

Australian Paradox 101

A disturbing episode involving the University of Sydney's deeply flawed obesity and sugar study, academic negligence, a serious but undisclosed conflict of interest and possible scientific fraud

*Debate on **The place of sugar in Australia's Dietary Intake Guidelines***

Parliament House, Canberra, Monday 29 October 2012

Rory Robertson

Economist and former-fattie

#18-23 on LHS of www.australianparadox.com

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Canberra's Great Sugar Debate

(Australian Paradox's authors and key supporters chose to be unavailable)

The Hon. Bernie Ripoll MP & Dr Andrew Laming MP

invite Senators, Members and all staff to join a discussion on

The place of sugar in Australia's Dietary Intake Guidelines

Monday 29 October

10am – 12pm

Main Committee Room, Parliament House

Assoc. Prof Tim Gill

Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders

David Gillespie

Author of Sweet Poison and Big Fat Lies

Rory Robertson

Economist and chief critic of *The Australian Paradox*

Peter FitzSimons

Sports journalist, author and anti-sugar convert

Lewis Kaplan

CEO of Diabetes Australia

RSVP to brett.chant@aph.gov.au (Invitation as at Friday 26 October) 2

Recommendation on official sugar advice

- **Added sugar is a serious health hazard, somewhat like tobacco.** There is increasingly clear evidence that modern doses of added sugar are a key driver of global obesity and diabetes: <http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all>
- ***Almost* everyone now agrees that sugary softdrinks are a particular menace to public health. Perhaps we also can agree the problem is the added sugar, not the added water:** <http://well.blogs.nytimes.com/2012/10/22/in-fight-against-obesity-drink-sizes-matter/>
- **We know that sugar tends to destroy our teeth.** Why do so many people resist the next step of concluding that modern doses of added sugar/fructose – eaten year after year, decade after decade – are a disaster for public health more generally?
- The once-a-decade update of our national nutrition guidelines is an opportunity to send a **strong and helpful message, by toughening official advice against sugar:**
 - × Eat/drink “only moderate amounts” of products with added sugar (**Current**);
 - × “Limit” the intake of products with added sugar (**Draft**);
 - ✓ **“Eliminate or at least minimise” food and drinks containing added sugar or artificially concentrated fructose (RR proposed)**

Australian Paradox 101

The paper in dispute: *The Australian Paradox: A Substantial Decline in Sugars Intake over the Same Timeframe that Overweight and Obesity Have Increased*

Authors: Dr Alan W. Barclay and Professor Jennie Brand-Miller

Both are key figures in the **Glycemic Index Foundation Limited** (GIF), the University of Sydney's "not-for-profit GI-based food endorsement program in Australia". Dr Barclay also "Head of Research at the Australian Diabetes Council"

Journal: *Nutrients*, an obscure pay-as-you-publish E-journal

The lead author JBM also was "Guest Editor" of the relevant April 2011 "Special Issue"

Undisclosed conflict of interest: GIF business is based on idea that **low GI-foods are good, therefore super-low GI (19) fructose – the "sweet poison" half of sugar – must be good.** Authors are high-profile defenders of sugar as harmless, yet there's growing evidence added/concentrated super-low GI(19)fructose is a key driver of global obesity and diabetes (http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all&_r=0)

Warning: Core of dispute is not about science or nutrition - basically an empirical matter

More background on *Australian Paradox* 101

- My name is Rory Robertson. I'm an economist, trained at James Cook University (BEC, First Class Honours, 1987), the Australian National University (Master of Economics, 1991) and the Reserve Bank of Australia (1988-1994).
- **To be upfront, I'm arguing near and far for the correction or retraction of the deeply flawed *Australian Paradox* paper. Today, I'll demonstrate that a series of simple but serious problems dominate the University of Sydney's paper, and require correction.**
- The faulty *Australian Paradox* paper's surprisingly strong influence on the public debate has made it a menace to Australian public health. Disturbingly, the **Heart Foundation, Australian Diabetes Council, Nutrition Australia** and the **Dietitians Association of Australia** are several key entities that have taken false comfort from the paper's mistaken conclusion that sugar/fructose consumption has nothing to do with obesity.
- Despite my shredding of the credibility of *Australian Paradox* in March, the authors in April 2012 published ***Australian Paradox Revisited***, restating their original bogus conclusions without addressing the serious errors. How that was reasonable is a mystery to me. Awkwardly, the lead author also was the "Guest Editor" of the publishing journal.
- Given that important facts have been misrepresented and published in a formal science journal not once but twice – and a conflict of interest - scientific fraud seems a possibility? (Slides 34 and 35)
- **I urge a public investigation into this *Australian Paradox* scandal. I'd be interested to know how this whole episode fits together without any serious research misconduct.**

After five months, no-one has collected my \$40,000

Challenge issued to University of Sydney Vice-Chancellor Dr Michael Spence, on 7 June 2012

...I challenge the University of Sydney's scores of fine scientists – indeed, any scientist, nutritionist, medical doctor, economist, journalist or enthusiastic observer anywhere - to prove that my critique of Australian Paradox is mistaken.

*To be clear, I will reward the first successful researcher with \$20,000 (cash), if anyone is able show beyond dispute that the available (valid) information really "...indicates a consistent and substantial decline in total refined or added sugar consumption by Australians over the past 30 years", as concluded in Australian Paradox. Moreover, I will pay **a further \$20,000 to the charity of choice** at the University of Sydney's low-GI school, and **publish a genuine public apology** in The Sydney Morning Herald, The Australian and The Australian Financial Review. What could be fairer to the University of Sydney? Here's an opportunity to (i) show everyone that the annoying economist is wrong, (ii) secure a public apology in major newspapers, and (iii) relieve him of the price of a new car in the process.*

<http://www.australianparadox.com/pdf/SydneyUniVC%20LETTER070612.pdf>

Australian Paradox, as published

Nutrients **2011**, *3*, 491–504; doi:10.3390/nu3040491

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www.mdpi.com/journal/nutrients

Article

The Australian Paradox: A Substantial Decline in Sugars Intake over the Same Timeframe that Overweight and Obesity Have Increased

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Published: 20 April 2011

<http://www.mdpi.com/2072-6643/3/4/491/htm>

False scientific conclusions, twice verified!

“This analysis...indicates a consistent and substantial decline in total refined or added sugar consumption by Australians over the past 30 years”

[1980 to 2010]

“...the existence of an Australian Paradox, i.e., an inverse relationship” between the consumption of refined sugar and obesity” (My emphasis; <http://www.mdpi.com/2072-6643/3/4/491/htm>)

[So eat more sugar, get thinner!]

Australian Paradox is wrong, plain and simple

- 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 and the **need** to correct serious errors in the public debate
- The *Australian Paradox* paper is wrong on the authors' own published charts
- **Five** separate *indicators* of sugar consumption
- **Four** indicators trend up not down while the other was discontinued as unreliable by ABS a decade ago!
- So, what should we conclude? The trend is **down!** **Huh??!**
- The two formal *Australian Paradox* papers have become an academic disgrace and a menace to public health

So Australian Paradox is wrong, so what?

- *Australian Paradox* is important because it's been used as a **spearhead** for the University of Sydney's and the food industry's campaigns for the once-a-decade **update of official dietary advice to "stay soft" on sugar**:
<http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html>
- The (bogus) "scientific observation" from the prestigious University of Sydney's nutritionists' formally published science paper provides a **critical (false) intellectual justification** for putting **Heart Foundation *ticks*** and ***LowGI stamps*** on sugary junkfoods and claiming they are "healthy"
- Sugar is not a problem! Indeed, the (bogus) scientific observation of "an inverse relationship" between sugar consumption and obesity suggests "Eat more sugar, get leaner". Yeah, right.
- It's somewhat of a hoax, in my opinion, given the increasingly clear scientific evidence that **added sugar in modern doses is a serious health hazard**: http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all&_r=0

“A spoonful of sugar is not so bad”

by Leigh Dayton, Science writer ; [The Australian](#) ; July 10, 2011



BILL Shrapnel was not amused ...the draft dietary guideline recommendations. ..What raised Shrapnel's ire was the word sugars in recommendation No 3: "Limit intake of foods and drinks containing saturated and trans fats; added salt; added sugars; and alcohol". Limit sugars? "Show us the evidence," he says. "There isn't any."

