

Editorial

Increasing numbers of citations and higher impact factor in 2012: the *British Journal of Nutrition* continues to show steady improvement

(First published online 16 August 2013)

In June 2013, the Institute for Scientific Information (ISI) released its annual assessment of the citation of articles published in scientific journals. These metrics provide valuable insights into the performance of journals both individually and in relation to others publishing similar content in the same field. In order to inform readers about the performance of the *British Journal of Nutrition* (*BJN*) over the preceding 12 months, I plan to follow the precedent set by my predecessor in writing an annual editorial to review the state of the journal^(1–8).

This editorial is based on data collected from the ISI Journal Citation Reports® database, in which the *BJN* is listed under the Nutrition and Dietetics category. The information presented in Tables 1 and 2, and in Fig. 1 was obtained from online searches of the ISI database on 18 July 2013. There are currently seventy-six journals listed under the Nutrition and Dietetics category, which encompass a wide range of specialities within this field. This category includes journals that publish only reviews or reports of primary research, while others publish a range of types of articles. *BJN* falls into the third group, and I have selected six journals with similar content and status for comparison. These are listed in Table 1.

The impact factor is perhaps the most widely used metric for assessing the citation of articles published in journals. The pros and cons of using the impact factor to assess the performance of a journal have been discussed in a previous editorial⁽⁷⁾. The impact factor of a journal is calculated by dividing the total number of citations of papers published in

the previous 2 years by the number of papers that the journal has published over these periods. The impact factor of the *BJN* for 2012 (issued in 2013) is 3.3 (Table 1), which is the second highest score for this journal in the past 10 years (the highest was 3.45 in 2009) (Fig. 1). This represents an increase of 9.6% in 2012 compared with 2011 (Table 1) and an overall increase of 33% compared with 2002 (2.49) (Fig. 1). The number of citations of articles in 2012 was a new record for the *BJN* (Table 1), an increase of 12.8% compared with 2011 and a 2.7-fold more citations than in 2002 (6205) (Fig. 1). The 5-year impact factor of the *BJN* also increased between 2011 and 2012 (Table 1). As a consequence of the increased citation of articles published in the journal, the rank position of the *BJN* in the Nutrition and Dietetics category increased from 19/72 in 2011 to 18/76 in 2012. The number of manuscripts submitted to the *BJN* increased steadily between 2001 and 2009, but then rose markedly between 2009 and 2010 (Fig. 2). However, the number of articles submitted has remained essentially the same at approximately 1400 per year since 2011 (Fig. 2). Currently, approximately 30% of manuscripts submitted to the *BJN* are accepted for publication. Together, these performance indicators show that *BJN* is maintaining a sustained, steady increase in both citations and impact.

The selected comparator journals had mixed fortunes in 2012. Of these, the *American Journal of Clinical Nutrition* continued to receive the highest impact factor (6.5), although slightly lower than in 2011, and remained ranked 3rd of all journals in the Nutrition and Dietetics category (Fig. 1;

Table 1. Selected publication metrics of the *British Journal of Nutrition* (*Br J Nutr*) and of comparator journals in 2011 and 2012*

	Impact factor			5-year impact factor		Ranking†		Total citations	
	2011	2012	Change (%)	2011	2012	2011	2012	2011	2012
<i>Am J Clin Nutr</i>	6.69	6.50	−2.8	7.37	7.20	3/72	3/76	45 766	48 233
<i>Br J Nutr</i>	3.01	3.30	+9.6	3.34	3.60	19/72	18/76	15 036	16 968
<i>Clin Nutr</i>	3.73	3.30	−11.5	4.09	3.88	13/72	19/76	4417	5003
<i>Eur J Clin Nutr</i>	2.46	2.76	+0.4	7.75	2.97	30/72	25/76	8981	9450
<i>Eur J Nutr</i>	2.75	3.13	+27.2	3.12	3.15	24/72	22/76	1931	2183
<i>J Nutr</i>	3.92	4.20	+7.1	4.36	4.69	10/72	10/76	32 605	34 300
<i>Nutrition</i>	3.03	2.86	−5.6	2.90	3.00	18/72	24/76	6139	6623

Am J Clin Nutr, *American Journal of Clinical Nutrition*; *Clin Nutr*, *Clinical Nutrition*; *Eur J Clin Nutr*, *European Journal of Clinical Nutrition*; *Eur J Nutr*, *European Journal of Nutrition*; *J Nutr*, *Journal of Nutrition*.

