DRAFT

Graphic evidence of research misconduct in science at an Australian "Group of Eight" university

What is to be done about University of Sydney's *Australian Paradox* fraud?

With Go8 research hopelessly unreliable, a reduction in Go8 research funding seems appropriate

Rory Robertson, September 2013

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This document was prepared in large part to assist: (i) University of Sydney Vice-Chancellor, Dr Michael Spence; (ii) MDPI CEO, Mr Dietrich Rordorf; and (iii) officials of BioMed Central*. I have provided them and their management with copies. I am hoping that they will print out the document, read it carefully – my apologies for being long-winded but the charts speak for themselves - and then do the right thing for scientific integrity: instruct the underperforming University of Sydney scientists to correct or retract their extraordinarily faulty Australian Paradox paper.*

This is a "living document", in that I will update it as needed as the scandal evolves. I assume the University of Sydney one day will indeed correct or retract its faulty Australian Paradox paper. If you read this document and judge that the paper needs neither correction nor retraction, I'm keen to hear from you. Please email me on strathburnstation@gmail.com

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rory robertson
economist and former-fattie
now fairly fructose free!

Join the push to give all kids a fairer start in life: http://www.australianparadox.com/pdf/Sugary-Drinks-Ban.pdf

What is to be done about University of Sydney's *Australian Paradox* fraud?

By Rory Robertson, September 2013

1. Introduction and summary

The University of Sydney's *Australian Paradox* fraud is a fascinating case study in shonky science at the highest levels of Group of Eight university research. As background, note that the University operates a business that exists in part to charge food companies up to $6,000 a pop to stamp particular brands of sugar and sugary foods as Healthy. And yet modern rates of sugar consumption - including via sugary drinks - are a key driver of global obesity and type 2 diabetes, together the greatest public-health challenge of our times: http://care.diabetesjournals.org/content/33/11/2477.full.pdf

Tragically, outsized rates of sugar consumption – alongside alcohol and tobacco – are a major driver of the unacceptable "gap" in life expectancy between Indigenous and non-Indigenous Australians: see the bottom row of Box/Table 2 in https://www.mja.com.au/journal/2013/198/7/characteristics-community-level-diet-aboriginal-people-remote-northern-australia

While those are important facts, they are not what I am complaining about. My particular concern is that in 2011 the operators the University's pro-sugar business self-published an extraordinarily faulty yet "peer reviewed" paper seeking to exonerate sugar consumption – including via sugary softdrinks - as a key driver of obesity (see key findings below). I am asking the scientists to do only what should have been done in 2012: simply correct or retract the faulty paper.

To be clear, my dispute with the University of Sydney at its core is not about science or nutrition, it's about simple things like **up versus down, valid versus invalid data and the need to correct serious errors in the public debate**. The self-published analysis is faulty, the conclusion is wrong and the public record must be corrected. There is no Australian Paradox, just a clownish assessment of the available data by senior University of Sydney scientists.

Here are the main false "findings":

4. Discussion

This analysis of apparent consumption, national dietary surveys and food industry data indicates a consistent and substantial decline in total refined or added sugar consumption by Australians over the past 30 years. In this respect, Australia may be unique, although FAO statistics suggest a modest

5. Conclusions

The present analysis indicates the existence of an Australian Paradox, *i.e.*, an inverse relationship between secular trends in the prevalence of obesity prevalence (increasing by ~300%) and the consumption of refined sugar over the same time frame (declining by ~20%). The findings challenge the implicit assumption that taxes and other measures to reduce intake of soft drinks will be an effective strategy in global efforts to reduce obesity.

Source: p. 499 and p. 502, *Australian Paradox* http://www.mdpi.com/2072-6643/3/4/491

In this update, there are 13 graphs, three of them new. If you do nothing else, please benchmark the *Australian Paradox* paper's "findings" (above) against those 13 graphs (from p. 4). In this episode, co-authors **Professor Jennie Brand-Miller (JBM) and Dr Alan Barclay (AWB) falsely claim that up is down (Figures 1-5) and that trivial is substantial (Figure 6 versus 6a), while embracing falsified data as fact (Figures 7-10).** Oops! Those are extraordinary and dominating errors.

For over 18 months, I have highlighted the extraordinary problems with the *Australian Paradox* paper, asking for it to be corrected or retracted. That has not happened. Instead, the University of Sydney's highly conflicted scientists and senior management have pretended that there are no errors and that the faulty paper is flawless "peer reviewed" science. Readers, is it reasonable for scientists at a publicly funded university not to correct serious and obvious errors in a paper, particularly when a minor formal correction already has been published? http://www.mdpi.com/2072-6643/3/8/734

By refusing to correct or retract its extraordinarily faulty paper, the University of Sydney in my opinion is fraudulently exaggerating the evidence that the consumption of sugar and sugary products has nothing to do with obesity, while collecting substantial business revenues from stamping particular brands of sugar and sugary products as Healthy.

The University of Sydney's unreasonable refusal to correct or retract its "shonky sugar study" - instead pretending that dominating factual errors do not exist, and too bad that critical data are falsified - has transformed this episode into a scandal featuring "**research misconduct**" as defined by the National Health and Medical Research Council (NHMRC),

including, amongst other things: (i) "recklessness or gross and persistent negligence"; (ii) "serious consequences, such as false information on the public record"; and (iii) "failure to declare and manage serious conflicts of interest": Sections 1-10 of http://www.australianparadox.com/

Readers, false information - including falsified data - has no place in either "peer reviewed" science or the public debate. In my opinion, the *Australian Paradox* paper is a menace to public health and a Group of Eight academic disgrace, making a mockery of the Go8's claim that it deserves increased research funding, for the national good, you understand: http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html ; http://www.go8.edu.au/university-staff/go8-policy-_and_-analysis/2013/discussion-paper-the-role-and-importance-of-research-intensive-universities

This piece has been prepared specifically for:

> **x Dr Michael Spence and Professor Jill Trewhella, Vice-Chancellor and Deputy Vice-Chancellor (Research) of the University of Sydney**. Their unwise and conflicted defence of the faulty *Australian Paradox* paper and its false "finding" – "an inverse relationship" between sugar intake and obesity - means that concerns about competence and scientific integrity surround the University's **$500 million Charles Perkins's Centre**, a new hub for research into obesity and related maladies: http://www.smh.com.au/national/university-sets-up-500m-centre-for-obesity-research-20130724-2qjq8.html
>
> **x Mr Dietrich Rordorf, CEO of the Multidisciplinary Digital Publishing Institute (MDPI)**, the publisher of around 100 journals, including *Nutrients*, which in 2011 negligently published the extraordinarily faulty *Australian Paradox* paper; in 2012, it recklessly published *Australian Paradox Revisited*, the authors' fluffy and false "rebuttal" of my correct critique: http://www.smh.com.au/business/pesky-economist-wont-let-big-sugar-lie-20120725-22pru.html ;
>
> **x The Editorial Boards of *Nutrients* and *BMC Public Health***: http://www.biomedcentral.com/1471-2458/13/668; http://www.mdpi.com/journal/nutrients/editors

The hope is that this document – by providing the disturbing detail of JBM and AWB's extraordinary if obvious errors - will convince Dr Spence and/or Mr Rordorf to instruct their under-supervised underlings to stop pretending that their clownish paper is flawless, and to stop unreasonably resisting its correction or retraction. To fast-track the process, here's my **proposed Retraction Notice**, first posted in a discussion with Mr Rordorf on *Retraction Watch*:

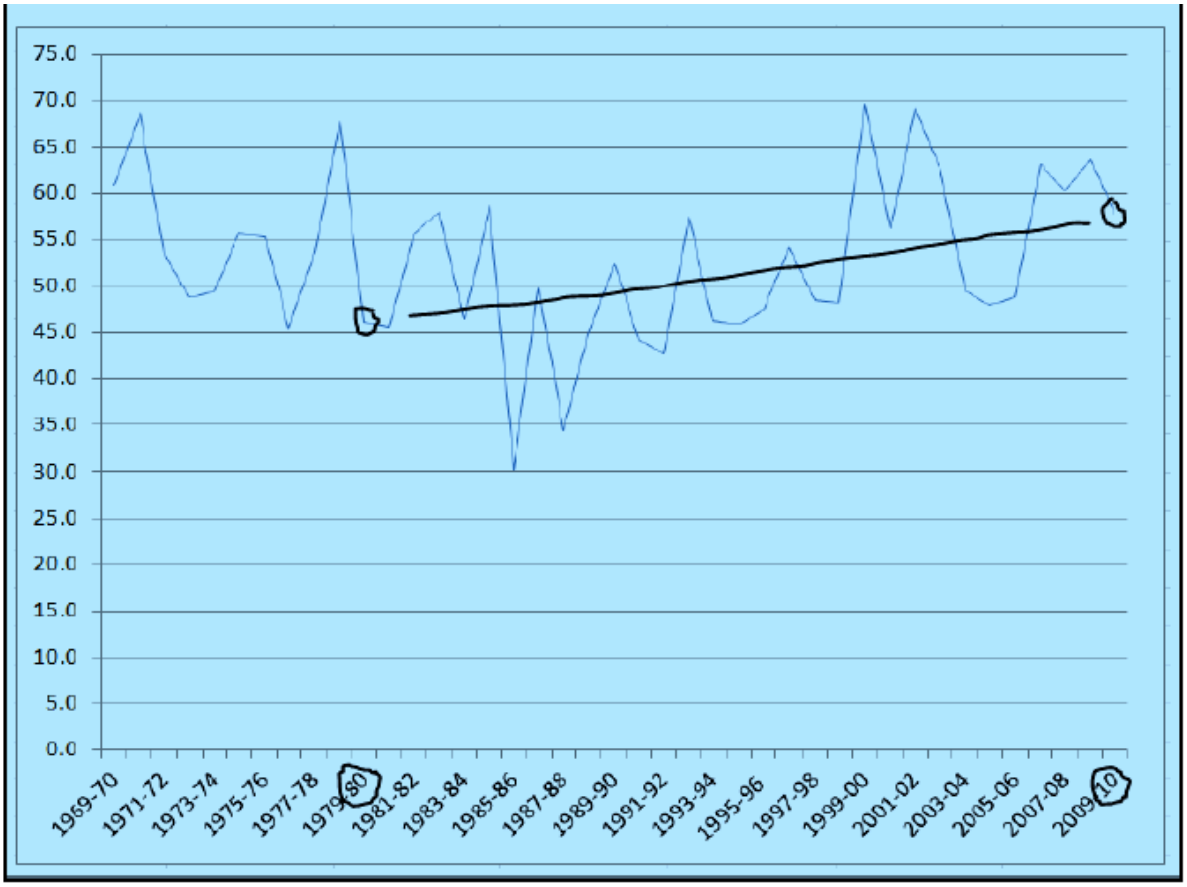
***Abstract**: It has been brought to our attention by a reader of Nutrients that the conclusion of "**a consistent and substantial decline**" in per-capita sugar consumption between 1980 and 2010 in "The Australian Paradox: A Substantial Decline in Sugars Intake over the Same Timeframe that Overweight and Obesity Have Increased" is based in part on a data series that was falsified by the Food and Agriculture Organization (FAO). MDPI has a strict "zero tolerance policy" towards the use of falsified data, whether the authors were aware of the invalidity of the data or not. Moreover, there are further major errors and misinterpretations that shred the credibility of the manuscript's conclusion of "an inverse relationship" between sugar intake and obesity. For example, the authors' own chart suggests that the consumption of sugar via softdrinks **increased** as obesity bulged between 1980 and 2010. Unfortunately, that observation removes a central element of the authors' claimed "paradox". The authors' business links to the sugar and sugary food industries also are somewhat unsettling. Taking public-health considerations into account – particularly evidence that excessive sugar consumption is a major contributor to global obesity and type 2 diabetes, together the greatest public-health challenge of our times: http://care.diabetesjournals.org/content/33/11/2477.full.pdf – the Editorial Team and Publisher have determined that this manuscript should be retracted. We apologize for any inconvenience this may cause.* http://retractionwatch.wordpress.com/2013/08/22/journal-to-feature-special-issue-on-scientific-misconduct-seeks-submissions/ (See discussion in Comments.)

The errors and misrepresentations promoted by the University's conflicted obesity researchers are documented in Sections 2-5 below, yet JBM, AWB and their senior management have chosen for more than a year to pretend that the evidence backing the *Australian Paradox* "finding" – "an inverse relationship" between sugar consumption and obesity - is flawless. **Unfortunately, that is scientific fraud**, as observed in Sections 1-10 of http://www.australianparadox.com/

It's a pity for taxpayers that the reputation of the **University of Sydney's new $500 million Charles Perkins Centre** has become entangled in the scandal involving the University's senior management failing to properly balance the need for scientific integrity against the need for its pro-sugar Glycemic Index (GI) business cashflows: pp. 10-11 of http://www.gisymbol.com.au/cmsAdmin/uploads/Glycemic-Index-Foundation-Healthy-Choices-Brochure.pdf ; p. 5 of http://www.foodhealthdialogue.gov.au/internet/foodandhealth/publishing.nsf/Content/D59B2C8391006638CA2578E600834BBD/$File/Resources%20and%20support%20for%20reformulation%20activities.pdf

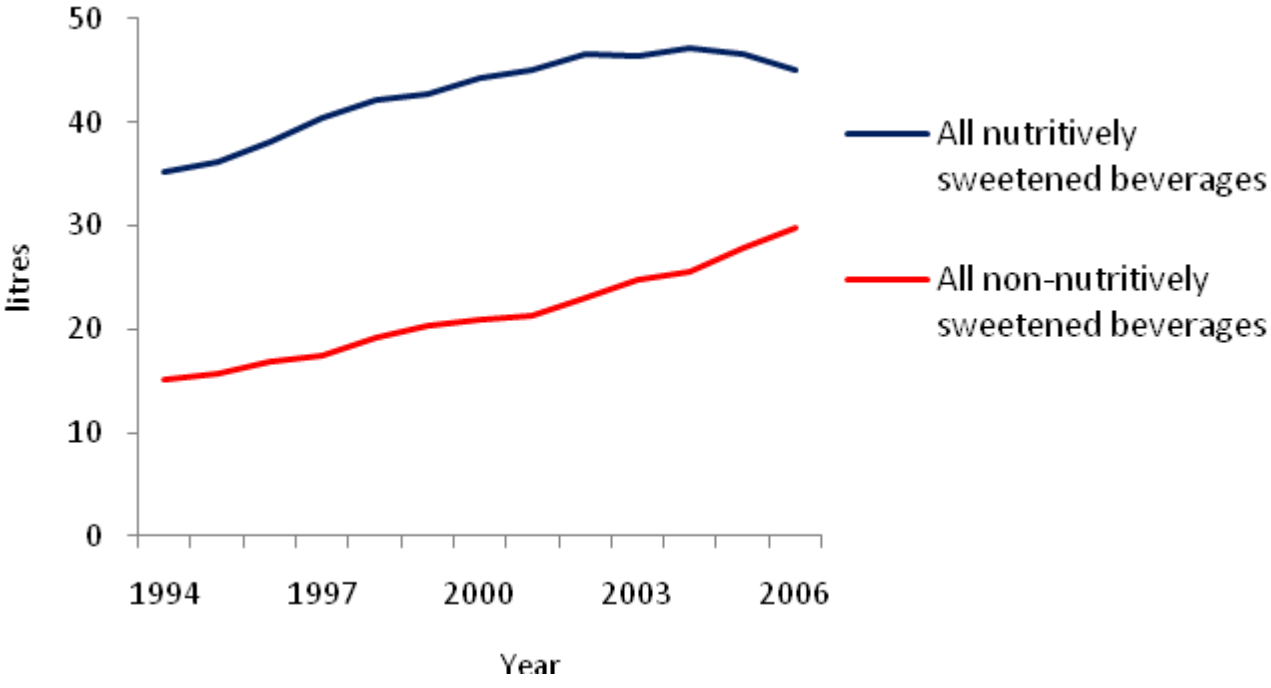
Now to the charts: note that, bizarrely, the first five charts – all upward sloping! – all were published by JBM and AWB!

