (2004) ²²	Full paper	14	24
McMullen <i>et al.</i> (2004) ²³	Full paper	13	34

* Data were obtained from ISI Web of Science® on 10 July 2007.

Table 4. Total number of citations of articles published in the *British Journal of Nutrition* and comparator journals over the period 2001–6*

	Total citations/year and ranking†					
	2001	2002	2003	2004	2005	2006
<i>American Journal of Clinical Nutrition</i>	24 081 (1/50)	25 118 (1/50)	27 083 (1/53)	26 010 (1/53)	289 98 (1/53)	30 533 (1/55)
<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)	24 642 (2/55)
<i>British Journal of Nutrition</i>	5360 (5/50)	6205 (4/50)	7144 (4/53)	7204 (4/53)	7893 (4/53)	8665 (5/55)
<i>European Journal of Clinical Nutrition</i>	3588 (8/50)	4181 (7/50)	4798 (6/53)	4931 (7/53)	5826 (7/53)	6062 (6/55)
<i>Nutrition</i>	1938 (15/50)	2646 (13/50)	2900 (13/53)	3060 (13/53)	3515 (12/53)	3942 (12/55)
<i>Journal of the American College of Nutrition</i>	1687 (18/50)	1751 (18/50)	2095 (17/53)	2137 (18/53)	2527 (17/53)	2755 (16/55)
<i>Clinical Nutrition</i>	1024 (25/50)	982 (24/50)	1007 (25/53)	1132 (24/53)	1588 (24/53)	2035 (21/55)
<i>Nutrition Research</i>	1270 (22/50)	1434 (21/50)	1362 (23/53)	1383 (23/53)	1556 (25/53)	1659 (24/55)
<i>Annals of Nutrition and Metabolism</i>	666 (30/50)	766 (28/50)	827 (29/53)	798 (30/53)	909 (30/53)	990 (29/55)
<i>European Journal of Nutrition</i>	154 (45/50)	250 (39/50)	373 (37/53)	514 (33/53)	756 (31/53)	877 (30/55)

* Data are from ISI Journal Citation Reports®.

† Ranking amongst journals in the Nutrition and Dietetics subject category is shown in parentheses underneath each impact factor (for example, *British Journal of Nutrition* ranked fourth out of fifty journals in 2002).

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