Along with University of Sydney nutritionist Jennie Brand-Miller, Shrapnel takes the highly contentious position that sugar isn't a dietary evil...

As Shrapnel says, "...sugar isn't the main game." Brand-Miller adds that "highlighting sugar only distracts people from the more important issues" ...Worse, both argue health policy ...is not based on science but on myth. ...She argues there's growing evidence that ...eating added sugar is not inherently dangerous.

"It doesn't actually do any direct harm to the human body. It doesn't raise blood cholesterol or raise blood pressure or cause cancer," says Brand-Miller. "Australians have been eating less and less sugar, and rates of obesity have been increasing," she says...[That's the Australian Paradox!]

University of Sydney's *Australian Paradox* authors operate an enterprise that promotes “low GI” sugary products

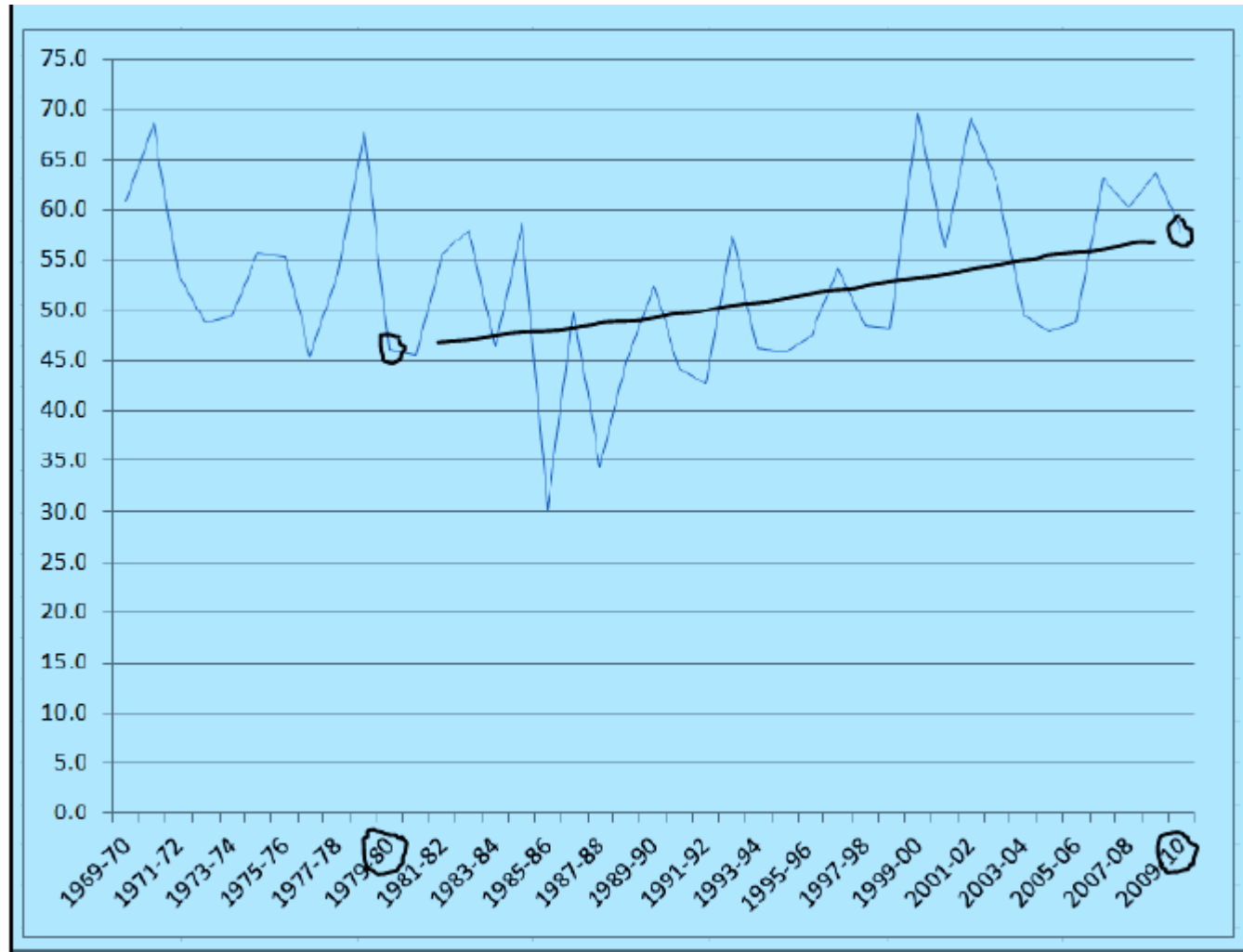


Page 10 at <http://www.gisymbol.com/cmsAdmin/uploads/Glycemic-Index-Foundation-Healthy-Choices-Brochure.pdf>

The University of Sydney's Glycemic Index enterprise's pricing structure is outlined here:

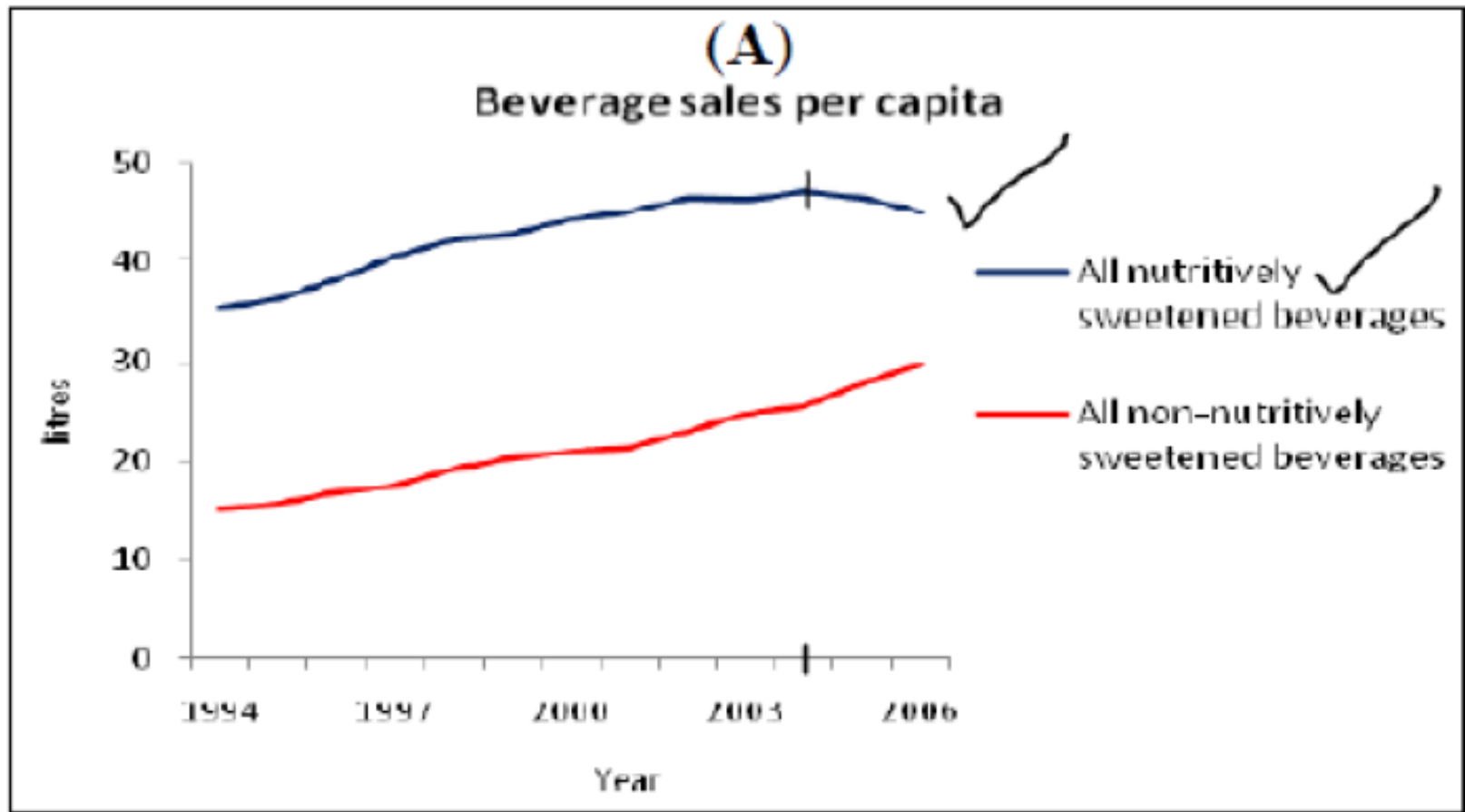
[http://www.foodhealthdialogue.gov.au/internet/foodandhealth/publishing.nsf/Content/D59B2C8391006638CA2578E600834BBD/\\$File/Resources%20and%20support%20for%20reformulation%20activities.pdf](http://www.foodhealthdialogue.gov.au/internet/foodandhealth/publishing.nsf/Content/D59B2C8391006638CA2578E600834BBD/$File/Resources%20and%20support%20for%20reformulation%20activities.pdf) (Or Google “Alan Barclay glycemic”)