Figure 1: Australian sugar availability
(kg per person per year)



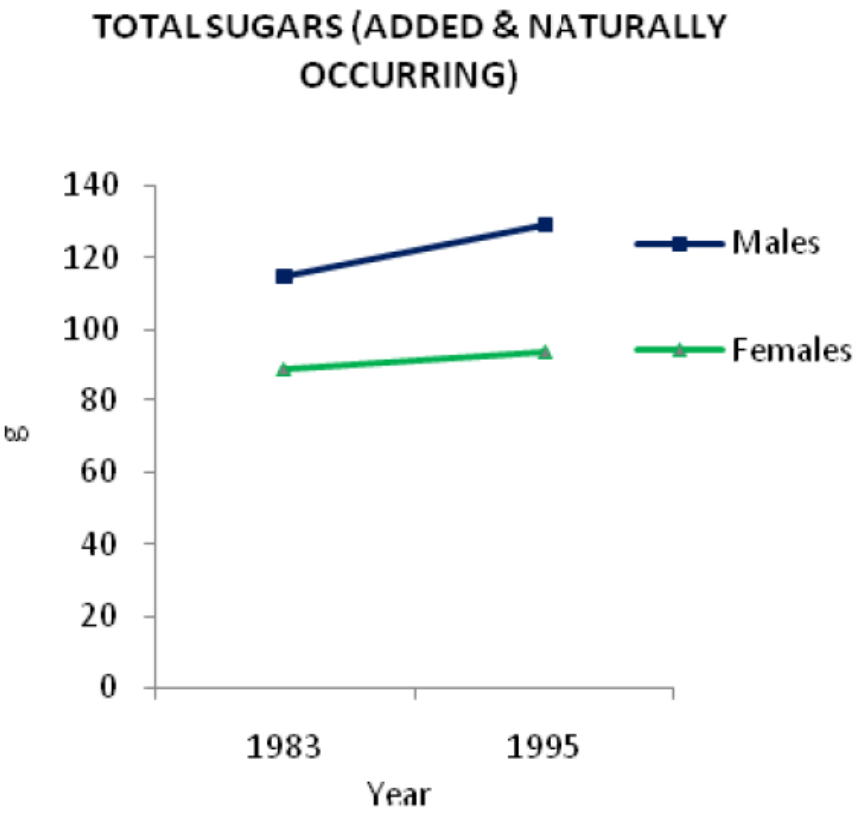
Source: ***Australian Paradox Revisited*** ; My "trend" for "the past 30 years"

Figure 2: Australian softdrink sales; Top (dark) line is sugary softdrinks
(Litres per person per year)



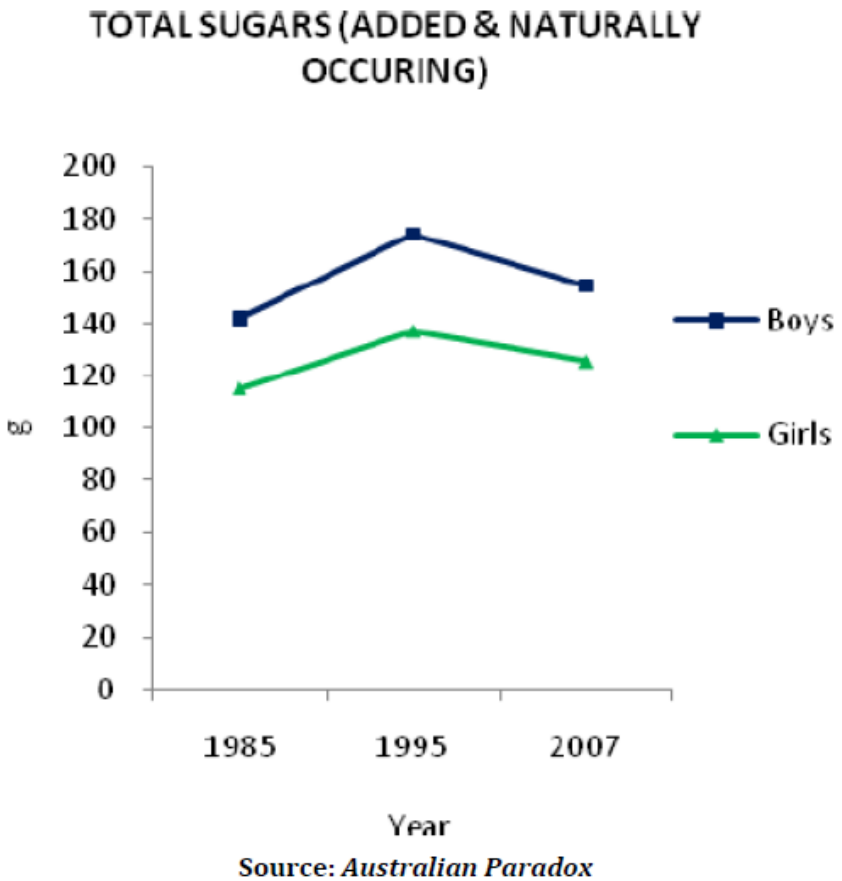
Source: ***Australian Paradox***

Figure 3: National surveys - Adults



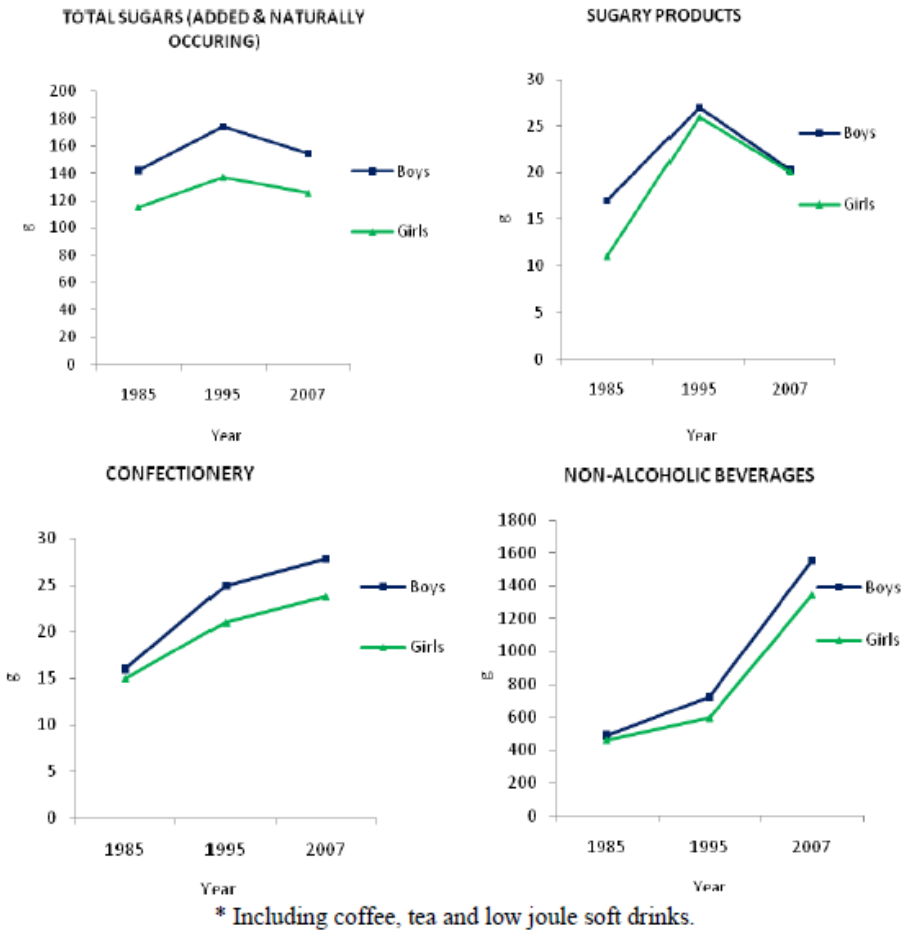
Source: *Australian Paradox*

Figure 4: National surveys - Children



Source: *Australian Paradox*

Figure 4a: National surveys - Children



* Including coffee, tea and low joule soft drinks.

Source: ***Australian Paradox***

Figure 5: Australian sugar industry's measure of sugar consumption

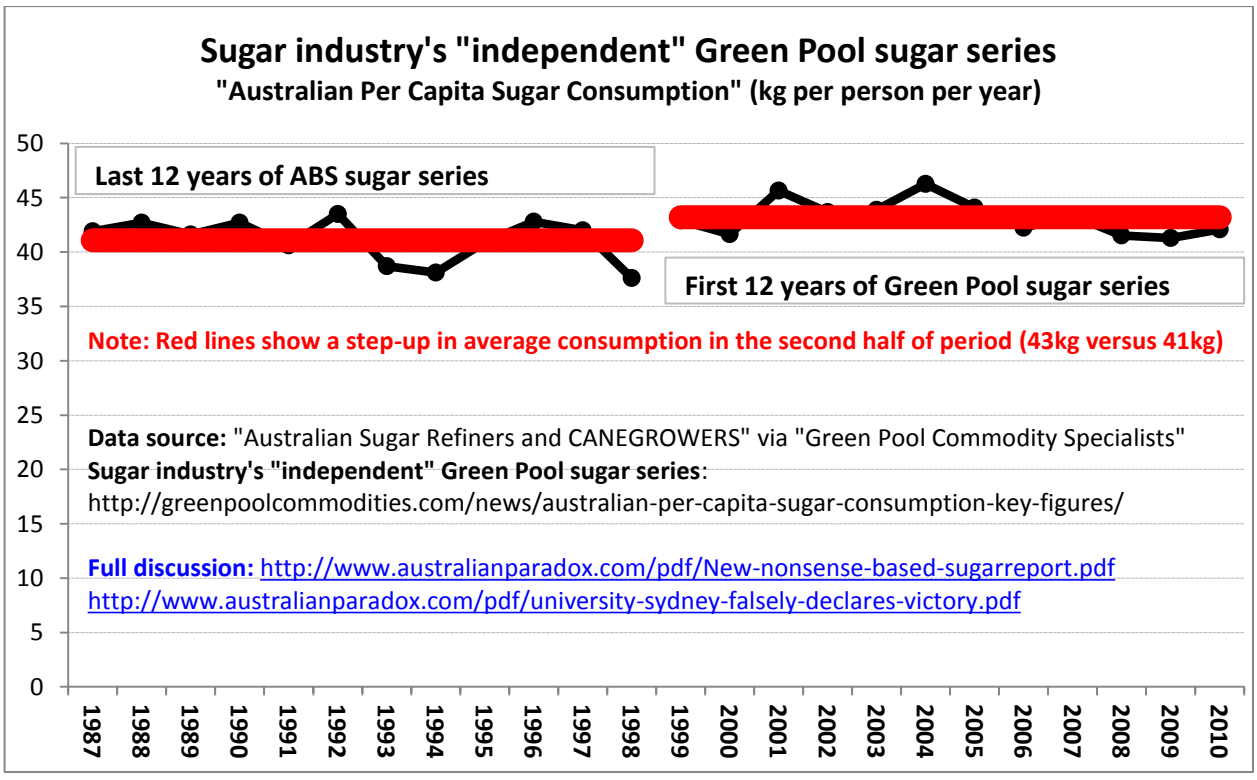
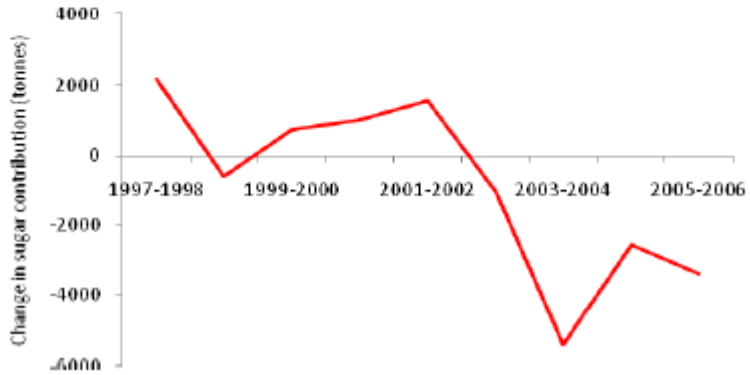


Figure 6: Annual change in sugar via sugary drinks (tonnes per year)

Figure 6 shows the annual change in the contribution of sugar from nutritively sweetened carbonated soft drinks (sugar-sweetened soft drinks) to the Australian food supply [30]. Levy and Tapsell [30] reported a concurrent increase in sugar from other nutritively sweetened beverages (e.g., sports drinks, flavored waters and iced teas). However, the increase in sugar contribution to the food supply from these beverages did not contribute enough volume to match the decline in nutritively sweetened carbonated soft drinks. Overall, there was a decrease in sugar contribution from nutritively sweetened carbonated soft drinks to the Australian food supply, amounting to 12,402 tons (~600 g per person per year, Figure 6) from 2002 to 2006.

