Rory Robertson Sydney, Australia, 22 March 2012

URGENT NEED TO PROPERLY "PEER REVIEW" CONTROVERSIAL "AUSTRALIAN PARADOX" PAPER

Dear Members of the Nutrients (E-journal) Editorial Board (and outside observers)

Hello, my name is Rory Robertson. I'm an economist with a strong interest in nutrition matters.

I am sorry to have to write to report that <u>as an Editorial Board you are doing a sub-standard job, and that your slackness has created problems aplenty in Australia</u>.

In particular, your journal *Nutrients* has been responsible in the past year for spreading serious misinformation about the relationship in Australia between sugar consumption and obesity.

The paper of concern - first published in March/April 2011 - is "<u>The Australian Paradox: A Substantial</u> <u>Decline in Sugars Intake over the Same Timeframe that Overweight and Obesity Have Increased</u>", by Dr Alan W. Barclay and Professor Jennie Brand Miller.

The authors conclude that there is an "Australian Paradox" in the relationship between sugar consumption (down) and obesity (up). <u>Attached</u> is a piece I have written on the debate about sugar, obesity and diabetes, including a critique of this "Australian Paradox" paper.

Now before anyone worries that I'm an economist not a scientist, note that **what is at issue here is not a question of science but purely an empirical matter**.

Consider the main conclusion of the "Australian Paradox" paper: "This analysis of [i] apparent consumption, [ii] national dietary surveys and [iii] food industry data indicates a **consistent and substantial decline** in total refined or added sugar consumption by Australians **over the past 30 years**" (My numbering and emphasis; p. 9 of 14 of PDF at http://www.mdpi.com/2072-6643/3/4/491/).

<u>Now, my problem with this "Australian Paradox" conclusion is that it is demonstrably false</u>. This is not rocket science: if the post-1980 trends are flat or up rather than down, the whole story is left in tatters.

Sorry, but that indeed is the case. <u>Actually, Dr Barclay and Professor Brand Miller have batted none-for-three: not one of their three nominated indicators shows a "substantial decline" in consumption over "the past 30 years"</u>.

In the attached analysis, I document that **the post-1980 trends for indicators (ii) and (iii) are up not down** - just look at the charts in my piece (to save time, please go straight to Figure 5A).

Disturbingly, Dr Barclay and Professor Brand Miller <u>failed to mention that the primary data source of their preferred indicator – (i) "Apparent Consumption" [AC] - was discontinued - abandoned as unreliable - by the Australian Bureau of Statistics after 1998-99. Sorry, but the ABS stopped even pretending to measure sugar imports [M], ensuring that there have been no reliable apparent consumption data for the past dozen years, if not longer (no matter what can be downloaded from www.fao.org). So while the authors insist that apparent consumption has fallen substantially "over the past 30 years", there actually have been no serious data for more than a decade.</u>

Finally, inexplicably, the authors <u>failed to mention the conspicuous "plenty of sugar" result that jumps out of a simple "sugar availability" (SA: production less exports) calculation using up-to-date ABARES data (see second and third chart in the attached analysis).</u>

Yet this timely official series is **the next best thing to an up-to-date apparent consumption measure**, **because sugar availability is the dominant component of any apparent consumption calculation** [AC = SA + M - "leakages" (with imports probably dominating leakages)].

No matter: facts do not cease to be facts just because they are overlooked or ignored. The available information – including (a) abundant "sugar availability" and rising sugary imports; (b) national dietary surveys and (c) industry data on soft-drink consumption – confirm that there has been plenty of sugar available to fuel Australia's trends towards obesity. All this is documented in detail in my Sections 4 and 5.

All in all, we are left with a clear sense that there is no "Australian Paradox", just an idiosyncratic and unreasonable assessment – and avoidance - of the available sugar data by those who coined the phrase.

As an economist, I'm shocked that a science journal that lists 40 or so scientists on its "Editorial Board" could publish the "Australian Paradox" paper so dominated by problems that they invalidate its conclusion (and title!).

This is a very big deal because, disturbingly, the (Australian) Heart Foundation, Diabetes Australia, Nutrition Australia and the Dieticians Association of Australia all seem to have taken false comfort from the authors' mistaken conclusion of an "Australian Paradox".

I'm sorry to berate you as an Editorial Board, but given that the available facts so obviously contradict the paper's high-profile conclusion, <u>one wonders whether the paper was subjected to any genuinely expert and independent "peer review" process</u>.

Accordingly, I insist that each of you now take a serious look at the "Australian Paradox" paper and ensure that it is properly - if belatedly - "peer reviewed", corrected and rewritten as required.

Or at least - if you are hard-pressed for time - <u>just have a quick look at the charts</u>: all nine charts in the attached paper - six of them reproduced directly from "Australian Paradox" - have post-1980 trends that are up not down. Please check them out.

I note that <u>one of the authors was the "Guest Editor" of the Special Issue "Carbohydrates" in which the "Australian Paradox" piece was published (http://www.mdpi.com/journal/nutrients/special_issues/carbohydrates/).</u>

I also note that **both authors are heavily involved in promoting the Glycemic-Index (GI) approach to nutrition**. As you would know, the (low) GI industry revolves around diets that claim special health benefits for low-GI food (GI 55 and under).

Now, fructose - the "bad" half of table sugar - has a super-low GI of 19, so - from a GI-industry perspective - fructose *must* be fine. If sugar/fructose in typical modern doses - decade after decade - is in fact a driver of obesity and diabetes - as argued by a small but growing nucleus of global scientists - the low-GI industry has an existential problem. So the authors have **an incentive** to argue that sugar is not a major factor driving Australia's obesity and diabetes epidemics.

Someone unkind might observe that leaving GI advocates to publish their work on the link between sugar and obesity without expert peer review - if that is what happened - is the scientific equivalent of leaving "the fox in charge of the hen-house".

Accordingly, I insist that the Editorial Board conduct an immediate "peer review" of its "peer-review processes", if only to protect the credibility of *Nutrients* as a reliable journal.

Also, every effort should be made by Members of the *Nutrients* Editorial Board to ensure that the Australian public in the future is provided with more-reliable information on critical health-related topics.

Thank you for your time. I look forward to the results of your comprehensive if belated "peer review" of the "Australian Paradox" paper, and more generally to hearing about your revamped peer-review processes.

Regards, Rory

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