* Data were obtained from the Institute for Scientific Information Journal Citation Reports® database.

† Ranking among the journals in the Nutrition and Dietetics category.

Table 2. Articles published in the *British Journal of Nutrition* in 2010 and 2011 that were most highly cited in 2012*

Reference	Type of article	Citations in 2012	Total citations to date
Roberfroid <i>et al.</i> ⁽⁹⁾	Supplement	62	133
von Hurst <i>et al.</i> ⁽¹⁰⁾	Research article	44	104
Epstein <i>et al.</i> ⁽¹¹⁾	Review	27	69
Del Rio <i>et al.</i> ⁽¹²⁾	Supplement	25	47
Williamson & Clifford ⁽¹³⁾	Supplement	25	47
Ramsden <i>et al.</i> ⁽¹⁴⁾	Review	24	63
Fleissner <i>et al.</i> ⁽¹⁵⁾	Research article	24	49
Chong <i>et al.</i> ⁽¹⁶⁾	Review	22	36
Fernandez-Ballarh <i>et al.</i> ⁽¹⁷⁾	Research article	21	49
Brasnyo <i>et al.</i> ⁽¹⁸⁾	Research article	21	41
Santacruz <i>et al.</i> ⁽¹⁹⁾	Research article	18	45
Stewart <i>et al.</i> ⁽²⁰⁾	Research article	18	41
Van Cauwenberghe <i>et al.</i> ⁽²¹⁾	Review	17	36
Gonzalez-Gallego <i>et al.</i> ⁽²²⁾	Supplement	17	29
Krikorian, Robert <i>et al.</i> ⁽²³⁾	Research article	17	29
Leffelaar, <i>et al.</i> ⁽²⁴⁾	Research article	16	33
Brownlee <i>et al.</i> ⁽²⁵⁾	Research article	13	35
Luoto <i>et al.</i> ⁽²⁶⁾	Research article	11	31
Lillycrop <i>et al.</i> ⁽²⁷⁾	Research article	11	30
Calder <i>et al.</i> ⁽²⁸⁾	Research article	10	32

* Data were obtained from the Institute for Scientific Information Web of Science® database on 18 July 2013.

Table 1). The impact factors of *Clinical Nutrition* and *Nutrition* also fell in 2012 compared with 2011, accompanied by lower rank positions (Table 1). In contrast, the impact factors of the *European Journal of Clinical Nutrition (Eur J Clin Nutr)*, the *European Journal of Nutrition (Eur J Nutr)* and the *Journal of Nutrition (J Nutr)* increased between 2011 and 2012. For the *Eur J Clin Nutr* and the *Eur J Nutr*, the increase in the impact factor was accompanied by an increase in their ranking, while the rank position of *J Nutr* (10/76) was unchanged in 2012 compared with 2011 (Table 1). Overall, the performance of the *BJN* in 2012 was among the best-performing journals of its type in the Nutrition and Dietetics category.

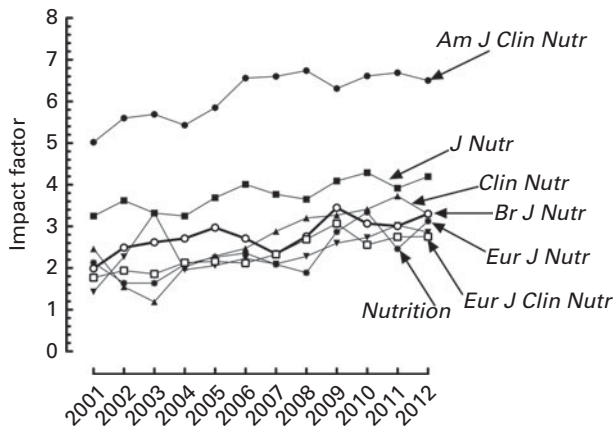


Fig. 1. Year-on-year impact factors of the *British Journal of Nutrition (Br J Nutr)* and of comparator journals. *Am J Clin Nutr*, *American Journal of Clinical Nutrition*; *Clin Nutr*, *Clinical Nutrition*; *Eur J Nutr*, *European Journal of Nutrition*; *Eur J Clin Nutr*, *European Journal of Clinical Nutrition*.