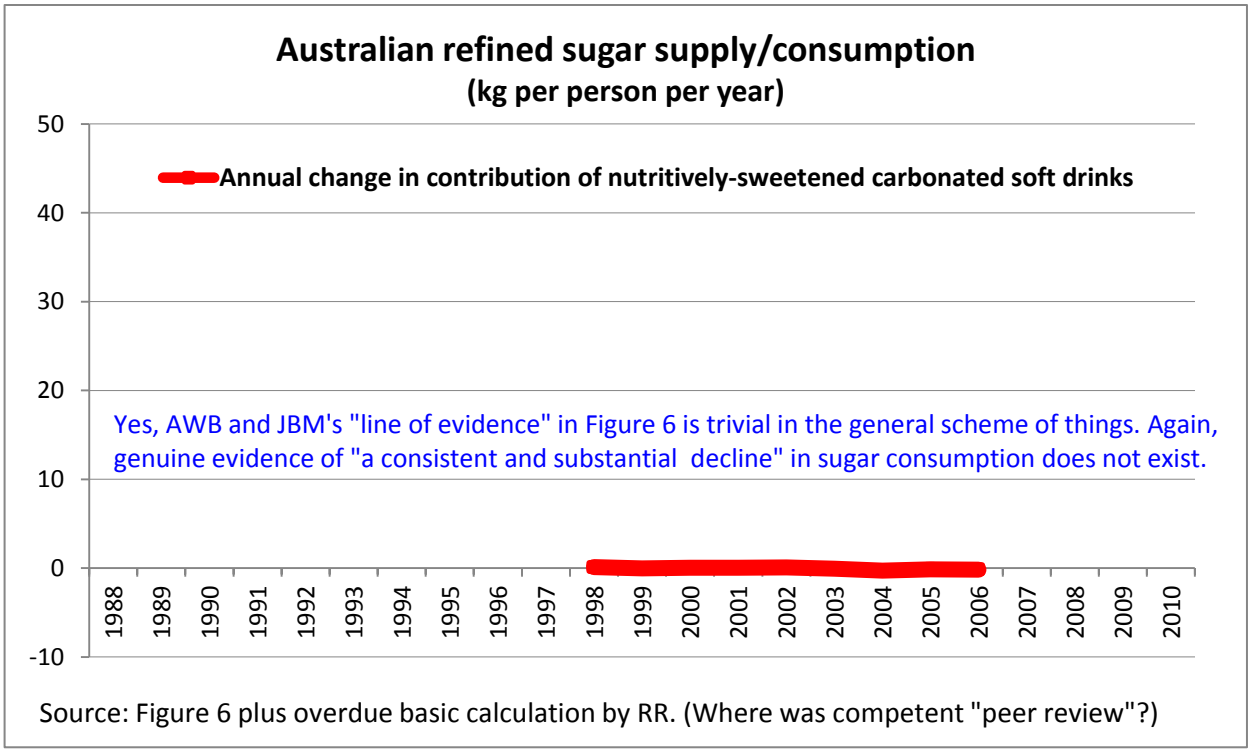
Figure 6. Annual change in contribution of nutritively-sweetened carbonated soft drinks to total added sugar in the Australian food supply [30].



Source: ***Australian Paradox***

Figure 6a: Annual change in sugar via sugary drinks (kg per person per year)

(Calculated by multiplying readings in Figure 6 by 1000, then dividing by our ~20,000,000 population)



Source: Figure 6 plus overdue basic calculation by RR. (Where was competent "peer review"?)

Figure 7: FAO's falsified sugars series (updated) versus Green Pool series

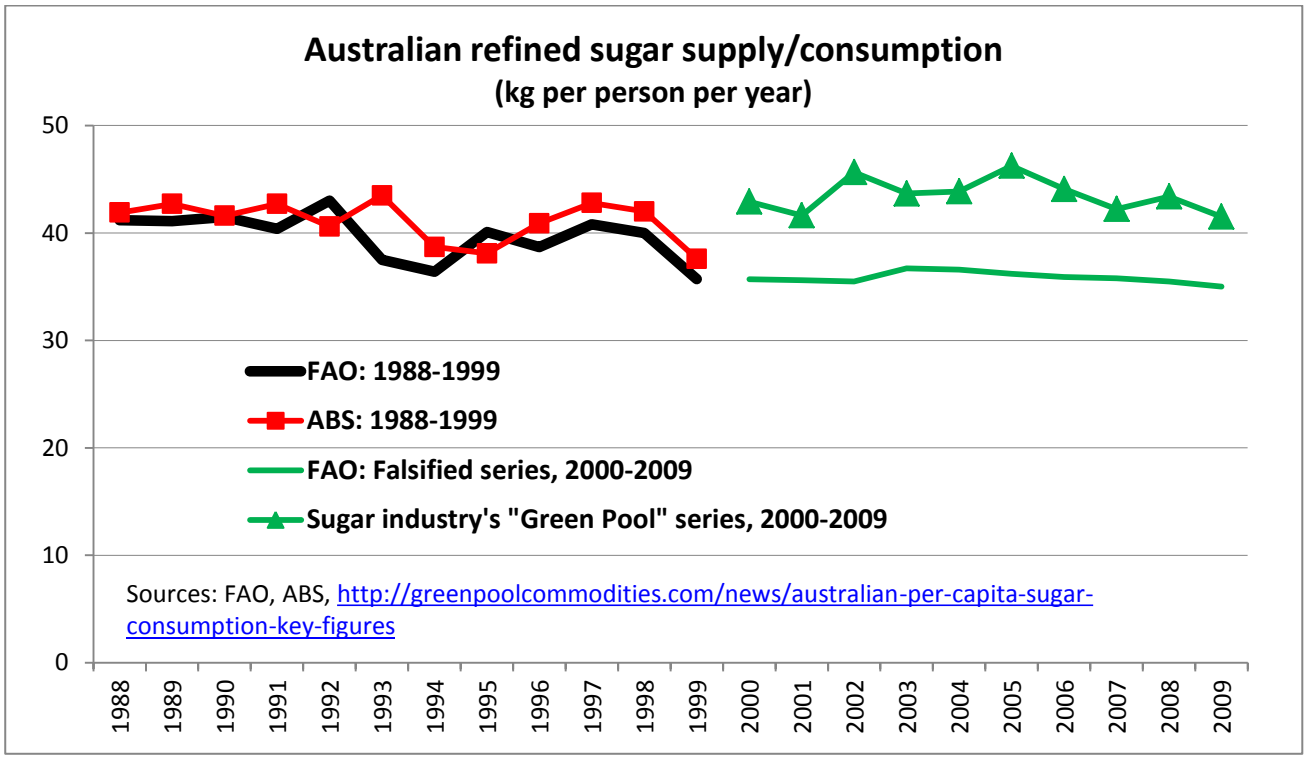
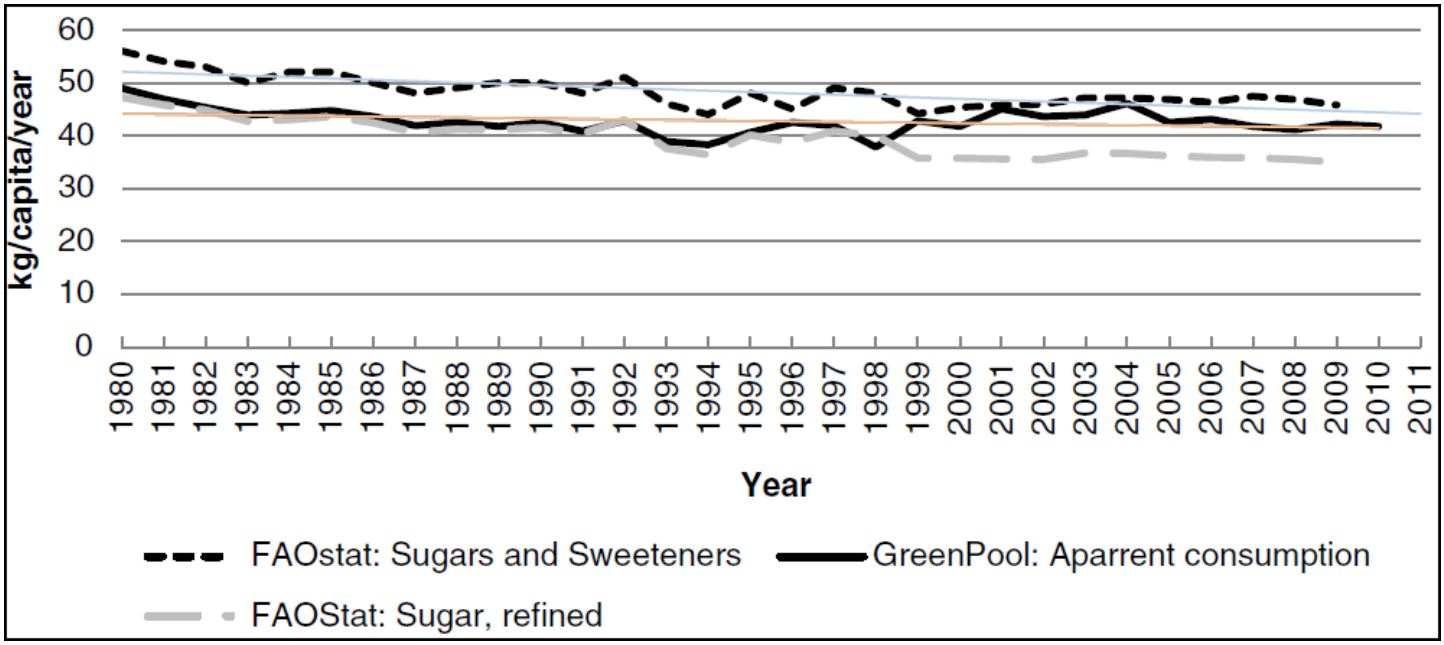


Figure 8: No valid evidence of "a consistent and substantial decline"

The FAO series are falsified after 1998-99. As we saw in Figure 5, the ABS/Green Pool sugar series is flat/up over past quarter-century (check the 12-year averages). How do *you* spell "Aparrent"?



Source: Rikkers *et al*, *Is there an Australian Paradox?*

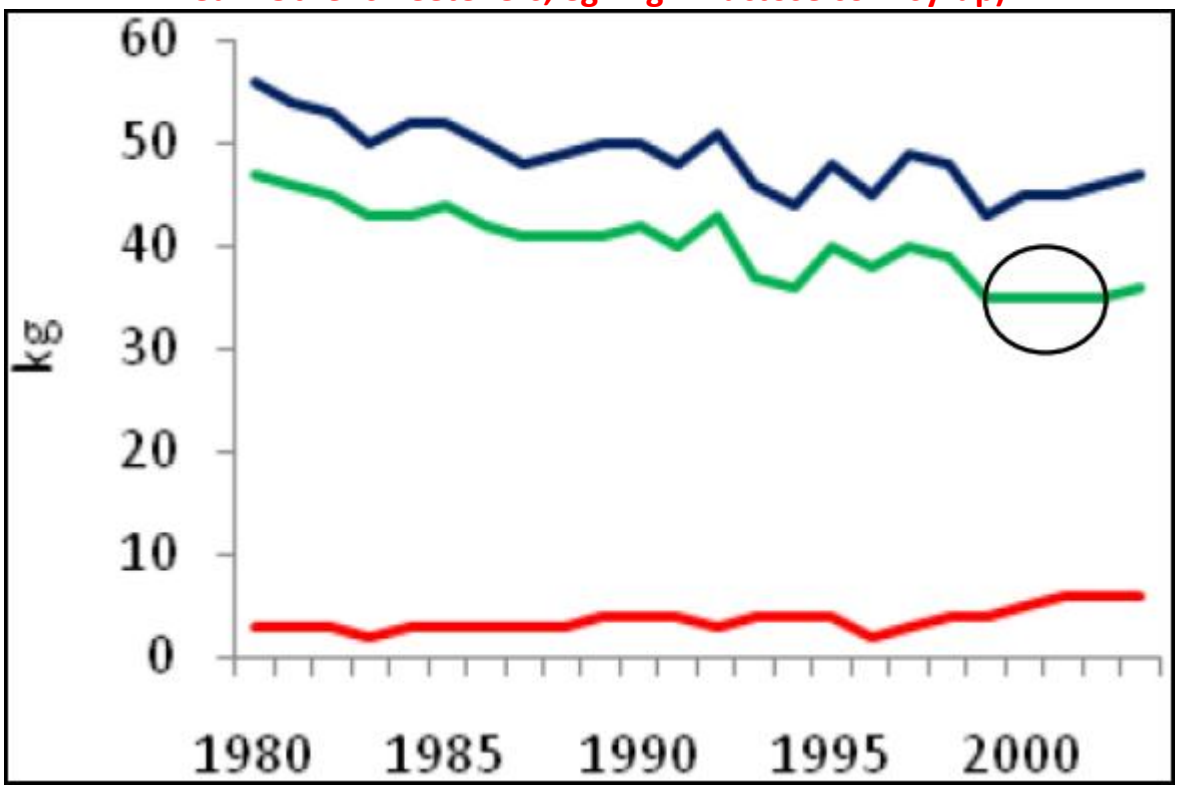
(p.9 of 11 at http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf)

Figure 9: FAO's falsified sugars series in *Australian Paradox*

(kg per person per year)

Blue = Total added sugars; Green = refined sucrose

Red = Other sweeteners, eg. high-fructose corn syrup)



Source*: *Australian Paradox

Figure 10: 1998-99 data dead-end; didn't notice falsified data or just didn't say?

