

THE DANGERS OF JUNK SCIENCE

By Dr Muriel Newman, NZCPR, 30 October 2015

A few months ago the world's media reported the astounding scientific finding that 'eating chocolate could help you lose weight faster'.

It turned out to be a hoax by a team of people who wanted to raise awareness of the dangers of "junk science" and the exploitation that accompanies it.

Their target was the diet industry and the media.

Documentary about the junk-science diet industry

Science journalist John Bohannon [explained](#) that he was contacted last year by a German television reporter and colleague, who were working on a documentary film about the junk-science diet industry. They wanted to reveal what they considered to be 'corruption' in the way that research into diet was being reported by demonstrating how easy it is to turn bad science into big headlines.

They recruited a German doctor, who had written a book criticising the pseudo-science in the diet industry, to run a clinical trial testing whether bitter chocolate could be used as a dietary supplement. Bitter chocolate was chosen because it was a favourite of 'whole food fanatics': "Bitter chocolate tastes bad, therefore it must be good for you. It's like a religion." A financial analyst friend was asked to crunch the numbers.

Using Facebook, the team recruited volunteers, offering 150 Euros to anyone willing to go on a diet for three weeks and take part in the trial.

Fifteen volunteers were chosen and randomly divided into three groups. The first was asked to follow a low carbohydrate diet, the second was asked to follow the same diet, but to include a 42 gram bar of bitter dark chocolate each day. The third group was the control, and they were asked to make no changes at all to their normal diet.

The team used a number of 'tricks'

The team used a number of 'tricks' to ensure the success of their project.

Firstly, they invented a name and created a website for what sounded like an influential scientific organisation to run the study - *The Institute of Diet and Health*.

Secondly, to gain a newsworthy outcome from the trial, they worked on the principle that if you measure a large number of factors from a very small sample, you are almost certain to get a "statistically significant" result. By ensuring that their clinical trial had an extremely small

sample of 15, but measured a wide range of variables – 18 to be exact – including weight, cholesterol, sodium, blood protein, sleep quality, and general well-being, they were confident of a newsworthy finding.

As John Bohannon explained, “We didn’t know exactly what would pan out — the headline could have been that chocolate improves sleep or lowers blood pressure — but we knew our chances of getting at least one ‘statistically significant’ result were pretty good.”

Thirdly, once the research was concluded and the report was written, it was submitted to a number of journals that didn’t require peer reviews. For a payment of 600 Euros, *The International Archives of Medicine* published the paper.

A press release was carefully designed

Finally, to accompany the publication of the report, a press release was carefully designed to “exploit journalists’ incredible laziness”.

Thanks to “cut and paste” journalism, the research was widely reported around the world. Those media outlets that published it clearly did not look into the legitimacy of the *Institute of Diet and Health*, the quality of the research with its tiny sample, nor the reputation of a journal that published scientific studies without subjecting them to peer reviews. As a result, the bogus diet research was reported world-wide as fact.

The whole exercise was carefully planned to expose the prevalence of junk science and sensation-driven press coverage. The team wanted to demonstrate just how easy it is for people to be conned over so-called scientific evidence, and they highlighted the need for far more scrutiny - and scepticism.

The world is drowning in all this pseudoscience

As John Bohannon explained in an interview on CBS News, “The world is just drowning in all this pseudoscience and when there is science, it's very poorly reported. We [journalists] should be doing a better job.”

The problem is that junk science and hype-driven press coverage, doesn’t just apply to the diet industry. Dubious research can be found in all sorts of areas to justify claims for political or financial advantage. But nowhere is it more evident than in the field of climate change.

This is the theme of a White Paper that has just been published by French Scientists from the Paris based *Société de Calcul Mathématique* (SCM). In their [report](#), *The battle against global warming: an absurd, costly and pointless crusade*, they say, “We are fighting for a cause - reducing CO2 emissions - that serves absolutely no purpose, in which we alone believe, and which we can do nothing about. You would probably have to go quite a long way back in human history to find such a mad obsession.”

Headed by Professor Bernard Beauzamy, SCM explains, “There is not a single fact, figure or observation that leads us to conclude that the world’s climate is in any way ‘disturbed’. It is variable, as it has always been, but rather less so now than during certain periods or geological eras. Rising sea levels are a normal phenomenon linked to upthrust buoyancy; they are nothing to do with so-called global warming. As for extreme weather events – they are no more frequent now than they have been in the past.”

They ask, “Do human beings have the technological ability to change the climate? The answer is no: human beings can do nothing about solar activity, the state of the oceans, the temperature of the Earth’s magma, or the composition of the atmosphere.”