Figure 1: Sugar availability
(Production less exports; kg p.p. p.a.)



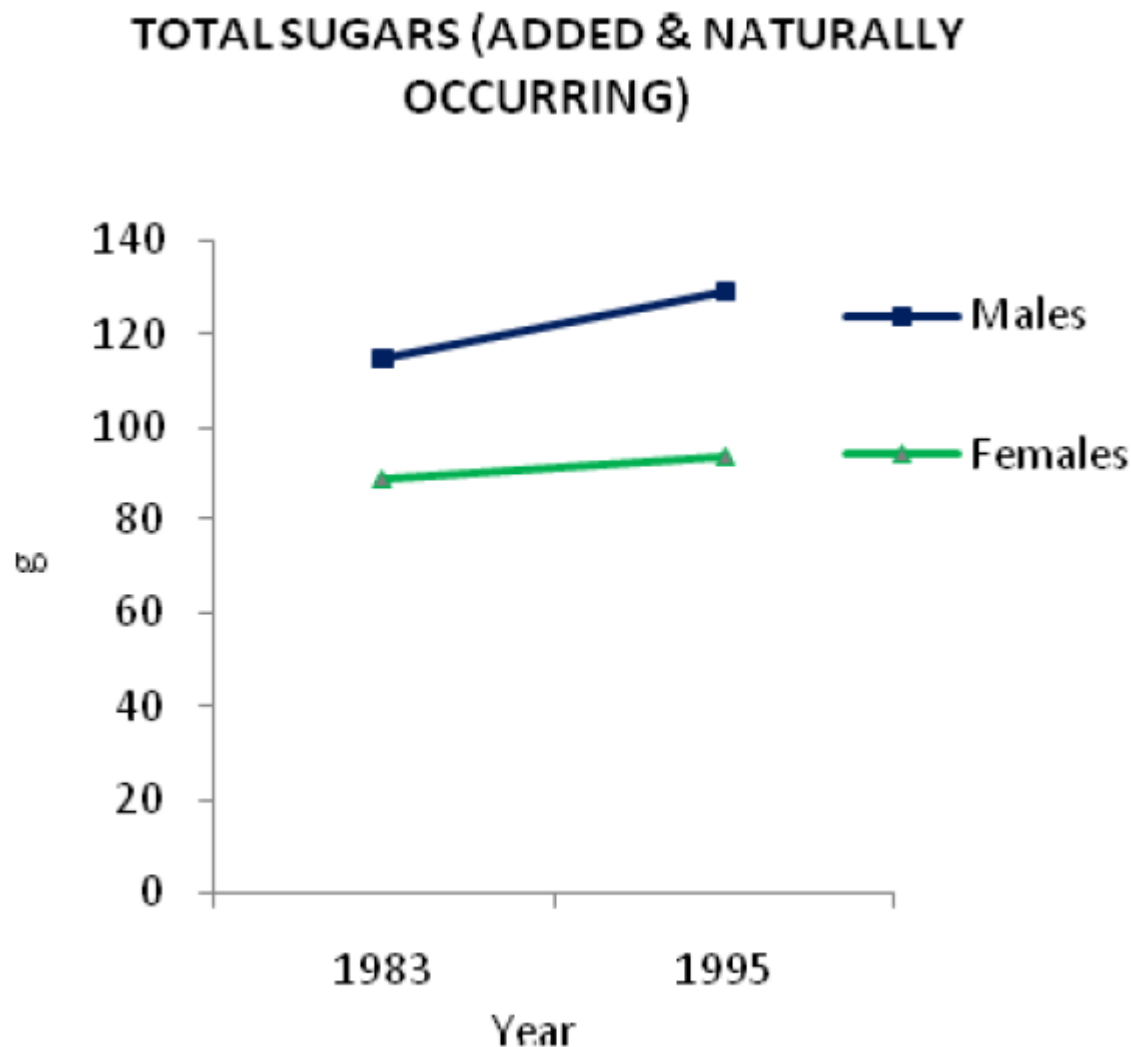
Source: *Australian Paradox Revisited* ; My "trend" for "the past 30 years"

Figure 2: Sugary softdrink sales
(Top line is sugary softdrinks)



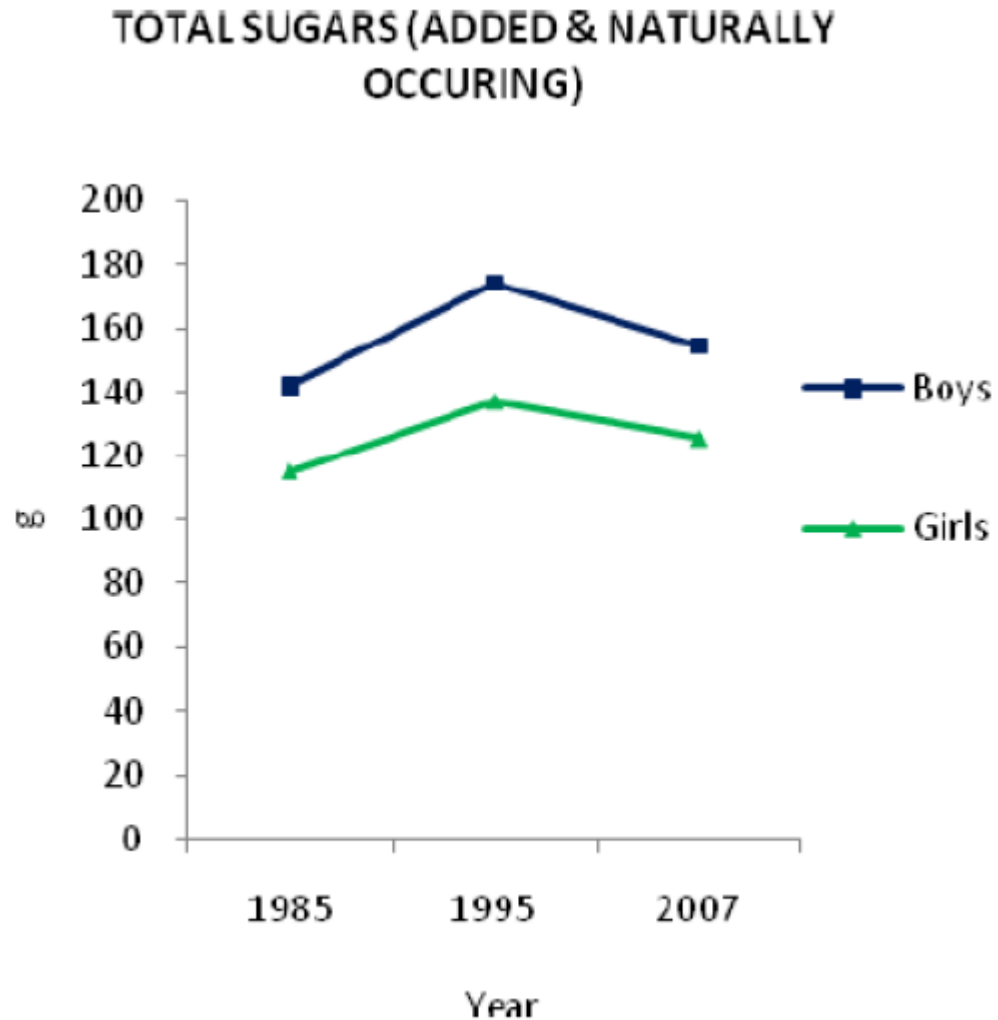
Source: *Australian Paradox* ; My mark for 2004 (not 2003) “peak” in sugary softdrinks