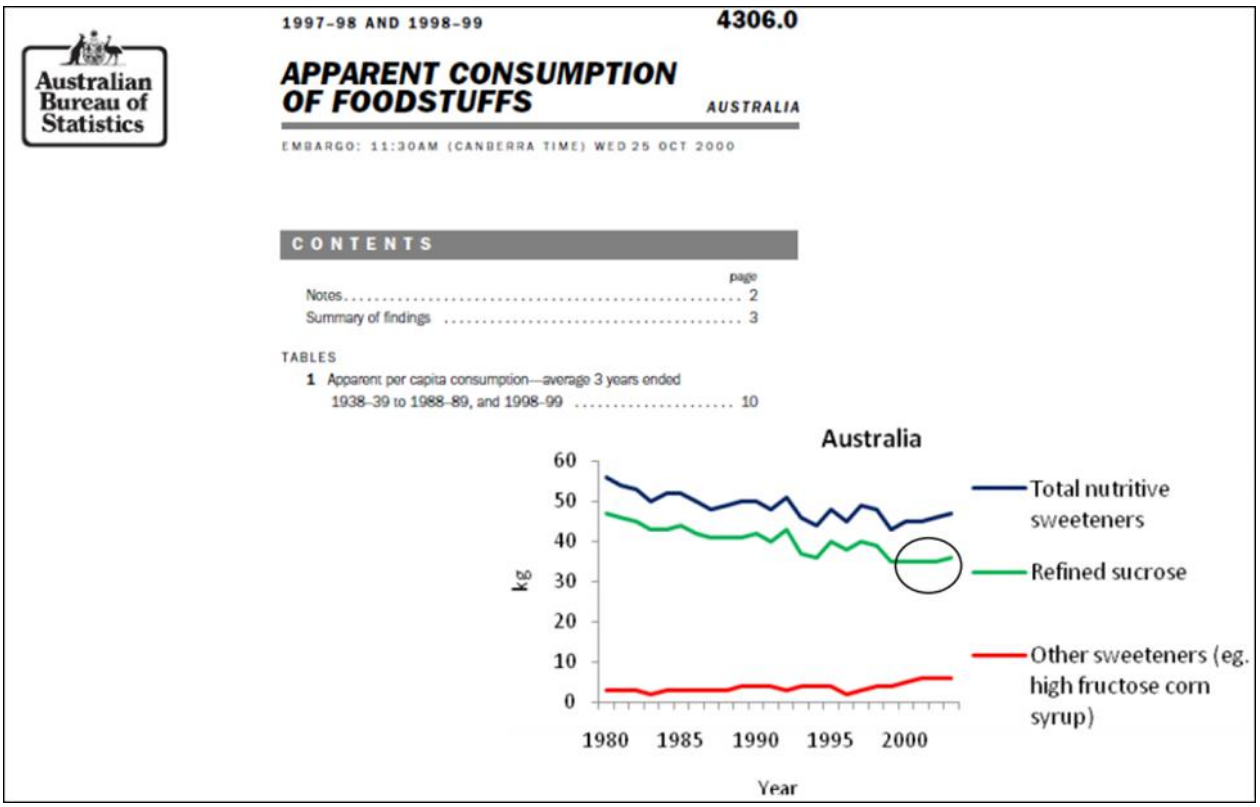
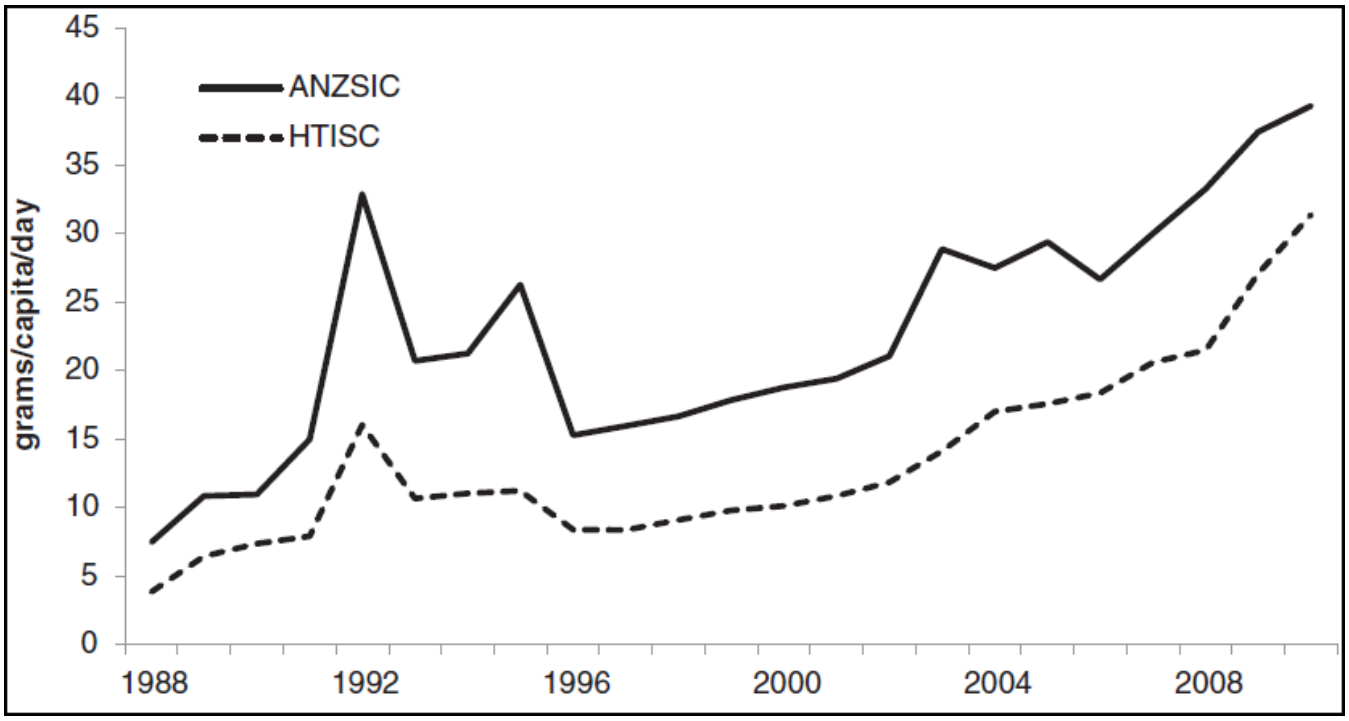


Chart 22 at http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf

Figure 11: Per capita sugar imports via processed food and drinks



Source*:* Rikkers *et al*, *Is there an Australian Paradox?* (p.4 of 11)

Section 1, continued…

The only credible way forward for University of Sydney Vice-Chancellor Dr Spence and MDPI's Mr Rordorf is to instruct their under-supervised scientists/authors to correct or retract their self-published and spectacularly faulty *Australian Paradox* paper. When I write "**self-published**", I mean that the lead author – JBM - and the "Guest Editor" of the publishing journal – JBM – are the same person! http://www.mdpi.com/journal/nutrients/special_issues/carbohydrates

Outrageously, Deputy Vice-Chancellor (Research), Professor Jill Trewhella, suggests that this cosy arrangement is consistent with "internationally accepted standard practice". Yet **incompetent quality control** by the authors, the University of Sydney, and MDPI *Nutrients* journal's "Guest Editor" and its other editors clearly is the main factor that facilitated the negligent publication and fallacious defence of JBM and AWB's extraordinarily faulty "science": http://www.australianparadox.com/pdf/Sept2012-Conversations.pdf

When I write "**incompetent**", I mean eye-popping. The original paper would never have been published in a real journal with real quality control. (Please open the paper via the mdpi.com link above.) For starters, notice that the "**3 fold**" increase in obesity in Australia discussed in the *Abstract* (p. 491) morphed into a "**~300%**" increase (not 200%), in *Conclusions* (p. 502). I'm not saying that's a hanging offence. I'm saying schoolboy errors are important because they reinforce my claim that no-one competent – authors, independent reviewers or editors - read the paper before it was published. Did lead author JBM actually read her own paper before its self-publication? (See number XX in Section 5.)

Anyway, please read Sections 2-5 below, and make up your own minds about the quality of the scholarship in this episode. Reading just Section 2 – or just Sections 2 and 3 – will for most provide sufficient evidence of my correct claims.

2. University of Sydney's clownish self-published analysis of simple softdrink statistics

Importantly, the main reason we can be sure that the University of Sydney's "finding" of "a consistent and substantial decline" in sugar consumption between 1980 and 2010 is **unreasonable, or reckless, if you prefer**, is because there are **no reliable data**. The available data are woefully incomplete and in general tend to point up not down! (Figures 1-5)

Amusingly, the clownish nature of the *Australian Paradox* "finding" is on full display in JBM and AWB's analysis of sugar intake via sugary softdrinks. For starters, I reckon that most of us born before 1970 with two functioning eyes have personally witnessed a large increase in per-capita consumption of sugary softdrinks between 1980 and 2010. If I'm right on that, few readers will be shocked to learn – **via Figure 2 above**, the authors' own chart from *Australian Paradox* - that per capita sales of sugary softdrinks (top line) increased by 30% (from 35L to 45L per year) between 1994 and 2006.

As I said, the data presented by JBM and AWB are embarrassingly incomplete, and thus insufficient to prove anything much. But obviously **a 30% increase in sugary softdrink sales between 1994 and 2006, if anything, contradicts** rather than supports the claim that there was "a consistent and substantial decline" in sugar consumption between 1980 and

2010. Moreover, given that the issue is **the volume of sugar in sugary softdrinks**, JBM and AWB's confused focus on non-sugary drinks including bottled water is a complete furphy. That is, beverage-industry market shares are irrelevant in an historical analysis of sugar consumption: non-sugary drinks contain zero sugar and thus are a big fat furphy!

Okay, so Figure 2 points up not down, right? Right. Extraordinarily, JBM and AWB claim that our 30% increase in sugary softdrink sales is actually a 10% decline: "Food industry data indicate that per capita sales of low calorie (non-nutritively sweetened) beverages doubled from 1994 to 2006 [correct, from about 15L to 30L] while nutritively sweetened beverages decreased by 10%" (p. 500). No, again, they rose by 30% from 35L to 45L. **Readers, that's a blatant error that should be corrected immediately - replacing "decreased by 10%" with "increased by 30%"** - alongside JBM and AWB's initial formal *Correction* way back in August 2011: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3257697/

Confronted several times about their clownish false claim of a 10% decrease in sales of sugary softdrinks, JBM and AWB always retreat to their Figure 6. Ironically, Figure 6 merely highlights further blatant errors. For starters, the self-published text on Figure 6 (shown above) reports: "Overall, there was a decrease in sugar contribution from nutritively sweetened carbonated soft drinks to the Australian food supply, amounting to 12,402 tons (~600 g per person per year, Figure 6) from 2002 to 2006". Readers, let's "peer review" that "~600 g per person per year" calculation.

So, how's your competence in junior-school maths? Let's see: "12,402 tons" spread over four years is 12,402,000,000 grams over four years, shared between roughly 20 million Australians. Dividing by four, that's ~3,000, 000,000 grams per annum shared between ~20, 000,000 of us. Cancel seven zeros and that's ~300 grams per year between two people. Or ~150 g per person per year, not "~600 g per person per year". **That error too should be formally corrected – by replacing "600 g" with "150 g" - without further unreasonable delay. Anyone think I'm wrong?**

Importantly, 150 g per person per annum is trivial in the general scheme of things. Indeed, when the tonnage figures shown in Figure 6 are properly converted to kilograms per person per year in my Figure 6a - as they should have been in the first place – JBM and AWB's "substantial" tonnage figures collapse to nothingness: the "kg per person per year" series runs along the X-axis at zero. **Readers, my Figure 6a shows that there is no "substantial decline", collapsing the credibility of JBM and AWB's Figure 6 and making a mockery of their latest nonsense-based defence of *Australian Paradox* in *BMC Public Health***: final para, p.10 at http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

In summary, based solely on JBM and AWB's sensational sloppiness with sugary softdrink statistics – and before we look at other serious problems in Sections 3-5 below - it is clear that the *Australian Paradox* paper is hopelessly faulty - a joke:

- JBM and AWB confused a 30% increase in sugary softdrink sales with a 10% decrease. That's hard to do, and still get published in a "peer reviewed" journal! Dr Spence must be impressed. That error must be corrected in *Nutrients*.
- JBM and AWB's non-existent 10% decrease in sales of sugary softdrinks was central to their claimed "paradox" of consumption down, obesity up. The 30% uptrend in the sugary softdrink "line of evidence" belies the claimed paradox (consumption up, obesity up - what paradox?), arguing for the joke *Australian Paradox* paper's retraction.
- JBM and AWB miscalculated that "600 g" figure: the correct figure is 150g. Again, a formal correction is required.
- JBM and AWB misread the significance of their supposedly giant-sized "12,402 tons" of sugar in Figure 6. In fact, when properly scaled - "kg per person per year" in my Figure 6a - their claim of a "substantial decline" is revealed to be complete nonsense, adding to the case for retraction.
- Clearly, sugar consumption via sugary softdrinks did not decline substantially. Indeed, it's hard to think it did not increase substantially. After all, big-sellers like Coca Cola, Sprite and Fanta all still have sugar contents in excess of 10%, and that 30% uptrend between 1994 and 2006 almost certainly was preceded by a similarly strong uptrend between 1980 and 1994. Sugary softdrinks up. Sugary milk up. Sugary energy drinks up. Obesity up. What paradox?

Does anyone think my observations above are wrong? Does anyone think anyone competent read through the self-published *Australian Paradox* paper before it was self-published? Does anyone think it is reasonable for ADPI's Mr Dietrich Rordorf, JBM, AWB, Dr Spence and Professor Trewhella to keep pretending that the University of Sydney's "shonky sugar study" is flawless "peer-reviewed" science?

Beyond their hopeless data analysis, JBM and AWB have recklessly misread "the science" of sugary softdrinks. Even in 2011, there was strong evidence that such drinks are a key driver of global obesity and type 2 diabetes: http://care.diabetesjournals.org/content/33/11/2477.full.pdf+html So too, sugary drinks are widely seen as a key driver of heart disease and some cancers: http://www.rethinksugarydrink.org.au/ Again, outsized rates of sugar and sugary drink consumption **–** alongside alcohol and tobacco – are a major driver of **the unacceptable "gap" in life expectancy between Indigenous and non-Indigenous Australians:** https://www.mja.com.au/journal/2013/198/7/characteristics-community-level-diet-aboriginal-people-remote-northern-australia

Readers, note again that the false and always-unlikely *Australian Paradox* "finding" was designed to try to exonerate (harmful) sugary drinks as a key driver of global obesity (see "5. Conclusions", above). Notably, JBM and AWB in their

pop-sci diet books already had chosen to (falsely) exonerate sugar as a driver of type 2 diabetes: http://www.australianparadox.com/pdf/diabetes.pdf

So how did the University of Sydney get it so wrong? It is hard to know exactly. Unfortunately, JBM and AWB's major conflicts of interest are a serious and unsettling issue. The background here is that JBM and AWB are amongst the world's foremost advocates of the (low) Glycemic Index (GI) approach to nutrition. Two or three million book sales and counting: http://www.australianparadox.com/pdf/diabetes.pdf

On the GI scale, food and drinks GI=55 and under supposedly are Healthy while those over 55 are somewhat less so. **Notably, Coca Cola is low GI=53, at the healthy end of the GI scale**, according to *PROFESSOR JENNIE BRAND-MILLER'S LOW GI DIET Shopper's Guide 2013* (Hachette Australia). So, JBM's low-GI approach likes Coca Cola; in turn, the Coca Cola company likes JBM's *Australian Paradox* paper exonerating sugary drinks as a key driver of global obesity: http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html

Interestingly, AWB was happy to take the time to tell his faulty *Australian Paradox* story for the Coca Cola company: http://www.livepositively.com.au/Webinar?id=5 Notably, the University of Sydney helped the **Australian sugar industry** to produce a new brand of sugar in the late 2000s, and continues to promote the consumption of many sugary processed carbohydrates: http://www.csrsugar.com.au/Better-For-You-Products/CSR-LoGiCane-LowGI-Sugar.aspx

Disclosure of this major conflict of interest is an issue. While still busy trying to exonerate harmful sugary softdrinks as a health hazard in 2013, AWB and JBM are presented in the *BMC Public Health* journal as associated only with the "Australian Diabetes Council" and the "School of Molecular Bioscience and Boden Institute of Obesity, Nutrition and Exercise, University of Sydney": p.9 of http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

Left **undisclosed** to global readers of the *BMC Public Health* journal is the fact that JBM and AWB's day jobs and careers revolve around the operation of the University of Sydney's Glycemic Index (GI) enterprise, which exists in part to charge food companies up to **$6,000 a pop** to stamp particular brands of sugar and sugary products as Healthy: pp. 10-11 of http://www.gisymbol.com.au/cmsAdmin/uploads/Glycemic-Index-Foundation-Healthy-Choices-Brochure.pdf ; p. 5 http://www.foodhealthdialogue.gov.au/internet/foodandhealth/publishing.nsf/Content/D59B2C8391006638CA2578E600834BBD/$File/Resources%20and%20support%20for%20reformulation%20activities.pdf

This major financial conflict of interest is rather unsettling, given JBM and AWB's reckless misreading of the science of sugary softdrinks, on top of their ham-fisted assessment of the available information on trends in softdrink and sugar consumption, including their ongoing embrace of falsified data as fact. With the University of Sydney's highest-profile food-industry service providers recklessly exonerating harmful sugary softdrinks as harmless, outsiders can only look on and wonder if JBM and AWB on this matter are wearing their "scientist" hats or "GI business" hats?