Scathing about the IPCC

And they are scathing about the United Nations Intergovernmental Panel on Climate Change (IPCC) – the world’s oracle on global warming – explaining that if one of their reports was submitted for publication in a reputable scientific journal, it would be rejected: “The IPCC report is totally flawed in terms of basic scientific method, since it ignores the natural variations in the variables that it seeks to analyse: temperature, precipitation, CO₂ concentration, etc. The IPCC argues as if the globe were in a constant, steady state that is disturbed only by human activities. The IPCC report is equally flawed in terms of data acquisition, since in principle it chooses the data or datasets that support its theses and discards all the rest, which are simply ignored. The IPCC report is highly ideologically biased. It does not follow any of the basic rules of scientific research and could certainly not be published in a peer-reviewed journal.”

In reality, climate change has become totally politicised, with computer model predictions of catastrophic environmental collapse regularly used to gain press coverage and scare the public.

In spite of such forecasts being false, the movement marches on, personally denigrating anyone who questions their integrity, labelling them as “climate deniers” and threatening their employment – as Philippe Verdier, the chief weather forecaster at France’s state television network, found out earlier this month, when he was taken off air for publishing a book attacking the global warming juggernaut. His book, *Climate Investigation*, criticises climatologists and political leaders for taking the world hostage with their misleading data: “We are hostage to a planetary scandal over climate change – a war machine whose aim is to keep us in fear.”

He [explained](#), “I received a letter telling me not to come. I’m in shock. This is a direct extension of what I say in my book, namely that any contrary views must be eliminated.”

Top climate scientists who rely on state funding

He believes top climate scientists, who rely on state funding, have been “manipulated and politicised”, and he is scathing about the IPCC, questioning the accuracy of their climate models, claiming that they “blatantly erased” contradictory data.

Mr Verdier decided to write his book in June 2014 when the French foreign minister summoned the country's main weather presenters and urged them to mention "climate chaos" in their forecasts – ahead of the UN's crucial climate change Conference of Parties (COP), to be hosted in Paris in December 2015. After the politician appeared on the front cover of a magazine posing as a weatherman with the headline: "500 days to save the planet", he decided that it was time for a real weatherman to express his opinions - "What's shameful is this pressure placed on us to say that if we don't hurry, it'll be the apocalypse."

The book was released at a particularly sensitive time for the French Government, which is expecting some 50,000 global warming advocates from around the world to converge on Paris next month - burning copious quantities of fossil fuels as they gather to set new rules restricting the use of fossil fuels.

Organisers of COP21 want a legally binding universal agreement to keep global warming below 2°C. However, there are deep divisions between nations.

The European Union has pledged to cut CO2 emissions by 40 percent below the 1990 level by 2030 - but only if the agreement is legally binding on all countries.

They are \$100 billion per year

Developing nations insist that the burden for cutting greenhouse gases should fall on developed countries, which they claim caused the problem. China and India, along with their 24-member bloc of 'Like-Minded Developing Countries', are adamant that developing nations should not only be exempt from any restrictions, but should also be compensated! They are demanding a legally binding compensation package of \$100 billion per year from 2020 from developed nations including New Zealand.

The reality is that climate change is now being used to not only engineer control of the economic progress of nations, but to also redistribute their wealth. But what is especially bizarre is that this is all happening in spite of the fact that there has been no appreciable rise in average global surface temperatures for nearly 20 years!

"Sensationalism, misinformation, anti-humanism and fear"

This week's NZCPR Guest Commentator is ecologist and Greenpeace founder, Dr Patrick Moore, who left the organisation when it turned away from science to embrace "sensationalism, misinformation, anti-humanism and fear". In a lecture outlining the crucial importance of carbon dioxide to mankind, Dr Moore states that it's time we all challenged global warming propaganda:

"CO2 is the most important building block for all life on Earth. All life is carbon-based, including our own. Surely the carbon cycle and its central role in the creation of life should be

taught to our children - rather than the demonization of CO₂, that 'carbon' is a 'pollutant' that threatens the continuation of life. We know for a fact that CO₂ is essential for life and that it must be at a certain level in the atmosphere for the survival of plants, which are the primary food for all the other species alive today. Should we not encourage our citizens, students, teachers, politicians, scientists, and other leaders to celebrate CO₂ as the giver of life that it is?

They must be challenged every day

“It is a proven fact that plants, including trees and all our food crops, are capable of growing much faster at higher levels of CO₂ than present in the atmosphere today. Even at the today's concentration of 400 parts per million plants are relatively starved for nutrition. The optimum level of CO₂ for plant growth is about 5 times higher, 2000 ppm, yet the alarmists warn it is already too high. They must be challenged every day by every person who knows the truth in this matter. CO₂ is the giver of life and we should celebrate CO₂ rather than denigrate it as is the fashion today.”

The reality is that there will always be some who will try to exploit public fear and gullibility - whether over chocolate, global warming, or some other issue. But as Dr Moore contends, it's beholden on us all to not only challenge those seeking advantage, but in addition to demand that the use of pseudo-science to further a cause be subjected to proper scrutiny *before* being reported as the truth in the media.