Figure 3: National surveys - Adults



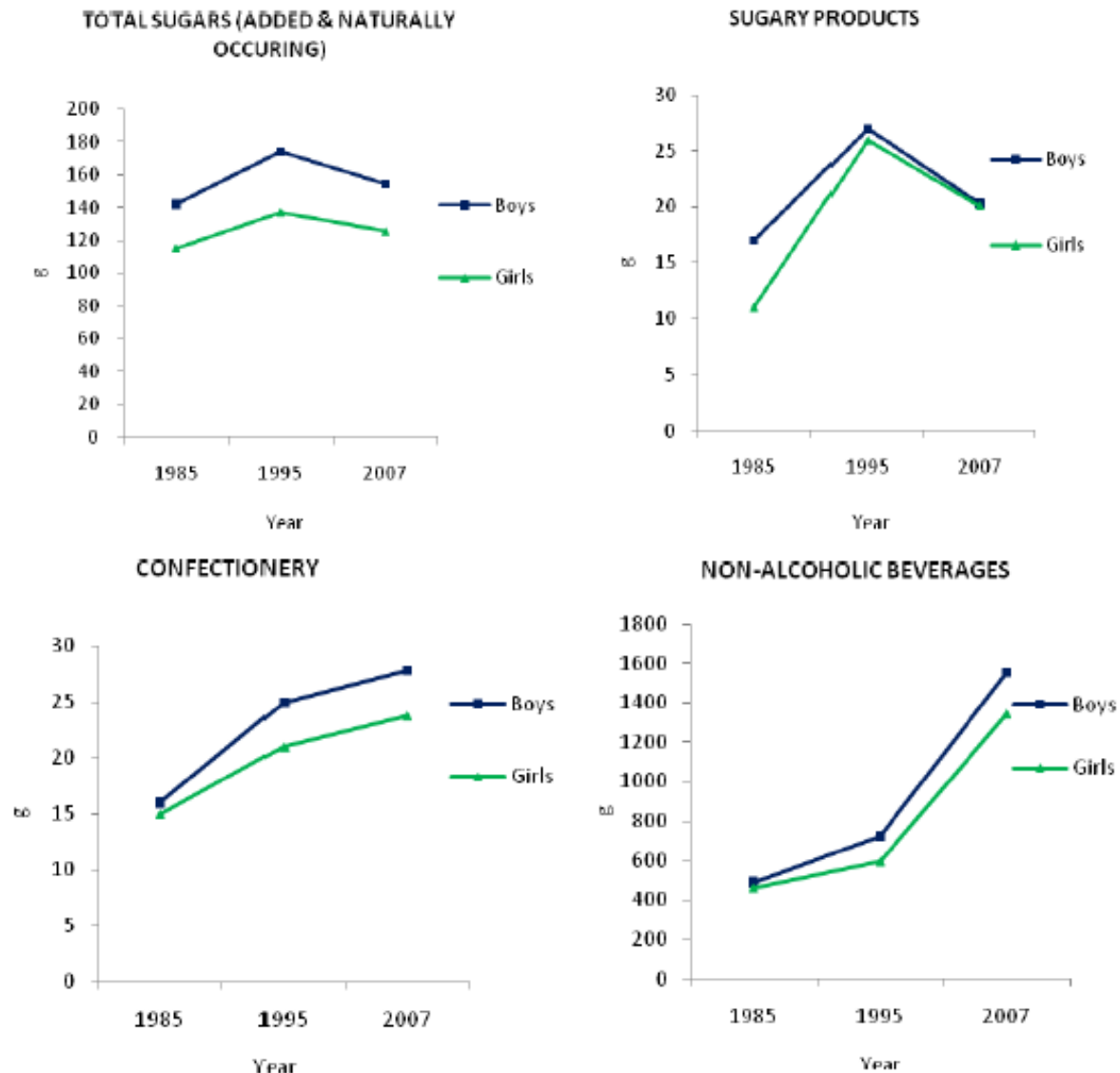
Source: *Australian Paradox*

Figure 4: National surveys - Children



Source: *Australian Paradox*

Figure 4a: National surveys - Children



* Including coffee, tea and low joule soft drinks.

Source: Australian Paradox

Dr Rosemary Stanton slams *Australian Paradox*

*“And yes, I agree with you [Rory] that **we have no evidence that sugar consumption in Australia has fallen**. A walk around any supermarket shows that huge numbers of foods contain sugar. I argue this point frequently with colleagues”;*

“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".*

<http://theconversation.edu.au/two-books-one-big-issue-why-calories-count-and-weighing-in-6372>
<https://theconversation.edu.au/energy-drinks-a-trigger-for-heart-attacks-and-stroke-7036>

Professor Boyd Swinburn slams *Australian Paradox*

*...Boyd Swinburn, an authority on obesity issues, has reviewed the arguments from both sides and comes out **broadly in favour of Mr Robertson.***

*Professor Swinburn, who is the director of the **World Health Organisation collaborating centre for obesity prevention at Deakin University**, says the study's summary of the data as showing "a consistent and substantial decline in total refined or added sugar by Australians over the past 30 years" **belies the facts "and is a serious over-call in my opinion".***