3. FAO's falsified data to the fore

Readers, please take a close look at Figures 9 and 10 above, reproduced from *Australian Paradox*. Notice that the green readings spanning 1999-2002 form a flat line. Isn't that remarkable? I say remarkable because, as many are aware, perhaps the rarest thing in nature – and so naturally rare in real-life scientific observations of humans, animals and plants - is a dead-straight flat line. Indeed, the term "flat-lining" is associated with things not living but dead.

Yes, that flat line literally is remarkable. And yet the University of Sydney has avoided remarking on it like the plague. Indeed, one of the extraordinary aspects of the *Australian Paradox* scandal is that while supposedly wrestling with a "paradox", JBM and AWB never felt the need to remark upon this most remarkable thing; for as long as they could, they avoided any discussion of the remarkably flat falsified green lines in Charts 21 and 22 at http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf

Importantly, that flat-lining data series in Figures 9 and 10 below was a correct hint of falsified figures. In fact, JBM and AWB's critical Food and Agriculture Organization (FAO) sugar series is conspicuously flat in the 2000s because the FAO began falsifying its Australian sugar series after 1998-99, after the ABS **discontinued as unreliable** its apparent consumption series: Contrast Letters 4 and 6 in http://www.australianparadox.com/pdf/FAOfalsifiedsugar.pdf

That is, after spoon-feeding sugar data to the FAO for decades, the ABS after 1998-99 stopped counting, simply discontinued the series as unreliable. So there are no valid data after 1998-99. Full stop. **Outrageously, the FAO chose to repeatedly (re)publish the dead-end figure of 37kg from 1998-99, year after year**. That's why we have a falsified flat line in JBM and AWB's preferred chart, the chart on which the flagrantly false *Australian Paradox* "finding" seeks to rely (Figures 9 and 10, above).

Amusingly, in response to the University of Western Australia (UWA) researchers Rikkers *et al* putting the spotlight on our under-supervised authors' sloppy scholarship in a formal journal, JBM and AWB finally were forced to remark upon

the remarkably flat falsified line upon which they had chosen not to remark previously, not in *Australian Paradox* nor *Australian Paradox Revisited*. Forced to respond to Rikkers *et al*, JBM and AWB claimed outrageously – either cluelessly or disingenuously - that **"...the data for the 4-year period 1999–2003 now appear to have been underestimated"**: p. 10 of http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

No, not underestimated. Falsified. That FAO sugar series after 1998-99 was falsified at the time of JBM and AWB's initial self-publication back in 2011 and it still is falsified today. Again, there are no valid data for the 2000s, not since the ABS discontinued the publication of its unreliable sugar series after 1998-99 (see FAOfalsified link above).

Readers, most experienced analysts would have been cautious about embracing a data series in 2011 that the ABS had discontinued as unreliable a decade earlier, after 60 years! Furthermore, there is a fairly widespread convention amongst competent scientists and administrators across the globe that there is no role for falsified data in "peer reviewed" science. Why is one of Australia's Group of Eight universities taking a completely different approach?

Even the discredited e-journal *Nutrients* says - http://www.mdpi.com/about - it has a "**zero tolerance policy**" towards falsified data, although in the event - so far - it has done nothing about the flat-lining falsified figures that feature in the faulty *Australian Paradox* paper.

Journalists, why not phone a sample of our Group of Eight Vice-Chancellors and enquire about university policy regarding their scientists' use of falsified data in "peer reviewed" science? Is reliance on falsified data okay or not okay? http://www.go8.edu.au/go8-members/go8-board

4. Big-picture analysis of University of Sydney's three nonsense-based "lines of evidence"

Readers, the *Australian Paradox* claim is very specific, involving "a consistent and substantial decline" in sugar consumption "over the past 30 years", from 1980 to 2010. The simple observation I've been making for the past 18 months is that the University of Sydney's under-supervised scientists have presented no valid evidence for their always-unlikely claim. When I say "valid", I mean "not falsified". Indeed, much of the valid evidence goes the other way.

In July, I was incensed to see JBM and AWB again concede nothing in a discussion of their hopelessly flawed paper. In their latest unreasonable defence of their faulty paper as flawless, they summarise: "In 2011, Barclay and Brand-Miller reported three separate lines of evidence indicating downward trends in added sugars intake over the same timeframe that the prevalence of overweight and obesity among Australians had dramatically increased. We referred to this inverse relationship as the *Australian Paradox*": p. 11 of http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

As we already have seen, those "three separate lines of evidence" include an incompetent analysis of sugary softdrink sales, as well as an unacceptable embrace of falsified FAO data. My summary of the graphical evidence is as follows:

- Bizarrely, the **upward trends in Figures 1, 2, 3, 4 and 4a** - charts published by JBM and AWB and reproduced above – all contradict rather than support the claim of "a consistent and substantial decline" in sugar intake.
- So too do **the upward trends in Figures 5 and 11**. The former measure, ironically, was commissioned, funded and "framed" by the University of Sydney's low-GI business partner, the Australian sugar industry, while the latter measure was produced by University of Western Australia (UWA) researchers – including a 30-year veteran of the ABS - attacking JBM and AWB's nonsense-based paper: http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf
- Again, that series of observations stuck at **zero kilograms per person per year in my Figure 6a** shreds the credibility of JBM and AWB's defence of their embarrassingly ham-fisted analysis (see the final paragraph in the previous link).
- The **remarkably flat line-segments in Figures 7-10 reflect falsified data**, an anathema to competent scientists and administrators. Again, in this slowly inflating *Australian Paradox* scandal the University of Sydney and the Food and Agriculture Organization (FAO) have revealed themselves to be outrageously unreliable sources of dietary information: http://www.australianparadox.com/pdf/FAOfalsifiedsugar.pdf

Yes, what a debacle! Each of their three "lines of evidence" is completely wrong or ridiculously compromised. Yes, none for three. Oops! The paper would never have been published in a real journal with real quality control. Readers, I challenge you to show me a less competent or more reckless paper authored by a high-profile and influential professor of science at an Australian Group of Eight university. Disturbingly, AWB is Head of Research at the Australian Diabetes Council and an influential spokesman for the Australian Dietitians Association, which retails his nonsense: http://daa.asn.au/for-the-media/hot-topics-in-nutrition/sugar-and-obesity/ ; http://daa.asn.au/for-the-media/daa-spokespeople/about-daa-spokespeople/ ; http://www.livepositively.com.au/Webinar?id=5

Readers, while few choose to use the brutally honest words "scientific fraud" or "research misconduct", my observation that the *Australian Paradox* "finding" is incorrect has been confirmed publicly by a range of observers:

- **Dr Rosemary Stanton** observed in 2012, "And yes, I agree with you [Rory] that we have no evidence that sugar consumption in Australia has fallen"; "I have many objections to that particular paper and to the idea that sugar is not a problem"; and "I have expressed my opinion about the paper to the authors...I will almost certainly cite it at some stage as an example of something I consider to be incorrect": Slide 18 in http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf

- **Professor Boyd Swinburn**, "...says the study's summary of the data ...belies the facts 'and is a serious over-call in my opinion'... 'the ecological trends of sugar and obesity are pretty well matched and I do not believe there is any paradox to explain' " http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html#ixzz2cJqOjTFu

- In July 2013, **five University of Western Australia (UWA) researchers - including a 30-year veteran of the Australian Bureau of Statistics (ABS)** – confirmed in a "peer reviewed" journal that the *Australian Paradox* claim has no serious basis in fact: http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

Almost a year ago, I spoke of my concerns in a formal discussion on ***The place of sugar in Australia's Dietary Intake Guidelines***, **Parliament House, Canberra, 29 October 2012**:
http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf

Photos from Canberra:
http://multimedia.aapnewswire.com.au/search.aspx?search=public+discussion+sugar%26%28importdate%3E20121028%29&gallery=PUBLIC+DISCUSSION+SUGAR

5. Laundry list of JBM and AWB's faulty claims in the *Australian Paradox* fraud

(i) JBM and AWB claim: Rory Robertson's critique of our *Australian Paradox* paper is wrong in part because cars not humans have been consuming up to "~14 kg per capita per year" of the available sugar via ethanol production: p. 2 of http://www.australianparadox.com/pdf/RESPONSE-TO-ROBERTSON.pdf

RR says: That clownish initial attempt to discredit my correct critique is unmistakable evidence that JBM and AWB either did not know what they are talking about or that they will go beyond what is reasonable to defend their spectacularly faulty paper. Either way, their self-published, nonsense-based paper should be corrected or retracted.

Despite being caught out on that carefully contrived yet absolutely false cars-are-eating-the-sugar claim, JBM and AWB rushed off to plonk *Australian Paradox Revisited* - their fluffy and false "rebuttal" of my correct critique – on the scientific record **without addressing** the fact that a range of indicators of sugar consumption in their own charts - Figures 1, 2, 3, 4 and 4a above - trend up not down. Nor in either *Australian Paradox* or *Australian Paradox Revisited* did the authors remark on the remarkable flat-lining FAO series that is falsified for the 2000s, as discussed above (Figures 7-10). And then there's their Figure 6 versus my Figure 6a! Widely respected journalist Michael Pascoe documented some of JBM and AWB 's shenanigans along the way: http://www.smh.com.au/business/pesky-economist-wont-let-big-sugar-lie-20120725-22pru.html

(ii) JBM and AWB state: "Therefore, using only ABARE data [in Figure 1 above], we can conclude that overall availability of refined sugar varied widely but shows no significant trend ($p = 0.46$) during a period when rates of obesity climbed dramatically": p. 2 in http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf

RR says: Again, the main finding of the *Australian Paradox* paper is very specific: "a consistent and substantial decline" in sugar consumption "over the past 30 years", from 1980 to 2010. In Figure 1 (above), it is hard not to notice the steep upward trend in that timeframe. Any competent supervision of the University of Sydney's unreliable and under-supervised food-industry service providers would have restricted their discussion to the relevant timeframe, disallowing the disingenuous detour into the 1970s, a decade irrelevant to the *Australian Paradox* dispute.

In any case, the claimed "no significant trend" still contradicts the false self-published claim of "a consistent and substantial decline". How low does the quality of scholarship have to go at the University of Sydney before Group of Eight scientists out of their depth are dismissed for incompetence or for recklessly bringing publicly funded "science" into disrepute?

(iii) JBM and AWB: On Figure 1 in *Australian Paradox Revisited*, JBM and AWB suggest that apparent consumption statistics no longer are available for "any foodstuff, including sugar" (p. 3): http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf

RR says: That self-serving suggestion is mocked by Canberra's ongoing publication of official estimates for easier-to-measure food and drink products, including beef, lamb, pork, poultry, butter, milk, cheese, beer and wine (see Tables 2.3 and Tables 2.4 at http://www.daff.gov.au/agriculture-food/food/publications/afs ; also http://www.abs.gov.au/ausstats/abs@.nsf/mf/4307.0.55.001/

As discussed below, much-harder-to-measure refined sugar has especially difficult measurement problems. Also see Section 4 in http://www.australianparadox.com/pdf/New-nonsense-based-sugarreport.pdf

(iv) JBM and AWB state: "In 2011, Barclay and Brand-Miller reported three separate lines of evidence indicating downward trends in added sugars intake over the same timeframe that the prevalence of overweight and obesity among Australians had dramatically increased. We referred to this inverse relationship as the *Australian Paradox*": p. 11 of http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

RR says: As discussed above, a feature of this growing scandal is JBM and AWB's ongoing and unreasonable refusal to notice that their claimed "three lines of evidence" amount to the false claims that up is down (Figures 1-5) and that trivial is substantial (Figure 6 versus 6a), while recklessly embracing falsified data as fact (Figures 7-10).

In July 2013, outrageously, JBM and AWB turned up in another journal pretending that their spectacularly faulty paper is flawless. As discussed above, the *Australian Paradox* scandal has developed over the past 18 months into an obvious case of "research misconduct" as defined by the NHMRC: Sections 1-10 in http://www.australianparadox.com/

Again, the obviously false original claim should never have been self-published, let alone disingenuously defended in two journals. The *Australian Paradox* paper would never have been published in a real journal with real quality control. It is unclear why *BMC Public Health* journal discredited itself by allowing JBM and AWB to publish further misrepresentations on this matter.

Extraordinarily, JBM and AWB now have had **three formal publications** on their false but business-supportive claim of "an inverse relationship" between sugar consumption and obesity without any competent formal "peer review" to correct their many now-published misrepresentations of the underlying facts. This is how Australian Group of Eight "science" is supposed to work? Is this a sample of the quality of the obesity research that we taxpayers are going to be paying for at the new $500m obesity-research hub that is the **Charles Perkins Centre** at the University of Sydney?

(v) JBM and AWB state: "Food industry data indicate that per capita sales of low calorie (non-nutritively sweetened) beverages doubled from 1994 to 2006 [correct] while nutritively sweetened beverages decreased by 10% [incorrect]" (*Australian Paradox*, p. 500).

RR says: Again, Figure 2 shows that sugary softdrink sales increased by 30%, from 35L to 45L per person per year. Yes, the claim that sugary softdrink sales "decreased by 10%" is an eye-popping published error, published with JBM operating as "Guest Editor". Students of this scandal are aware that JBM and AWB got themselves into tangles between absolute levels and "market share" figures in the same sentence. That error would not have been published if anyone competent had read the paper before someone hit the "self-publish" button at MDPI's *Nutrients* journal.

Can anyone think of a good reason why the University of Sydney's unreliable and under-supervised authors should not immediately publish a formal correction of that blatant error alongside their initial formal *Correction* back on 9 August 2011? http://www.mdpi.com/2072-6643/3/8/734/

(**vi) JBM and AWB state**: "Unfortunately, Rikkers et al. interpret the change in the volume of beverages as equivalent to change in sugar consumption, failing to recognise a decline in the concentration of added sugar in soft drinks" (p. 10).

RR says: Again, JBM and AWB confused a 30% increase in sales of sugary softdrinks with a 10% decrease. That's hard to do in a "peer reviewed" paper. After haplessly confusing up with down - and then having no-one competent check their work before it was self-published – JBM and AWB now arrogantly are pretending that a 30-year veteran of the ABS and her four colleagues have not correctly identified obvious problems in their clownish *Australian Paradox* paper.

Let's look at some basics. Before that 30% increase in sugary softdrink sales in Australia between 1994 and 2006, US experience suggests there was a steep upward trend between 1980 and 1994. Let's be conservative and guess that sugary softdrink sales per person in Australia increased by a total of 50% between 1980 and 2010. Clearly, sugar consumption via sugary softdrinks did not decline substantially.