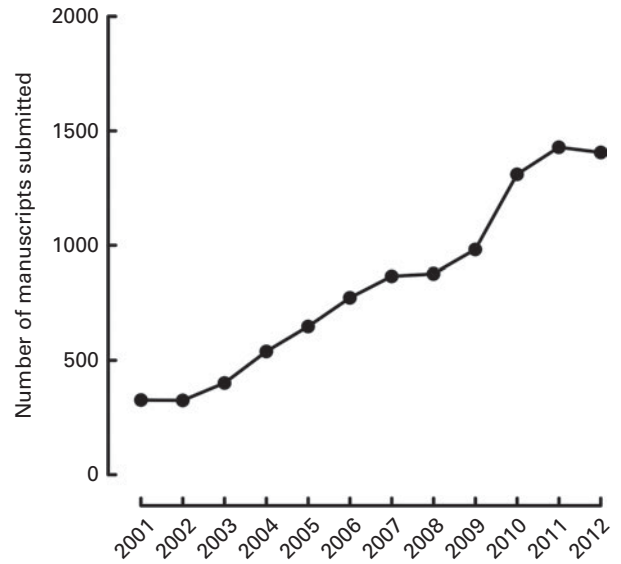


Fig. 2. Year-on-year number of manuscripts submitted to the *British Journal of Nutrition*.

As in 2011⁽⁸⁾, the most highly cited articles in the *BJN* in 2012 were predominately papers reporting primary research findings (Table 2). However, the most highly cited article in 2012 was a review by Roberfroid *et al.*⁽⁹⁾ on the potential health and metabolic benefits of probiotics published in a supplementary edition of the *BJN*. Review articles also made an important contribution to the most cited articles in 2012, although the number of review articles in the top twenty most cited articles in 2012 was less than that in 2011⁽⁸⁾.

Overall, *BJN* is continuing to perform at least as well as the best journals publishing a similar range of articles in the Nutrition and Dietetics category. The high number of manuscript submissions and increasing citations suggests to me that *BJN* is well respected among researchers in the field as a source of high-quality publications in nutritional science. Nevertheless, I am convinced that *BJN* has not yet achieved its full potential and that continued improvement in its impact factor and in other measures of performance will enhance the (perceived) quality of the journal and secure the place of *BJN* among the best journals in the field of nutritional science.

Graham C. Burdge

Editor-in-Chief
Academic Unit of Human Development and Health,
Faculty of Medicine,
University of Southampton,
Southampton, UK
g.burdge@nutritionsociety.org

doi:10.1017/S0007114513002808

References

1. Calder PC (2006) Carpe diem. *Br J Nutr* **95**, 1–4.
2. Calder PC (2007) Happy birthday *BJN*! *Br J Nutr* **98**, 447–450.