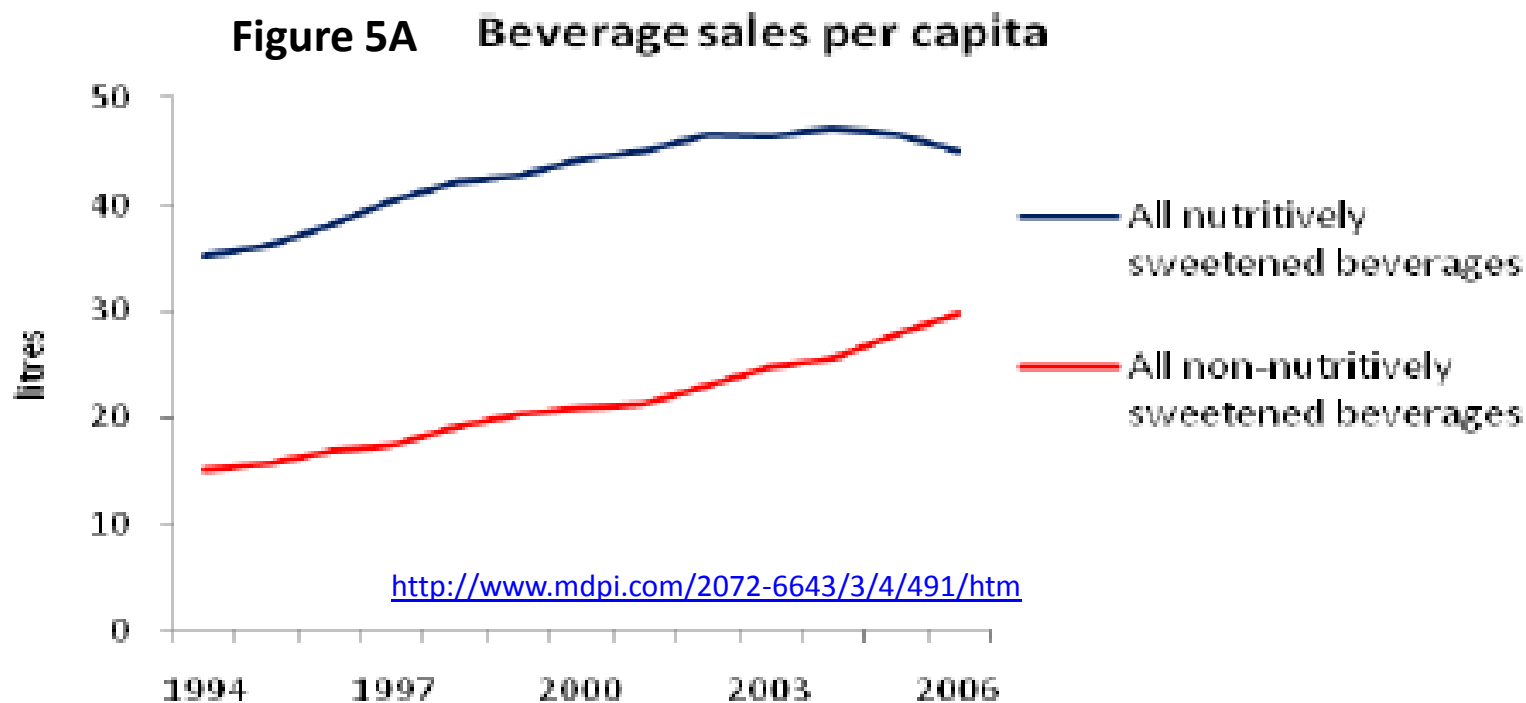
*His conclusion is that "the ecological trends of sugar and obesity are pretty well matched and **I do not believe there is any paradox to explain".***

[My bolding; http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html#ixzz23Rs9ydiC](http://www.smh.com.au/national/health/research-causes-stir-over-sugars-role-in-obesity-20120330-1w3e5.html#ixzz23Rs9ydiC)

Incompetence in *Nutrients'* quality control

The top – dark – line in Figure 5A shows **sugary softdrinks**, rising 30% from 35ish to 45ish. The bottom – red – line shows **non-sugary beverages**, doubling from 15ish to 30ish.

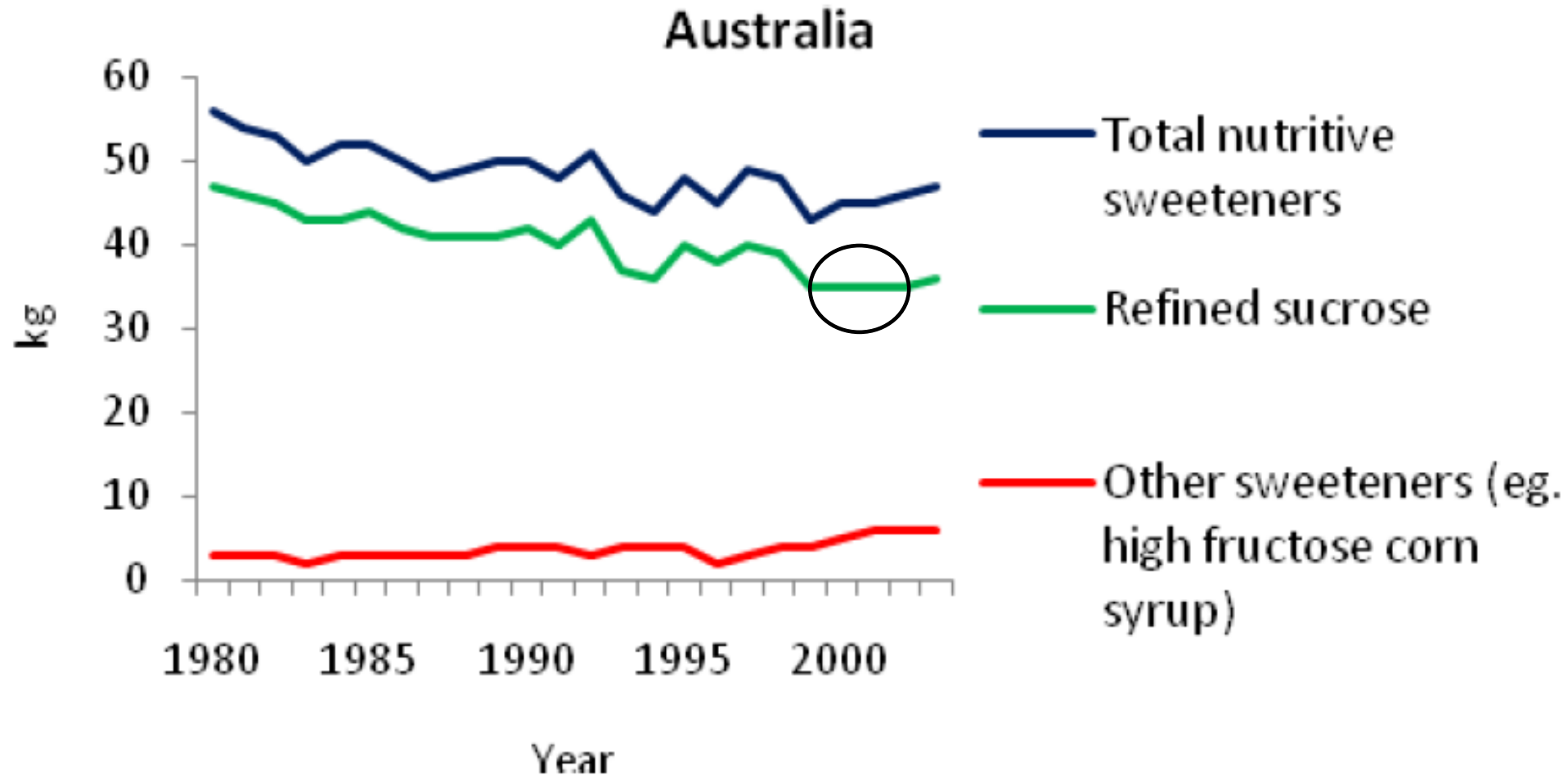
*...Food industry data indicate that per capita sales of low calorie (non-nutritively sweetened) beverages **doubled** from 1994 to 2006 [correct] while nutritively sweetened beverages **decreased by 10% [huh?]** (3rd para in “4. Discussion”)*



So “decreased by 10%” should read “increased by 30%”, from 35 to 45ish! If anything, the chart suggests increased sugar consumption but authors say it’s evidence of declining consumption. (Indisputable error.)

Next slide (overleaf), notice the strangely flat readings for the green line after 1998-99!

Awkwardly, authors' sucrose – green – series “exists” in 2003 despite underlying dataset discontinued as unreliable by ABS after 1998-99!??



How come professional scientists were unaware - or deliberately didn't say - that key series discontinued by ABS after 1998-99?!!