Indeed, it's hard to think it did not increase substantially. Again, big-sellers Coca Cola, Sprite and Fanta all still have sugar contents in excess of 10%. And that 30% uptrend between 1994 and 2006 almost certainly was preceded by a similarly

strong uptrend between 1980 and 1994. Sugar consumption via sugary softdrinks is up. Consumption of sugary milk is up. Consumption of sugary "energy drinks" is up. Obesity is up. Again, what paradox?

(vii) JBM and AWB state: "Manufacturers now sell soft drinks with as little as 3-5% sucrose vs 10-12% in the past. This critical information is not encapsulated by volume sales data, but by data on amounts of sugar used by the beverage industry (figure 6 in the *Australian Paradox*)" (p. 10).

RR says: Again, big-sellers Coca Cola, Sprite and Fanta all still have sugar contents in excess of 10%, as too do various big-selling "energy drinks". Importantly, sales of diet softdrinks - the no-sugar versions – and bottled water are irrelevant for competent assessments of the amount of sugar involved.

And then there's funny Figure 6! It's funny because Figure 6 is the work of high-profile and influential scientists, scientists who for a year and a half have with a straight face refused to correct the serious and obvious errors in their extraordinarily faulty paper. When competent analysts challenge them on their faulty paper, JBM and AWB throw Figure 6 in our faces, as in the quote above.

AWB and JBM's insistence that Figure 6 in *Australian Paradox* – reproduced as my Figure 6 above – indicates "a consistent and substantial decline" in per-capita sugar consumption is revealed as clownish when their supposedly really big tonnage figures are converted to "per person, per year" figures, as they are in my Figure 6a.

Amusingly, JBM and AWB's really big tonnage numbers in Figure 6 collapse to **run along the X-axis at zero - zero - kg per person per year, collapsing the credibility of their Figure 6 in particular and their spectacularly faulty paper in general**.

(viii) JBM and AWB state: "Overall, there was a decrease in sugar contribution from nutritively sweetened carbonated soft drinks to the Australian food supply, amounting to 12,402 tons (~600 g per person per year, Figure 6) from 2002 to 2006" (p.498).

RR says: Again, let's review JBM and AWB's talent with numbers. Yes, readers, again, that's 12,402, 000,000 grams in total over four years, shared between some 20 million Australians. So, dividing by four, that's roughly 3,000, 000,000 grams per annum shared between some 20, 000,000 of us. Cancel seven zeros and that's ~300 grams per year between two people. **That's just ~150 g per person per year, not the self-published figure of "~600 g per person per year".**

That blatant error is wrong only by a factor of four, but it must be corrected in the journal *Nutrients* if the University of Sydney wants to claim that competence and integrity have an important place in the Charles Perkins Centre, the new $500 million hub for the study of obesity and related maladies that soon is to be occupied by JBM and AWB.

(ix) JBM and AWB state: "FAOStat data for Australia are almost identical to ABS data until 1998–99 when reporting ceased (Figure 8), implying similar methodologies": p. 9 of http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

RR says: Similar methodologies! What nonsense. As discussed in Section 3 above, the FAO did not originate an Australian cane-sugar (sucrose) series before 1998-99. It essentially just "cut and pasted" the ABS series for several decades. After the ABS stopped counting sugar consumption - discontinued its series as unreliable - after 60 years, after 1998-99, the FAO falsified the now-non-existent series for the 2000s simply by writing down the ABS's dead-end-1998-99 figure for several years. Hence the remarkably flat line in JBM and AWB's preferred chart, reproduced above as my Figures 9 and 10.

To be clear, the FAO responded to the ABS no longer spoon-feeding it an Australian sugar series simply by pretending the series was flat. After several decades, the FAO's first several published readings after the ABS stopped counting were unchanged at the ABS's data-dead-end figure of "37 kg. per cap": second paragraph at http://www.australianparadox.com/pdf/FAOfalsifiedsugar.pdf

(x) JBM and AWB state: "The most recent FAOStat data for Australia show that sugar availability has continued to decline (Figure 8)": p. 9 http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

RR says: Again, this is nonsense. Again, there are no real data for the 2000s, only falsified flatlining figures that the FAO made up on the basis of nothing, in order to avoid what would have been an unsightly hole - n.a.(not available) - in its dataset.

The fact that JBM and AWB continue to embrace clearly falsified data as fact is evidence of "persistent negligence" or worse. Either way, as discussed above, the University of Sydney in my opinion is in breach of the NHMRC's *Australian Code for the Responsible Conduct of Research*.

(xi) JBM and AWB state: "Although the data for the 4-year period 1999–2003 now appear to have been underestimated…": p. 10 of 11 at http://www.biomedcentral.com/content/pdf/1471-2458-13-668.pdf

RR says: Not underestimated. Falsified. One key aspect of the *Australian Paradox* scandal since early 2012 is how/why our overconfident scientists didn't notice the conspicuously flat green line in Figures 9 and 10 above. Wrestling with a "paradox" the flat line always was the thing that didn't "ring true". That line segment always was remarkably flat; it always was obviously falsified by the FAO, after the ABS stopped spoon-feeding it sugar data after 1998-99.

There never was a real sugar series for 2000-2003, yet that remarkable flat line went "unnoticed" and unremarked in the original paper and in *Australian Paradox Revisited*, JBM and AWB's second fluffy and unreasonable defence of their "shonky sugar study". Finally forced to discuss that falsified 1999-2003 segment, the underperforming authors chose to keep insisting that their clownish paper is flawless. Extraordinary. These are scientists?

(xii) JBM and AWB state: "The Green Pool analysis concluded that apparent consumption of sugar declined from 1980–2011, i.e., a conclusion that is similar to the most recent FAOStat data" (p. 9 again).

RR says: Again, the FAO sugar series for Australia is falsified - and so is invalid - over the 2000s. There are no real data for the 2000s. The FAO series is a hoax. Moreover, again, the sugar industry's "independent" Green Pool sugar series in Figure 5, above, shows sugar consumption to be flat-to-up over the past quarter-century, again contradicting JBM and AWB's faulty claim of "a consistent and substantial decline": http://www.australianparadox.com/pdf/JBM-AWB-AustralianParadox.pdf

(xiii) JBM and AWB claim: "...a new independent review of Australian's [sic] sugar consumption indicates that it is still continuing to decline" (previous link).

RR says: Again, the claim is flagrantly false: Figure 5 shows that the ABS/Green Pool consumption series is flat-to-up over the past quarter-century, contradicting the claim of "a consistent and substantial decline".

Similarly, JBM and AWB's claim that the sugar industry's support via its commissioned, funded and "framed" Green Pool series is "independent" is rather slippery. In the late-2000s, the University of Sydney's low-GI business helped CSR produce a new brand of sugar: http://www.logicane.com/Partners

Moreover, the University of Sydney operates a low-GI business stamping sugar and sugary products as Healthy. Again, the University of Sydney's Glycemic Index (GI) methodology - separating "good" foods and beverages (good = low GI = 55 and under) from "bad" (bad = high GI = over 55) - suggests that GI=53 Coca Cola is a good food: search for coca cola in http://www.glycemicindex.com/foodSearch.php

The University of Sydney's GI methodology likes Coca Cola and, in turn, Coca Cola really likes the *Australian Paradox* paper: http://www.smh.com.au/national/health/researchcauses-stir-over-sugars-role-in-obesity-20120330-1w3e5.html

So much so that it was keen to sponsor AWB getting the good word out about the spectacularly faulty *Australian Paradox* "finding" (first 10 seconds): http://www.livepositively.com.au/Webinar?id=5

Of course, if your food product is high GI then the University of Sydney for up to $6000 a pop can add super-low GI=19 fructose - the "sweet poison" half of table sugar - to make it low GI and "Healthy": p. 5 at http://www.foodhealthdialogue.gov.au/internet/foodandhealth/publishing.nsf/Content/D59B2C8391006638CA2578E600834BBD/$File/Resources%20and%20support%20for%20reformulation%20activities.pdf (if the link doesn't work, google "barclay glycemic reformulating") and pp. 10-11 at http://www.gisymbol.com.au/cmsAdmin/uploads/Glycemic-Index-Foundation-Healthy-Choices-Brochure.pdf

Yes, clearly, the University of Sydney's high-profile food-industry service providers and the sugar and sugary food industries are completely "independent"! **Awkwardly, the fact that fructose – the "sweet poison" half of table sugar – is super-low GI=19 is the fundamental flaw of the Glycemic Index approach to nutrition**: http://www.diabetes.co.uk/diabetes-forum/viewtopic.php?f=18&t=30245

As a matter of fact, it is in JBM and AWB's interest to exonerate super low-GI=19 fructose and sucrose (50% fructose) as a menace to public health because as it becomes increasingly obvious that added and concentrated super-low-GI=19 fructose and sucrose are a menace to public health, the credibility and revenues of the University of Sydney's GI business will tend to collapse. Here is a sample of some of those yummy sugary low-GI foods again: pp. 10-11 in http://www.gisymbol.com.au/cmsAdmin/uploads/Glycemic-Index-Foundation-Healthy-Choices-Brochure.pdf

As an aside, readers should be aware that the Australian sugar industry's commissioned, funded and "framed" Green Pool sugar series is basically a joke series, with the industry having disingenuously dug up the deceased ABS methodology long abandoned as unreliable. As noted by Green Pool, "Virtually all factors have largely been left as per ABS calculation, since an update of all data would require a large scale study of both the composition of imports of food into Australia and representative food compositional data for imports and exports of all categories - which is no longer collected by ABS" (p.3).

Nailing a dead parrot back on its perch is okay, but Monty Python did it better: http://www.youtube.com/watch?v=ClrBMt4eiRk ; http://www.australianparadox.com/pdf/New-nonsense-based-sugarreport.pdf

(xiv) JBM and AWB state: "Rikkers et al. claim that the *Australian Paradox* is based on incomplete data because the sources utilised did not incorporate estimates for imported processed foods. This assertion is incorrect. Indeed, national nutrition surveys, sugar consumption data from the United Nations Food and Agricultural Organisation (FAOStat), the Australian Bureau of Statistics (ABS) and Australian beverage industry data all incorporated data on imported products" (p. 10).

RR says: Again, I do not know why the *BMC Public Health* journal gave JBM and AWB the undeserved luxury of being allowed to formally publish further misrepresentations on the *Australian Paradox* matter, again without anyone competent correcting the nonsense they are retailing.

In any case, JBM and AWB are correct in saying that national-nutrition surveys and softdrink-sales figures capture imported sugar alongside domestically produced sugar. But, again, those "lines of evidence" point up not down, killing the faulty "paradox" claim. Moreover, JBM and AWB are hopelessly wrong on the FAO data: again, the falsified FAO series in the 2000s does not incorporate any genuine estimate for imported sugar via processed products in the 2000s. Again, the FAO numbers flat-line over 1999-2002 in JBM and AWB's charts because the FAO simply wrote down the dead-end ABS figure for 1999 year after year, while pretending it was doing something reasonable, something much more sophisticated.

Before declaring themselves stumped by a "paradox", exonerating sugar as a menace to public health and then campaigning against efforts to toughen dietary advice against sugar – including in sugary softdrinks - shouldn't we expect competent "scientists" to notice obviously falsified flat lines in simple charts? (Figures 7-10)

To be clear, the FAO essentially "cut and pasted" the ABS series until 1998-99. After that, for the 2000s, the FAO falsified its Australian sugar series. The FAO pretended it had real data when it did not. It had no real figures for imports of sugar because, with our sugar imports already embedded in tens of thousands of processed food and drink products, the FAO had neither the ability nor the resources required to count our imported sugar.

After all, the FAO is part of the United Nations and the UN's main priority is helping the starving children of Africa, not counting Aussie sugar. Since the UN's FAO was never going to devote sufficient resources to properly measuring Australian sugar imports in processed foods, it should have put "not available" in the empty cells for the 2000s, rather than unreasonably just making stuff up (see earlier FAOfalsifiedlink).

Importantly, Rikkers *et al* have produced estimates - shown in Figure 11 - of the volumes of sugar imported into Australia via processed food and drink products. And those estimates show per-capita imports of sugar trending steeply up not down over the 1988-2010 timeframe (up by roughly 9kg per person per year over those two decades). Yet again, the evidence contradicts the *Australian Paradox* claim. (Note that Rikkers *et al*'s measure of exports of sugar via processed products is relatively small; at around 2-3kg per person per year they largely are irrelevant.)

Now, by definition: Apparent consumption of sugar ~ Sugar availability (production-exports)+ (net) Imports – "Leakages";

So, Apparent consumption of sugar ~ Figure 1 (upward sloping) + Figure 11 (upward sloping) – "Leakages" (flat)

On leakages, the best we can do - as the ABS used to do - is assume they are flat over time. Flat over time is a reasonable assumption because when AWB and JBM searched for leakages, their best effort - their claim that cars are consuming up to 14 kg per person per year of the available sugar via ethanol production - turned out to be either an inadvertent or deliberate hoax, much like *Australian Paradox* itself: http://www.smh.com.au/business/pesky-economist-wont-let-big-sugar-lie-20120725-22pru.html

Again, the calculation above boils down to: Figure 1 (upward sloping) plus Figure 11 (upward sloping) minus Leakages (flat), so overall we have an upward sloping line. By observation, that multi-part sugar series trends up not down. Yet again, the always-unlikely *Australian Paradox* claim of "a consistent and substantial decline" in added sugar consumption between 1980 and 2010 is unsupported – indeed mostly contradicted - by the range of available information.

(xv) JBM and AWB state: "Other limitations should be noted. In their analysis, Rikkers et al. were obliged to make assumptions about the cost of imported food items in order to derive an estimate of amount consumed. However, imported goods vary markedly in price depending on country of origin, but can be much more expensive than the local product (up to 10-fold more per litre in the case of soft drink)" (p. 9).

RR says: JBM and AWB's clownish *Australian Paradox* and *Australian Paradox Revisited* pieces feature a complete lack of discussion about the absence of reliable data on sugar consumption over the 30 years to 2010. They did not mention to readers or independent reviewers (!) or editors that the ABS series ended in 1998-99, discontinued as unreliable in part because counting the grains of sugar in our modern food supply is a tough job.

That JBM and AWB in their original paper said nothing about the extreme difficulty of reliably counting the refined sugar scattered - in grains not bags - throughout our food supply, by itself, told knowledgeable readers that they were clueless on their own chosen special subject (Figure 10, above). JBM and AWB still pretend to be unaware of the measurement issues – and the ABS data dead-end - that cratered the credibility of their self-published "finding" from the outset. Again, check out those **conspicuously flat green lines in Figures 7-10 above and Slides 21 and 22** of http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf

For anyone competent considering measurement issues, it jumped out that counting the scattered grains not bags of sugar in sugary imports would be a major problem. After all, added sugar is almost ubiquitous in our modern food supply, and counting it properly must be extraordinarily difficult. Tell me, how much added sucrose and fructose, if any, have you eaten in the past week? And what's your confidence in the reliability of that estimate?