3. Calder PC (2007) Floruit floreat. *Br J Nutr* **97**, 1–3.
4. Calder PC (2008) Record citations in 2007, but impact factor slips. *Br J Nutr* **100**, 687–689.
5. Calder PC (2009) *BJN* impact factor rises. *Br J Nutr* **102**, 1243–1245.
6. Calder PC (2010) *BJN* impact factor rises by 25%. *Br J Nutr* **102**, 1243–1245.
7. Calder PC (2011) More citations, but a fall in impact factor. *Br J Nutr* **106**, 789–792.
8. Calder PC (2012) Record citations in 2011 contribute to maintenance of the impact factor of *BJN*. *Br J Nutr* **108**, 759–761.
9. Roberfroid M, Gibson GR, Hoyles L, *et al.* (2010) Prebiotic effects: metabolic and health benefits. *Br J Nutr* **104**, Suppl. 2, S1–S63.
10. von Hurst PR, Stonehouse W & Coad J (2010) Vitamin D supplementation reduces insulin resistance in South Asian women living in New Zealand who are insulin resistant and vitamin D deficient – a randomised, placebo-controlled trial. *Br J Nutr* **103**, 549–555.
11. Epstein J, Sanderson IR & Macdonald TT (2010) Curcumin as a therapeutic agent: the evidence from *in vitro*, animal and human studies. *Br J Nutr* **103**, 1545–1557.
12. Del Rio D, Borges G & Crozier A (2010) Berry flavonoids and phenolics: bioavailability and evidence of protective effects. *Br J Nutr* **104**, Suppl. 3, S67–S90.
13. Williamson G & Clifford MN (2010) Colonic metabolites of berry polyphenols: the missing link to biological activity? *Br J Nutr* **104**, Suppl. 3, S48–S66.
14. Ramsden CE, Hibbeln JR, Majchrzak SF, *et al.* (2010) *n*-6 Fatty acid-specific and mixed polyunsaturate dietary interventions have different effects on CHD risk: a meta-analysis of randomised controlled trials. *Br J Nutr* **104**, 1586–1600.
15. Fleissner CK, Huebel N, Abd El-Bary MM, *et al.* (2010) Absence of intestinal microbiota does not protect mice from diet-induced obesity. *Br J Nutr* **104**, 919–929.
16. Chong MF, Macdonald R & Lovegrove JA (2010) Fruit polyphenols and CVD risk: a review of human intervention studies. *Br J Nutr* **104**, Suppl. 3, S28–S39.
17. Fernandez-Ballart JD, Pinol JL, Zazpe I, *et al.* (2010) Relative validity of a semi-quantitative food-frequency questionnaire in an elderly Mediterranean population of Spain. *Br J Nutr* **103**, 1808–1816.
18. Brasnyo P, Molnar GA, Mohas M, *et al.* (2011) Resveratrol improves insulin sensitivity, reduces oxidative stress and activates the Akt pathway in type 2 diabetic patients. *Br J Nutr* **106**, 383–389.
19. Santacruz A, Collado MC, Garcia-Valdes L, *et al.* (2010) Gut microbiota composition is associated with body weight, weight gain and biochemical parameters in pregnant women. *Br J Nutr* **104**, 83–92.
20. Stewart JE, Feinle-Bisset C, Golding M, *et al.* (2010) Oral sensitivity to fatty acids, food consumption and BMI in human subjects. *Br J Nutr* **104**, 145–152.
21. Van Cauwenberghe E, Maes L, Spittaels H, *et al.* (2010) Effectiveness of school-based interventions in Europe to promote healthy nutrition in children and adolescents: systematic review of published and ‘grey’ literature. *Br J Nutr* **103**, 781–797.
22. Gonzalez-Gallego J, Garcia-Mediavilla MV, Sanchez-Campos S, *et al.* (2010) Fruit polyphenols, immunity and inflammation. *Br J Nutr* **104**, Suppl. 3, S15–S27.
23. Krikorian R, Nash TA, Shidler MD, *et al.* (2010) Concord grape juice supplementation improves memory function in older adults with mild cognitive impairment. *Br J Nutr* **103**, 730–734.
24. Leffelaar ER, Vrijkotte TG & van Eijsden M (2010) Maternal early pregnancy vitamin D status in relation to fetal and neonatal growth: results of the multi-ethnic Amsterdam Born Children and their Development cohort. *Br J Nutr* **104**, 108–117.
25. Brownlee IA, Moore C, Chatfield M, *et al.* (2010) Markers of cardiovascular risk are not changed by increased whole-grain intake: the WHOLEheart study, a randomised, controlled dietary intervention. *Br J Nutr* **104**, 125–134.
26. Luoto R, Laitinen K, Nermes M, *et al.* (2010) Impact of maternal probiotic-supplemented dietary counselling on pregnancy outcome and prenatal and postnatal growth: a double-blind, placebo-controlled study. *Br J Nutr* **103**, 1792–1799.
27. Lillycrop KA, Rodford J, Garratt ES, *et al.* (2010) Maternal protein restriction with or without folic acid supplementation during pregnancy alters the hepatic transcriptome in adult male rats. *Br J Nutr* **103**, 1711–1719.
28. Calder PC, Ahluwalia N, Brouns F, *et al.* (2011) Dietary factors and low-grade inflammation in relation to overweight and obesity. *Br J Nutr* **106**, Suppl. 3, S5–S78.