1997-98 AND 1998-99

4306.0

APPARENT CONSUMPTION OF FOODSTUFFS

AUSTRALIA

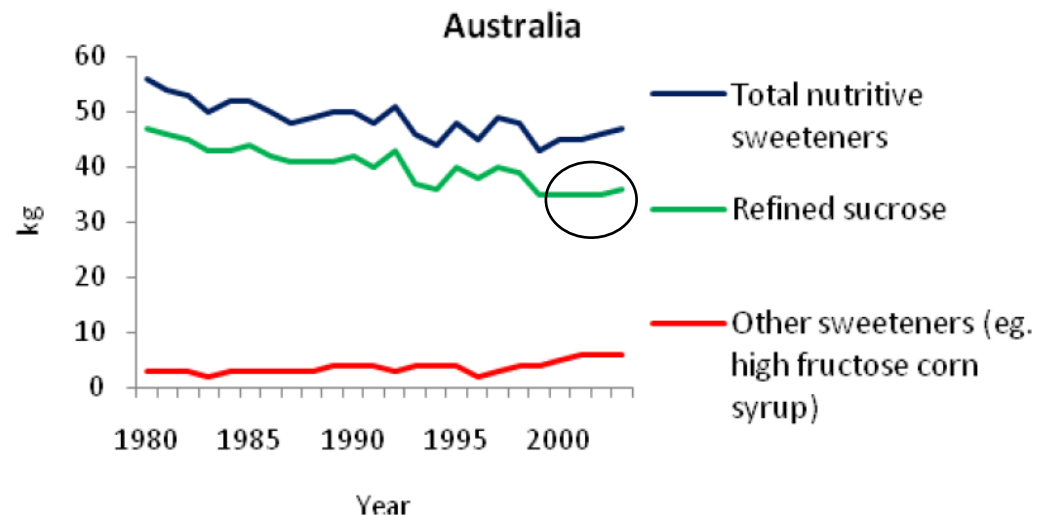
EMBARGO: 11:30AM (CANBERRA TIME) WED 25 OCT 2000

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1 Apparent per capita consumption—average 3 years ended 1938-39 to 1988-89, and 1998-99	10
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http://www.mdpi.com/journal/nutrients/special_issues/carbohydrates

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4306.01997-98%20and%201998-99?OpenDocument>

“Paradox” collapses under simple scrutiny

- **Four valid indicators of sugar consumption - all trending up!**
Critical fifth series discontinued as unreliable a decade before the bogus conclusion of a decline was published! Clearly, the paper must be corrected or retracted <http://www.australianparadox.com/pdf/8-QUESTIONS-FOR-AWB-&-JBM-BANNED.pdf>
- **That is, there is no “Australian Paradox”, just an idiosyncratic and unreasonable assessment – and avoidance - of the data by the University of Sydney scientists who coined the phrase. So.....**
 - ✓ **Why are authors saying opposite of what valid data are saying?**
 - ✓ **How was false conclusion published not once but twice via clownish quality control at *Nutrients*? How significant is it that the lead author also was the “Guest Editor” of the publishing journal?**
 - ✓ **Q: Is this a case of persistent negligence or basic scientific fraud?**
(Slides 34 and 35)

***Australian Paradox* misrepresentation matters because...**

The University of Sydney “scientists” encourage the use of their bogus conclusion to **shield unhealthy products with added sugar from tougher diet controls**:

- × *"The findings challenge the implicit assumption that ...measures to reduce intake of soft drinks will be an effective strategy in global efforts to reduce obesity"* <http://well.blogs.nytimes.com/2012/10/22/in-fight-against-obesity-drink-sizes-matter/>
- × *"The concern is that potentially more important determinants of obesity are being overlooked by the current emphasis on sugars and soft drinks"* <http://www.mdpi.com/2072-6643/3/4/491>

Outrageously, the authors – ignoring the serious errors I’d highlighted in their original paper that invalidated their preferred story (Slides 17-23) – mostly just restated their bogus conclusion in *Australian Paradox Revisited*:

- × *“This paradox challenges the view that concentrated sources of sugar, sucrose or fructose are primary players in the genesis of overweight and obesity”* p. 4 <http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf>

Bill Shrapnel finds big hole in *Australian Paradox*

“...a major source of the data on sugar consumption was ‘apparent consumption’ data, which had ceased to be collected by the Australian Bureau of Statistics (ABS) after 1998/9. So, any suggestion that sugar consumption had continued to fall from 2000 could not be supported”.

Mr Bill Shrapnel - Deputy Chairman, University of Sydney Nutrition Research Foundation - inadvertently arguing that the *Australian Paradox* paper requires correction (<http://scepticalnutritionist.com.au/?p=514> , 8 October 2012)

My rather lively response to Mr Shrapnel's **recent self-serving, self-contradictory and mostly mistaken** contribution to the debate can be found at <http://www.australianparadox.com/pdf/university-sydney-falsely-declares-victory.pdf>

Those who have agreed publicly that the *Australian Paradox paper* is hopelessly wrong

Rory Robertson

Dr Rosemary Stanton

Professor Boyd Swinburn

Professor Robert Lustig

David Gillespie

Bill Shrapnel*

Chris Forbes-Ewan*

*To be fair, while both Shrapnel and Forbes-Ewan have agreed publicly that the paper's conclusion is factually incorrect, for their own reasons (next slide) they are determined not to say bad things about the paper: previous Slide; <http://www.australianparadox.com/pdf/university-sydney-falsely-declares-victory.pdf> ; and Slide 23-28 in <http://www.australianparadox.com/pdf/AUSTRALIAN-PARADOX-101-SLIDESHOW.pdf>

An “unwritten rule” that professional nutritionists need not correct errors and should not criticise others’ work

Perhaps the most disturbing aspect of the *Australian Paradox* dispute – beyond the fact that it involves formally published papers with bogus conclusions that reflect either persistent negligence or deliberate scientific fraud by two of Australia’s highest-profile nutritionists - is **the apparent “culture” in local “nutrition science”** that features a lack of respect among publicly funded nutritionists for the integrity of the scientific record. It’s almost as if there is a **cosy “unwritten rule”** that professional nutritionists need not correct their errors, and that no-one should go out of their way to criticise obvious errors in papers of fellow professionals.

Most obviously, the authors of *Australian Paradox* have not corrected serious and obvious errors that have misled the public debate. Nor, to this day, have I been able to find a single unprompted criticism of the clearly bogus - yet twice “peer reviewed” and formally published - conclusion of “an inverse relationship” between the consumption of added sugar and obesity. There seems to have been no unprompted public criticism from professional nutritionists even *after* that high-profile false narrative misled the debate around official nutrition advice on sugar (Slide 11).

This correct-nothing nutritionist culture was highlighted by Chris Forbes-Ewan chasing non-professional David Gillespie all over the internet to slam Gillespie for arguing (correctly) that everyday people could improve their health by removing sugar from their diet. Yet, amusingly, even after Mr Forbes-Ewan had performed an extraordinary public back-flip on his assessment of the veracity of the *Australian Paradox* paper, the publicly funded nutritionist refused to criticise either the bogus paper or the high-profile University of Sydney nutritionists, or even agree with me that their errors should be corrected (previous Slide).

Why was it left to a passing economist to highlight the problems in this *Australian Paradox* matter? Well, because, as I mentioned, there seems to be a cosy ill-disciplined culture that makes the nutrition space basically dysfunctional. Several people - including Dr Rosemary Stanton - have argued that the nutrition field is full of dodgy research papers with false conclusions so I should relax, not get bothered about one paper in particular and leave it to the professionals.