As an example of the measurement issues faced by the ABS, how much sucrose and how much fructose, if any, should analysts assume is in the $700m worth of "concentrates and beverage base" imported annually by just one firm that sells sugary softdrinks and other beverages in Australia? See note 32 and notes 3 and 4 on page 84 of 96 in http://ccamatil.com/InvestorRelations/Documents/CCA%202010%20annual%20report.pdf

If we think kindly of them, one assumes that JBM and AWB had given none of this a thought; that they hadn't noticed that the ABS sugar series had been discontinued as unreliable for a decade before *Australian Paradox* was written, and/or that their preferred FAO series flat-lines from 1998-99 because it is falsified. Apparently unaware of the detail of their subject matter, JBM and AWB claim to have observed "a consistent and substantial decline" in added sugar consumption over the 30 years to 2010. Yet what valid data there are in Figures 1-5 tend to point up not down.

Apparently clueless about critical measurement issues when they self-published in 2011, it's amusing that JBM and AWB in 2013 are defending their hopeless analysis by arguing the toss about measurement issues, insisting their critics need to be aware of them! Talk about disingenuous. Sorry, but is hard to be anything but scathing.

In any case, a 30-year veteran of the ABS has confirmed again that there is no reliable measure of per-capita sugar consumption for Australia between 1980 and 2010, confirming that the *Australian Paradox* "finding" is essentially a hoax. A ham-fisted hoax to be sure, but it has become a determined hoax nevertheless. Consider the fictional "Dr Sydney Nutrition" and his would-be fraudulent **Australian Blue Kangaroo** claim: Charts 43 and 44 http://www.australianparadox.com/pdf/AUSTRALIAN-PARADOX-101-SLIDESHOW.pdf

(xvi) JBM and AWB state: "Rikkers et al. have also misinterpreted the results of national nutrition surveys in 1983 and 1995 by confusing total sugars with added sugars...the surveys demonstrated declines in **'sugary products'** that contribute refined added sugar against increasing intakes of fruit and vegetables, implying that the absolute intake of refined added sugars had declined over time" (p. 10).

RR says: I love it. I love watching JBM and AWB pretend to be experts in this area. Last year, they wrote: "...the terminology, strengths and limitations of various nutrition data are readily understood by individuals trained in nutrition [us]", whereas Rory Robertson is "not a nutritionist" and so has no hope of understanding this really complicated simple stuff. And then they went on to explain that the cars not humans were eating a big chunk of the available sugar: http://www.smh.com.au/business/pesky-economist-wont-let-big-sugar-lie-20120725-22pru.html

In fact, JBM and AWB were unfamiliar with the relevant data when they wrote their initial fluffy and false "rebuttal" of my correct critique, tripping again and again as they tried to pretend their self-published analysis is flawless. After all, they insisted: "Although there were small increases in total sugars from 1983 to 1995 [for adults], there were **sharper declines in 'sugary products' such as soft drinks that contribute refined sugar to the diet**". Unfortunately for their credibility as experts in this area, sugary softdrinks are not categorised as "sugary products" but are located in "Non-alcoholic beverages": p. 1 in http://www.australianparadox.com/pdf/RESPONSE-TO-ROBERTSON.pdf

The problem today is that JBM and AWB refuse to understand or at least acknowledge that the category "**Sugary products" is only a small subset** of the total added sugar in our food supply. Moreover, as I have highlighted in various places: "For children in Figure 4[a]...the trend spanned by the point estimates from 1985 to 2007 is **up not down for 'Total sugars', 'Sugary products', 'Confectionery', 'Non-alcoholic beverages' and the other large sugary category of 'Cereal-based products and dishes**'. Yes, unambiguously, the post-1980 trend in sugars consumption for children is

flat/up not down as obesity ballooned. Again, what Australian Paradox?" (see Figure 4a above and in Slide 17 at http://www.australianparadox.com/pdf/22Slideshowaustraliangoestoparadoxcanberrafinal.pdf)

(xvii) JBM and AWB state: "National nutrition survey data, as cited in the *Australian Paradox*, provide the most precise data on food actually consumed" (p. 9).

RR says: Awkwardly, there are no national-nutrition survey data for adults since 1995, half of the relevant 1980 to 2010 timeframe. That is, the survey data do not exist when it matters, let alone possess some special precision. In any case, as noted, the key charts - Figures 3, 4 and 4a above - all trend up not down, leaving JBM and AWB resorting to ham-fisted cherry-picking to contrive a supportive story that in fact is an unreasonable stretch of the available information: Section 6 in http://www.australianparadox.com/

Furthermore, these surveys are hardly reliable snapshots: they are somewhat unreliable, self-reported records collected from adults and/or children. (The nice lady is coming to ask us about our diets, kids, so no lollies, icecream or softdrinks!) Finally, a small but important point: JBM and AWB should not be drawing solid lines between the available snapshots, given material changes in methodology between surveys, especially those for the 2007 survey of children.

(xviii) JBM and AWB claim: "Thankfully, reliable data on the intake of added sugars by Australians will be generated by the 2011–12 National Nutrition Survey due for release later this year [2013]" (p.9).

RR says: That will be good. But there is nothing that the ABS can publish in 2013 that will change the fact that JBM and AWB in 2011 self-published an incompetent assessment of the facts, and since then have fraudulently defended their spectacularly false *Australian Paradox* findings. Again, the valid data tend to point up not down, while the key FAO series is based on an ABS series that was discontinued as unreliable by the ABS and after 1998-99 is falsified by the FAO.

(xix) JBM and AWB claim: "Fructose Was Not 'Scarce' " (a section heading in *Australian Paradox Revisited:* http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf).

RR says: JBM and AWB embarrass themselves (further) by arguing that, in fact, "Fructose Was Not 'Scarce' " in Australia in pre-European times. One can barely believe they are serious in making this ludicrous claim. Australians way back then reportedly gorged on local delicacies "including sugarbag (bush honey) and dried bush fruits, such as the bush tomato Solanum centrale containing 80% sugars". Not to mention sugar ants: http://bushtuckerman.com.au/honey-ants/

Meanwhile, back then in Europe, the poor were not really poor at all because owning honey factories was much more common than you might think: "Apiculture, the art of raising bees, was widely practiced even by the poor. Indeed at certain times in history, consumption of honey may well rivalled our current consumption of refined sugar" (p. 4). Yes, of course, the advent of commercial farming of sugar cane (50% of cane sugar is fructose), sugar beet and corn (and high-fructose corn syrup) – not to mention commercial farming of fruit and honey - probably has boosted only marginally the average human's access to fructose. Sure. Of course we are not eating unnaturally high doses today! Again, this RBA chart - http://www.australianparadox.com/part-2 - suggests that JBM and AWB understate the average human's access to fructose – today versus (say) three centuries ago, or even three score years ago in many cases - by many multiples. Oh dear. These are scientists?

Readers, I've challenged JBM and AWB to spend a week fossicking in Centennial Park – just across from the University of Sydney - and report back on their success in seeking the average 59 grams of fructose per day that the sugar industry (under)estimates we now are eating (that is, 59 grams times two - to convert from fructose to sucrose - times 365 days equals 43kg per annum), and that's before counting fructose consumed via commercially produced fruit juice, fruit and honey.

(xx) JBM as "Guest Editor" of *Nutrients* states: "Deadline for manuscript submissions: closed (30 September 2010)".

RR says: Given that the "Deadline" of 30 September 2010 had passed and the gate was "closed" to submissions, how come the *Australian Paradox* manuscript was "*Received: 4 March 2011"*? http://www.mdpi.com/2072-6643/3/4/491

Readers, the original *Australian Paradox* paper has rather interesting origins. I do not know what to make of them, if anything. I simply have a series of questions that follow from what appear to be the facts. For starters, how come the manuscript looks to have been submitted nearly six months after submissions for JBM's "Special Issue" had "closed"?

And why was the paper - apparently submitted in March 2011 - based on hopelessly dated (as well as falsified) FAO data - only to 2003 - accessed way back "on 11 August 2009" (see #25 in References, p. 503), some 18 months earlier? Why was the paper not submitted earlier, or the data from all sources properly updated? Perhaps the paper was submitted earlier, elsewhere, but was refused publication, and then quickly self-published in *Nutrients*? Who knows? In any case, why were the featured data **so out of date – accessed 18 months earlier!** - at the time of the manuscript's submission to *Nutrients*?

High-profile nutritionist Chris Forbes-Ewan's unsolicited account reported that **Dr Barclay and Alicia Sim's 2010 Dietitians Association of Australia (DAA) Conference paper** was submitted somewhere for publication, but it appears not to have been published. Instead, that DAA paper apparently morphed into the *Australian Paradox* paper, with co-author Alicia Sim out and a new and rather influential co-author – Professor Jennie Brand-Miller - in: Slide 27 in http://www.australianparadox.com/pdf/AUSTRALIAN-PARADOX-101-SLIDESHOW.pdf

When I asked for a copy of that DAA paper and its underlying dataset, AWB on 11 February 2012 replied, "Better still Rory, you can read the full paper here: http://www.mdpi.com/2072-6643/3/4/491 ". That is, the DAA paper and *Australian Paradox* paper seem to be regarded by AWB as one broad piece of work.

Adding to the intriguing origins of *Australian Paradox*, its (final) co-authors acknowledge that, "**This study was a Masters of Nutrition and Dietetic project conducted by Laura Owens and co-supervised by AWB and JBM" (p. 502). Huh?**

Big mystery: whatever happened to those two earlier co-authors? I ask only because if those junior co-authors had remained involved they may have gone to the trouble – before publication – of fixing the range of obvious errors – small and large - that ultimately were published. Clearly, given the serious errors documented above, it would have been good if someone competent – no matter how junior – had read and corrected the paper before its self-publication. Again, I ask, did JBM actually read through her own paper before it was published with her acting as "Guest Editor" of *Nutrients*?

Beyond all that, why did two senior and high-profile University of Sydney scientists publish a supposedly profound scientific finding – "The Australian Paradox"! – in a low-profile pay-as-you-publish E-journal? I will tell you: the obviously faulty paper would never have been published in a real journal with real quality control.

Finally, if JBM was the lead author or at least the "Author to whom correspondence should be addressed" (p. 492), why is it AWB who keeps showing up to defend the faulty paper? For example, AWB, not JBM, called me a criminal "Troll" for encouraging proper scrutiny of the paper, around the same time as he was trying to stop Rikkers *et al* using the words "Australian Paradox" in their critique's title in *BMC Public Health* journal, trying to minimise proper scrutiny of his "shonky sugar study": http://www.biomedcentral.com/imedia/1293403769860649_comment.pdf http://www.biomedcentral.com/imedia/8219033369168960_comment.pdf ; The pre-publication history of *Australian Paradox* would be fun to see, given errors are no problem! http://www.biomedcentral.com/1471-2458/13/668/prepub

In summary, the entire episode remains full of puzzles about why the University of Sydney and the Group of Eight doesn't bother with genuine quality control when it matters. But there still is no "paradox" in sight. And there never was.

6. Discussion: The University of Sydney is on the wrong side of history, because sugar is the next tobacco

Readers, you have seen that sloppy little errors like 300% (rather than 200%) and "600 g" (rather than 150g, on Figure 6), above) – and later "Roberston" and "Aparrent" (on Figure 10) - quickly gave way to major errors so dominating that they argue for the paper's retraction. Nevertheless, JBM and AWB in this episode continue to claim that up is down (Figures 1-5) and that barely trivial is substantial (Figure 6 versus 6a), while recklessly embracing falsified data as fact (Figures 7-10).

Again, in my opinion, JBM and AWB's nonsense-based defence of their spectacularly faulty *Australian Paradox* paper has become a serious episode of "**research misconduct**", as defined by the NHMRC, including, amongst other things: (i) "recklessness or gross and persistent negligence"; (ii) "serious consequences, such as false information on the public record"; and (iii) "failure to declare and manage serious conflicts of interest": http://www.australianparadox.com/

Their *Australian Paradox* paper is notoriously faulty, yet JBM and AWB absolutely refuse to correct or retract it; they continue to insist via their extraordinarily faulty paper that sugar and sugary drinks are innocent of anything to do with obesity. In a world full of populations fuelled by sugar and trending towards obesity and type-2 diabetes, this is an outrage: http://care.diabetesjournals.org/content/33/11/2477.full.pdf ; http://www.youtube.com/watch?v=xDaYa0AB8TQ&feature=youtu.be

Notably, an economics chart produced by the Reserve Bank of Australia inadvertently highlights refined sugar as an obvious suspect behind global "diseases of affluence": http://www.australianparadox.com/part-2 Looking (North)East, there may already be "up to 113.9 million Chinese adults with diabetes and 493.4 million with prediabetes"; and those figures too are trending up not down! http://jama.jamanetwork.com/article.aspx?articleid=1734701

Given that backdrop, it would be reckless of me not to continue to argue near and far for the correction or retraction of the academic disgrace and menace to public health that is the extraordinarily faulty *Australian Paradox* paper.

Already, I've been absolutely amazed that the University of Sydney is so supportive of the *Australian Paradox* nonsense (Section 8 in http://www.australianparadox.com/). Already, I have written to the journal, interacted with the authors online and written repeatedly to the University of Sydney's senior management about my detailed concerns.

Again, this *Australian Paradox* fraud has put a dark cloud over the competence and integrity of research to be produced at **the University of Sydney's new $500 million Charles Perkins Centre for research into obesity, diabetes and cardiovascular disease**, even before it has opened its doors: http://www.smh.com.au/national/university-sets-up-500m-centre-for-obesity-research-20130724-2qjq8.html

Again, on retractions, MDPI CEO Dietrich Rordorf's *Nutrients* journal claims to have "a zero tolerance policy" towards falsified data, yet so far Mr Rordorf and his editors have done nothing to correct the public record. Whatever happened to competence and integrity in science in "peer reviewed" journals and Group of Eight universities?

With its outrageous efforts to exonerate sugar and sugary drinks as a menace to public health, the University of Sydney is on **the wrong side of history**. The smart money is going the other way. Sugar is the new tobacco: what once were isolated concerns about the role of refined or added sugar driving global obesity and type 2 diabetes ("diabesity") - and "metabolic syndrome" more generally - increasingly have become mainstream as disturbing evidence has accumulated.

Global Investment bank CSFB recently surveyed 152 doctors globally on the question "is sugar addictive", finding 65% saying yes. Strikingly, almost all respondents think that "increased sugar consumption is linked to the development of obesity" and type 2 diabetes (p. 15). Given the giant-sized public-health issues and dollars involved, global investment markets increasingly are paying attention to links between sugar and chronic diseases: https://doc.research-and-analytics.csfb.com/docView?language=ENG&source=ulg&format=PDF&document_id=1022457401&serialid=atRE31ByPkIjEXa%2fp3AyptOvIGdxTK833tLZ1E7AwlQ%3d (If the link does not work, please google "csfb sugar pdf")

Unfortunately, both Dr Spence and Professor Trewhella have unwisely sought to verify the veracity of the extraordinarily faulty paper by insisting that JBM's research was "**peer reviewed**" - so get lost! (Section 8 in http://www.australianparadox.com/) - as if the obvious failure of any actual "peer review" process excuses the University's ongoing promotion of false information in the debate on the origins of obesity and type 2 diabetes, together the greatest public-health issue of our times.