In my opinion, this is all wrong. We need to clean up the mess in Australian “nutrition science”. We cannot have high-profile publicly funded scientists either negligently or fraudulently publishing formal science papers with bogus conclusions that mislead the public debate on obesity and diabetes, the biggest public-health issue of our times. Shonky results should be rooted out so that everyday people – taxpayers - can have some confidence in the results that are published, in the results that they paid for; I view this statement as both non-negotiable and a point of view that should be uncontroversial.

Recommendation on official sugar advice

- **Added sugar is a serious health hazard, somewhat like tobacco.** There is increasingly clear evidence that modern doses of added sugar are a key driver of global obesity and diabetes: <http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all>
- ***Almost everyone now agrees that sugary softdrinks are a particular menace to public health. Perhaps we also can agree the problem is the added sugar, not the added water***: <http://well.blogs.nytimes.com/2012/10/22/in-fight-against-obesity-drink-sizes-matter/>
- **We know that sugar tends to destroy our teeth.** Why do so many people resist the next step of concluding that modern doses of added sugar/fructose – eaten year after year, decade after decade – are a disaster for public health more generally?
- The once-a-decade update of our national nutrition guidelines is an opportunity to send a **strong and helpful message, by toughening official advice against sugar:**
 - × Eat/drink “only moderate amounts” of products with added sugar (Current) ;
 - × “Limit” the intake of products with added sugar (Draft) ;
 - ✓ **“Eliminate or at least minimise” food and drinks containing added sugar or artificially concentrated fructose (RR proposed)**

University of Sydney refuses to correct bogus conclusions

The University of Sydney is promoting a disingenuous - "It's peer-reviewed and published, so get lost" - defence of its bogus paper. One possibility is that the University is **struggling to balance**:

- a. Its desire to maintain a high standard of academic and scientific integrity in its research; against
- b. Its desire to support and grow **the low-GI enterprise** to which its *Australian Paradox* authors are devoted

That the authors' analysis is said to have been "peer reviewed" and published – twice! - should mean there are no obvious and serious errors in *Australian Paradox*. But clearly there are. So any public investigation should ask whether the several layers of quality control all accidentally overlooked the blindingly obvious errors, or is scientific fraud an issue? (Slides 34 and 35) <http://www.australianparadox.com/pdf/Sept2012-Conversations.pdf>

Journalist Michael Pascoe skewers “scientists”

“...After Business Day published the original story in March, [Professor] Brand-Miller sent me a reply to Robertson's argument. That reply put the “sugar availability” discrepancy substantially down to sugar being used to make fuel ethanol...”

The University of Sydney's claim was that up to 14kg per person per annum of sugar was being consumed by motor vehicles not humans via its use in ethanol. But the **real answer is zero**, because sugar is not used in ethanol production in Australia (see next slide).

“I told the Professor I thought she was wrong, she checked and admitted that was the case. Having failed on two of the three key issues with the jury out on the third, I didn't bother about the reply. In the Nutrients e-journal, Brand-Miller and Barclay published their reply to Robertson under the title Australian Paradox Revisited with the ethanol bit deleted. ...”

<http://www.smh.com.au/business/pesky-economist-wont-let-big-sugar-lie-20120725-22pru.html>

Like me, Michael Pascoe naturally assumed - after the implosion of their utterly unconvincing rebuttal - that the authors would correct or retract their original paper, so he left them to it.

Instead, they rushed off to publish the same misrepresentations of important facts in *Australian Paradox Revisited*. How's that for scholarship? Since when are scientists allowed to repeatedly publish false information in formal science papers? Isn't that called scientific fraud? (Slides 34 and 35)

Sorry, we have no sugar in our ethanol!

Table 6.1 Australian ethanol production capacity (ML): 2010 to 2015

Operator	Location	Feedstock	Current Status	2010	2011	2012
Manildra	Nowra, NSW	wheat starch, wheat	Operating	210	300	300
Sucrogen Bio-Ethanol	Sarina, Qld	molasses	Operating	60	60	60
Dalby Bio	Dalby, Qld	sorghum, other grain	Operating	80	80	80
Austcane	Ayr, Qld	sugar juice, molasses	Potential	0	0	0
NQBR	Ingham, Qld	sugar juice, molasses	Potential	0	0	0
Coskata	Vic.	biomass	Potential	0	0	0
Mackay Sugar	Mackay, Qld	molasses	Potential	0	0	0
Total from existing plants				350	440	440
Total from (proposed) new and existing plants				350	440	440

Source: APAC *Australian Biofuels 2010–11*

<http://www.accc.gov.au/content/item.phtml?itemId=961783&nodeId=c5006d5e6145ec6c55231148c819855e&fn=ACCC%20Petrol%20Monitoring%20Report%20Chapter%206.pdf>

Published rebuttal, after “Ethanol mix-up” quietly deleted

Correspondence

The Australian Paradox Revisited

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Tel.: +61-2-9351-3759; Fax: +61-2-9351-6022.

Received: 25 March 2012 / Published: 30 March 2012

The *Australian Paradox* reported the observation that upward changes in the prevalence of overweight and obesity in Australia run counter to changes in *refined* sugars intake [1]. Economist, Rory Robertson claims there is no Australian Paradox, just unreasonable treatment of the available data [2]. Unfortunately, there are factual errors in Mr. Robertson's essay 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. While the terminology, strengths and limitations of various nutrition data are readily understood by individuals trained in nutrition, some confusion may have been avoided if our original paper had referred to refined sugars in its title and described the terminology used.

<http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf>

Authors didn't let dud paper die without an unimpressive fight

With **three "independent lines of evidence"** all contradicting their long-time pet story, the “scientists” needed three “special factors” to explain why the charts point up not down. They claimed:

- ❖ In Figure 1, **motor vehicles** not humans consumed a big chunk of the available sugar!
- ❖ In Figure 2 (a.k.a. Figure 5A), the faster growth in **diet drinks** and non-sugary bottled water (furphy) somehow offsets a 30% rise in sugary softdrinks.
- ❖ In Figure 3 (Adults) and Figure 4 (Children), the consumption of **intrinsic/natural sugars** increased while that of refined sugars declined.
- ❖ Importantly, **the story for children** in Figures 4 and 4a is rather **unambiguous**: up not down not only for “Total sugars”, but also for “Sugary products”, “Confectionery” and “Non-alcoholic beverages” in the authors’ own charts, as well as for another large sugary category “Cereal-based products and dishes” in the original data: <http://www.australianparadox.com/pdf/TimeforNeweditor24052012.pdf>

Again, what Australian Paradox? How was that false observation published twice as scientific fact? Is this persistent negligence or basic scientific fraud?

Crunch-time for Dr Barclay and Prof. Brand-Miller

In my opinion, the key question is **WHY** the exact moment in March that Dr Alan Barclay and Professor Jennie Brand-Miller agreed with each other that it was time to quietly retract/delete without acknowledgement their false made-up claim about ethanol production/cars consuming a big chunk of the available sugar, somehow was **NOT** also the right moment to agree to formally correct or retract their error-ridden *Australian Paradox* paper?

The unreasonable delay in removing the clearly false but supposedly twice-verified claim of an "Australian Paradox!" - an extraordinary "inverse relationship" between sugar consumption and obesity - from the scientific record increasingly has reasonable people wondering when a series of inadvertent errors deliberately left uncorrected becomes **scientific misconduct or fraud?**

(http://en.wikipedia.org/wiki/Scientific_misconduct)

Also see Sections 7 and 10 at

http://www.nhmrc.gov.au/files_nhmrc/publications/attachments/r39.pdf

Any thoughts, anyone?

Scientific fraud?

As a cross-check on my sense of "balance" on this matter, I recently contacted a **distinguished Australian economist and intellectual** - a retired high-level public official now active elsewhere - who has been a keen observer of the public debate for many decades.

He's been there and seen that, so I sought his seasoned advice on what I see as an important issue.