Amusingly, the required degree of competence and integrity in Go8 research turns out to be highly variable. For example, when challenged on the eye-popping problems that dominate *Australian Paradox*, Dr Spence was content with any old "peer-review" process, even one that clearly was a **complete failure**, given that the paper remained dominated by a series of serious errors and misinterpretations. And yet, when the University of Sydney's research dollars from taxpayers via Canberra suddenly seemed at risk, Dr Spence suddenly became a strong supporter of a "robust" peer-review process: ''I want to reassure you that we will do all we can to help the federal government understand the importance of university research across all academic disciplines, and the value of the robust peer-review process at the heart of our research funding system.'' http://www.smh.com.au/national/education/academic-ridiculed-by-coalition-says-sydney-university-vicechancellor-20130905-2t86l.html#ixzz2f3nW2BNO

At best, the Go8's quality-control process is unreliable and untrustworthy. We know this because the University of Sydney – some 18 months after being given the facts - still is promoting its "shonky sugar study" as flawless peer-reviewed science. In seeking the correction or retraction of the University of Sydney's extraordinarily faulty paper, I was impressed recently by the **University of Queensland**'s insistence that scientific integrity be given the highest priority:

…UQ places the highest importance on upholding the integrity of our research and will not only continue to do so with vigilance but will seek to identify further measures to strengthen that endeavour. By having the paper retracted, the University enables the global scientific community to learn that the research reported in the paper has no place in the body of scientific knowledge, and so cannot be used as a basis for further research.
http://www.uq.edu.au/news/?article=26661

In summary, until the incompetent *Australian Paradox* paper is corrected or retracted, we must conclude that:

- There is no quality control in University of Sydney "science" that we can trust when it matters. For the past 18 months it has been happily pretending that its seriously faulty *Australian Paradox* paper is flawless "peer reviewed" science. Moreover, the University is yet to properly respond to my well-documented claim of "research misconduct", as defined by the NHMRC and as documented in Sections 1-10 in http://www.australianparadox.com/
- There is no quality control in MDPI journals we can trust when it matters. MDPI CEO Mr Dietrich Rordorf must stop pretending MDPI has no problem with scientific integrity and, instead, fix the glaring problems at *Nutrients*.
- **The *Australian Paradox* fraud has put a dark cloud over the competence and integrity of future research at the new $500 million Charles Perkins Centre (CPC). The University has spent vast amounts of taxpayers' money to build a research base for investigations into obesity and related maladies while recklessly pretending that its highest-profile obesity study – both an academic disgrace and a menace to public health – is flawless "peer**

reviewed" science. If the University will not correct or retract an obviously faulty paper that completely mangles a basic assessment of simple empirical facts, why should anyone trust it to competently tackle difficult topics?

- There is no quality control in Group of Eight (Go8) research that we can trust when it matters. The University of Sydney's current policy of ignoring the need for competence and integrity in research makes a mockery of the Go8's enthusiasm for increased taxpayer funding, in the national interest you understand, on the basis that "research intensive universities" are special: http://www.go8.edu.au/university-staff/go8-policy-_and_-analysis/2013/discussion-paper-the-role-and-importance-of-research-intensive-universities

From what I have seen, the Go8 has done pretty well nothing to force its delinquent member, the University of Sydney, to give scientific integrity the necessary priority. With quality control uncertain when it matters, we are left in the dark about which particular pieces of Go8 research are fact-based and which are nonsense-based. In my opinion, the Go8 and the University of Sydney should follow the University of Queensland's approach on scientific integrity, ditching the current policy of "Pretend there is no problem and then hope the problem goes away".

Importantly, since both the Australian Senate and our House of Representatives have been misled by the University of Sydney's *Australian Paradox* fraud - see Summary and Section 8 in http://www.australianparadox.com/ - **I urge Federal Parliament to launch an independent investigation into this matter.** Please consider this document Exhibit A for any such investigation.

7. Motivation: Why I am making such a fuss

Readers, after 18 months, I am angry about the lengths I have had to go to encourage the University of Sydney to do what is right, to do what it should have done without any prodding from me. I am angry about the lengths I have had to go to push the University of Sydney towards correcting or retracting a ridiculously faulty self-published paper that recklessly (falsely) seeks to exonerate harmful sugary softdrinks as a menace to public health.

To be clear about my motivations, this all matters because **modern rates of sugar consumption - including via sugary drinks - are a key driver of global obesity and type 2 diabetes**, together the greatest public-health challenge of our times: http://care.diabetesjournals.org/content/33/11/2477.full.pdf

To be clear about my motivations, I am arguing near and far for **a ban on all sugary drinks in all schools in all nations**: http://www.australianparadox.com/pdf/Sugary-Drinks-Ban.pdf

To be clear about my motivations, I am concerned that, tragically, **outsized rates of sugar consumption – alongside alcohol and tobacco – are a major driver of the unacceptable "gap" in life expectancy between Indigenous and non-Indigenous Australians**: see the bottom row of Box/Table 2 in https://www.mja.com.au/journal/2013/198/7/characteristics-community-level-diet-aboriginalpeople-remote-northern-australia

To be clear about my motivations, I think it is a disgrace that JBM and AWB are set to move into the **Charles Perkins Centre**, when they have devoted themselves to (falsely) exonerating as harmless the very substance that is fuelling the obesity, type-2 diabetes, heart disease and related miseries that are killing the health of Charles Perkins's First Australians. The Hippocratic Oath should be as relevant for nutrition "science" as for medical science: First, do no harm.

Readers, this slowly inflating *Australian Paradox* scandal appears to feature scientific fraud along the lines undertaken by the fictional "Professor Sydney Nutrition": Slides 43 and 44 at http://www.australianparadox.com/pdf/AUSTRALIAN-PARADOX-101-SLIDESHOW.pdf So, again, here's my **proposed Retraction Notice**:

***Abstract**: It has been brought to our attention by a reader of Nutrients that the conclusion of "**a consistent and substantial decline**" in per-capita sugar consumption between 1980 and 2010 in "The Australian Paradox: A Substantial Decline in Sugars Intake over the Same Timeframe that Overweight and Obesity Have Increased" is based in part on a data series that was falsified by the Food and Agriculture Organization (FAO). MDPI has a strict "zero tolerance policy" towards the use of falsified data, whether the authors were aware of the invalidity of the data or not. Moreover, there are further major errors and misinterpretations that collapse the credibility of the manuscript's conclusion of "an inverse relationship" between sugar intake and obesity. For example, the authors' own chart suggests that the consumption of sugar via softdrinks **increased** as obesity bulged between 1980 and 2010. Unfortunately, that observation removes a central element of the authors' claimed "paradox". The authors' business links to the sugar and sugary food industries also are somewhat unsettling. Taking public-health considerations into account – particularly evidence that excessive sugar consumption is a major contributor to global obesity and type 2 diabetes, together the greatest public-health challenge of our times: http://care.diabetesjournals.org/content/33/11/2477.full.pdf – the Editorial Team and Publisher have determined that this manuscript should be retracted. We apologize for any inconvenience this may cause.*

http://retractionwatch.wordpress.com/2013/08/22/journal-to-feature-special-issue-on-scientific-misconduct-seeks-submissions/

Outrageously, JBM and AWB continue to ignore the readily available facts – in their own charts! – and instead claim – via a University of Sydney website – that they have made no errors, that their faulty paper is flawless and that Rory Robertson is incompetent in this matter:

"*Unfortunately, there are factual errors in the economist's arguments, and misinterpretation of the distinctions between total sugars vs. refined sugars, sugar availability vs. apparent consumption, sugar-sweetened and diet soft drinks, and other nutrition information*": http://www.australianparadox.com/pdf/JBM-AWB-AustralianParadox.pdf via http://www.glycemicindex.com/

Of course, I have made no such errors. Critically, the authors have documented no such errors. So where are we left? Well, one **simple definition of fraud** is "intentional deception made for personal gain or to damage another individual": http://en.wikipedia.org/wiki/Fraud

In my opinion, the University of Sydney's senior scientists have chosen to bolster their credibility and careers at the expense of mine. They have recklessly chosen not to correct their errors and misrepresentations documented in Sections 2-5 above in order to limit the damage to their reputations, in the process maximising the damage to mine. Their approach thus fits neatly that simple definition of fraud.

Disturbingly, in the year or so since I correctly advised University of Sydney Vice-Chancellor Spence about the serious problems in his nutrition "science" area - Section 8 in http://www.australianparadox.com/ - he has allowed his unreliable and under-supervised staff to falsely trash my reputation via a University of Sydney website. Indeed, in November 2012, one of the University's "scientists" came online to describe me as a **criminal "Troll"**.

Again, this is outrageous, and has made me all the more determined to find out who is going to take responsibility for the lack of quality control and integrity in science at the University of Sydney. **Importantly, the *Australian Paradox* fraud is not a fraud because JBM and AWB self-published an incompetent assessment of the available information. The problem is their ongoing and determined refusal to acknowledge and correct the various errors and misrepresentations – both small and large - that I've documented, again, in great detail in Sections 2-5 above.**

In my opinion, it is unreasonable for JBM and AWB to keep defending the indefensible, to keep pretending that the spectacularly faulty *Australian Paradox* paper is flawless. For 18 months, they have been well aware of the serious flaws in their paper. Again, this clearly is an example of **research misconduct**, as defined by the NHMRC: Sections 1-10 of http://www.australianparadox.com/ ; http://www.smh.com.au/business/economist-v-nutritionists-big-sugar-and-lowgi-brigade-lose-20120307-1uj6u.html

Readers, what is going on in "science" at the University of Sydney, home to our highest-profile academic defenders of added sugar in food as harmless? http://www.theaustralian.com.au/news/health-science/a-spoonful-of-sugar-is-not-so-bad/story-e6frg8y6-1226090126776

Looking at international experience, deep links between universities and the sugar industry have a poor record in terms of improving scientific integrity and public health. In the US, "Big Sugar" set out in the 1950s to scramble and mislead science on the links between modern sugar consumption and chronic diseases. On the way, Harvard University in the 1960s and 1970s became America's "most public defender" of "modern sugar consumption" as harmless, its "science" reportedly corrupted by heavy funding from the sugar and sugary food industries: http://www.motherjones.com/environment/2012/10/sugar-industry-lies-campaign

JBM and AWB's *Australian Paradox* "findings" clearly are wrong, based as they are on confusion between up and down in simple charts, and falsified FAO data. Their policy conclusion – sugary drinks are innocent - is reckless, according to such notables as the National Health and Medical Research Council (NHMRC), Heart Foundation, Cancer Council and Diabetes Australia: http://www.rethinksugarydrink.org.au/ Importantly, the NHMRC toughened dietary advice against added sugar in February, despite strong pressure not to from the food and beverage industries, supported by the University of Sydney's *Australian Paradox* paper: http://www.australianparadox.com/pdf/canberradietary.pdf

In my assessment, this is all rather disturbing. The faulty *Australian Paradox* paper should be corrected or retracted without further unreasonable delay, to remove serious and somewhat dangerous misinformation from the scientific record. Readers, if you got this far – yes, I plead guilty to being long-winded - I hope you have enjoyed my detailed explanation of the *Australian Paradox* fraud. At least my proposed Retraction Notice is short and sweet!

If you simply stumbled into this discussion but agree that I have identified a serious problem with research integrity, why not make a fuss about it in a small way, perhaps highlighting the issue by forwarding this piece and asking those

you know at the University of Sydney - or elsewhere in the Group of Eight, in science and/or public health - what should be done. If you are a scientist at the University of Sydney or elsewhere in the Group of Eight and you too are outraged about all this, please show your colleagues and make a bigger fuss.

If you are University of Sydney Vice-Chancellor Dr Michael Spence, Professor Jill Trewhella – in charge of the University's research integrity! - or MDPI CEO Mr Dietrich Rordorf, you have a problem. Your growing problem is that these are the facts and the facts tell a very smelly story. If you don't fix the problem now, you'll have to fix it later: the facts are not going away and in the meantime the *Australian Paradox* scandal is slowly inflating.

Readers, I'll keep chipping away as best I can, seeking the correction or retraction of the outrageously faulty paper that the University of Sydney uses to "exonerate" harmful sugar and sugary drinks as a menace to public health while, for up to $6000 a pop, its GI business stamps particular brands of sugar and sugary products as Healthy.

8. Sunlight is the best disinfectant: University of Sydney's *Australian Paradox* fraud out into the fresh air

On top of my contributions to *Retraction Watch*, I have taken the time to discuss the *Australian Paradox* fraud "live" on the Australian universities' joint-venture website, ***The Conversation***:

x https://theconversation.com/how-we-deal-with-alleged-research-misconduct-nhmrc-17101#comment_203994 ;

x http://theconversation.com/from-fraud-to-fair-play-australia-must-support-research-integrity-15733 ;

x https://theconversation.com/new-dietary-guidelines-evidence-for-healthy-choices-more-certain-12275 ;

x https://theconversation.com/an-insiders-account-of-the-human-genome-project-13040 ; and

x https://theconversation.com/what-is-good-science-and-what-gets-public-funding-18011 (If those links don't work, please just cut and paste them into your viewer.)

In conclusion, if you have read my analysis and you strongly disagree or agree with anything I have written, then please have your say in those public fora above. That's particularly the case if you are Professor Jennie Brand-Miller, Dr Alan Barclay, Vice-Chancellor Dr Michael Spence, Professor Jill Trewhella or MDPI's CEO Mr Dietrich Rordorf.

Importantly, if the University of Sydney thinks that my observation of scientific fraud is incorrect or somehow unreasonable, it should come online immediately and explain why that is the case. If not, and the problems I have been highlighting for the past 18 months now seem obvious, as they should, please correct or retract the extraordinarily faulty *Australian Paradox* paper – and its obviously false finding of "an inverse relationship" between sugar consumption and obesity - without further unreasonable delay.

JBM and AWB also should correct their spectacularly silly false claim that "There is absolute consensus that sugar in food does not cause [type 2] diabetes" in any next edition of their pop-sci diet books:
http://www.australianparadox.com/pdf/diabetes.pdf

After all, disturbingly, added sugar continues to fuel global obesity, type 2 diabetes, heart disease and various cancers:
http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all&_r=0 ;
http://care.diabetesjournals.org/content/33/11/2477.full.pdf ; http://www.rethinksugarydrink.org.au/ ;
http://www.youtube.com/watch?v=xDaYa0AB8TQ&feature=youtu.be ; http://www.youtube.com/watch?v=HMKbhbW-Y3c&feature=c4-overview-vl&list=PL0B44DF914C4FB3ED

Comments, corrections, questions, compliments, whatever welcome at *strathburnstation@gmail.com*

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