I emailed: "...if you have time, do you have in your head a concise definition of [i] academic misbehaviour; [ii] scientific fraud"?

His answer was brief, cutting to the chase: "Yes, this seems an example of both."

And it's not just *Australian Paradox*...

The University of Sydney scientists' series of spectacular false claims about the consumption of added sugar/fructose include:

- i. Sugar consumption has **declined substantially** "over the past 30 years", so there's "an inverse relationship" between sugar consumption and obesity (the main results in *Australian Paradox*);
- ii. **Motor vehicles** not humans have been consuming up to 14kg per person per annum of the available sugar via ethanol production/usage (argued in "Response to Rory Robertson"; <http://www.australianparadox.com/pdf/RESPONSE-TO-ROBERTSON.pdf>);
- iii. "**Fructose Was Not 'Scarce'**" in earlier centuries (argued in *The Australian Paradox Revisited*; <http://www.australianparadox.com/pdf/nutrients-03-00491-s003.pdf>); and
- iv. "**There is absolute consensus that sugar in food does not cause diabetes**" (published in the co-authors' low-GI diet books). Chapter 6 in *Good Calories, Bad Calories* demolishes that nonsense claim (Slide 42).

University of Sydney's undisclosed conflict of interest

- In this episode, the University of Sydney has made a series of serious factual errors that happen to be supportive of the claim that sugar consumption is harmless, while at the same time running a business that promotes - among other things - “low GI” sugary foods as “healthy”.
- Now, the University of Sydney's low-GI enterprise is based on the story that low-GI foods are good. **Yet fructose - the “sweet poison” half of added sugar – has a super-low GI of 19** and there's growing evidence that fructose is a key driver of global obesity and diabetes. Awkwardly, the University has a serious but undisclosed conflict of interest.
<http://www.australianparadox.com/pdf/Sydney-Uni-conflict-interest-030712.pdf>
- That is, Australia's highest-profile academic defenders of sugar in food as harmless also run a low-GI business, the prosperity of which depends on the general public continuing to see added sugar/fructose as harmless, despite growing evidence that modern consumption of sugar is a health hazard.
- The University of Sydney should disclose its still-undisclosed low-GI-fructose conflict of interest, and correct or retract its faulty *Australian Paradox* papers

Green Pool report is “garbage in, garbage out”

- The sugar industry’s latest report was produced by Brisbane consultants Green Pool. The new report - **"Sugar Consumption in Australia: A statistical update"** – claims a "robust and accurate" data series showing a decline in sugar consumption over recent decades (<https://greenpoolcommodities.com/news/sugar-consumption-in-australia-a-statistical-update/>).
- But like *Australian Paradox*, this new report is deserving of ridicule because it is based on the **same sugar series that was discontinued as unreliable by the ABS (4306.0) a decade ago**. The same series that was discontinued as unreliable has been updated by applying the same broken methodology the ABS abandoned as unreliable a decade ago!
- Accordingly, **the sugar industry’s new nonsense-based Green Pool report is worse than useless**, a nonsense that misleads rather than informs the public debate. Is misleading the public debate with “updated” but still-bogus information just unreasonable or is it completely unacceptable? (<http://www.australianparadox.com/pdf/university-sydney-falsely-declares-victory.pdf>)

Problem: Counting added sugar is “impossible”

How much added sugar did you eat last year? No idea? The core difficulty faced by the ABS in trying to quantify sugar consumption - back before it walked away after 1998-99 - was broadly the same as that faced by those of us trying to avoid added sugar today: it's in places you almost wouldn't think to look.

Beyond counting the added-sugar content of **imported** softdrinks, fruit drinks, flavoured milk, sports drinks, energy drinks, canned fruits, vegetables and meats, soups, jams, pies, cakes, biscuits, buns, slices, muffins, chocolates, lollies, ice cream, and other desserts, the ABS also would have to be diligent counting the portions of sugar in myriad breads, pizza, muesli and other “health” bars, yoghurts, sauces, salad dressings, mayonnaises, baby or toddler foods, otherwise processed fruits, vegetables and meats, and other assorted manufactured food products, including especially breakfast cereals. No wonder the ABS walked away.

Three steps:

- a. **Portion of sugar (%)** in each of those **tens of thousands of varieties of product**
- b. **Weight (grams)** of each of those **tens of thousands of varieties**
- c. **Total number sold (units)** of each of those tens of thousands of varieties.

So it's simple: **a** times **b** times **c**. That's all!! I'm not sure many people have a clue how massive a task that would be (<http://www.australianparadox.com/pdf/New-nonsense-based-sugarreport.pdf>).

New report promotes worse-than-useless dataset

- On the sugar industry's Green Pool report, someone well-informed and somewhat sceptical would **ask the obvious question**, something like: "How did a modest Brisbane firm succeed in the extraordinarily difficult task of counting all the added sugar scattered here, there and everywhere across Australia's food supply, a task so immense that even the ABS with thousands of staff and great counting expertise failed badly, so badly in fact that it had to abandon its methodology as unreliable over a decade ago"? The answer, of course, is that **the new report did no such thing**.
- The new data "update" is fundamentally flawed because it takes absolutely no account of the critical why behind the ABS discontinuing its unreliable sugar series after 1998-99, after some 60 years! The ABS's sugar-counting methodology was in such disorder that the sugar data could not - and should not - be relied upon for anything important.
- But don't take my word for it: the ABS provides an **information line** on the cover page of its discontinued 4306.0 dataset - "**For further information** about these and related statistics, contact Karen Connaughton on Canberra 02 6252 5337" - for the media and other analysts keen to understand **the data issues that led the ABS to conclude that its sugar-counting methodology had - over the decades - become increasingly outdated, overwhelmed and unreliable**.

Why the *Australian Paradox* paper matters

- **University of Sydney's false observation** of “an inverse relationship” between the consumption of added sugar and obesity was published twice in a formal “peer reviewed” science journal. That's a problem.
- A series of basic but serious errors made the two *Australian Paradox* papers an academic disgrace that should be corrected or retracted. It's time!
- As well, the bogus *Australian Paradox* conclusion is a menace to public health. It's been used as a spearhead in campaigns for the once-a-decade update of official dietary advice to “stay soft” on sugar, and provides a false intellectual basis for the Heart Foundation and the GI Foundation to endorse unhealthy sugary junkfoods as “healthy” http://www.nytimes.com/2011/04/17/magazine/mag-17Sugar-t.html?pagewanted=all&_r=0
- One of the **many unsettling aspects** of this *Australian Paradox* dispute is that the lead author was the “Guest Editor” of the publishing journal! And the high-profile authors operate a low-GI enterprise that depends on sugar being seen as harmless. Now the sugar industry trying to “help out” with Green Pool report!
- Michael Pascoe documented unscholarly behaviour that elevates the issue of **research misconduct, including the possibility of scientific fraud** (Slides 30, 34)

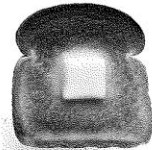
“Good Calories, Bad Calories”

In my opinion, this could be the best book on nutrition science ever written, detailing a history spanning recent centuries. If you have the time, maybe start with Chapters 23 and 6. The pro-carbohydrate foundations of modern “nutrition science” – especially the hapless embrace of refined sugar and other refined carbohydrates as harmless - seem so poorly based that it’s not only fascinating and eye-opening but seriously disturbing.

“A vitally important book, destined to change the way we think about food.”
—MICHAEL POLLAN, AUTHOR OF *IN DEFENSE OF FOOD*

“Gary Taubes is a brave and bold science journalist who does not accept conventional wisdom.” —*THE NEW YORK TIMES*

GOOD CALORIES,



BAD CALORIES

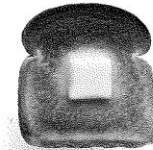
FATS, CARBS, AND THE CONTROVERSIAL
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