

Examples of bad science and countering false information

The examples here include bad science, misinformation, disinformation, common logical fallacies, and debunking and corrections of science reporting. What do you think each is an example of? Some links contain multiple examples of the above.

Alternatively, consider how you might use topical issues or issues of interest to your local area/curriculum. Find and share links about how these issues are being reported.

The links we've chosen to use in this document were retrieved in June 2025. If you find a broken link, please contact us at enquiries@sciencelearn.org.nz so that we can find a replacement.

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COVID-19

ADVERTISING REALITY CHECK

Photo / SST

Did your health suffer AFTER THE COVID SHOT?

New Zealand's 'Zero Covid' policy meant many Kiwis were coerced into taking an mRNA 'vaccine' to get their 'lives back.' Tens of thousands of people experienced negative health impacts following their shots. Many continue to suffer. Don't let it happen again.

HAVE YOUR SAY!

NI's Royal Commission is asking for public feedback on expanding the COVID-19 Inquiry's terms of reference. Join tens of thousands of Kiwis demanding a public, full-scale wide-ranging, independent inquiry into NI's Covid response. Add your name to The People's Terms and safeguard against future government abuse of fundamental human rights.

www.covidinquiry.co.nz

This website is created by Reality Check Radio. It is not the official Covid-19 Inquiry website.

- [Advertising Standards Authority says Reality Check Radio's Covid advert had unsubstantiated claims](#) – New Zealand Herald (NZ)
- [Covid story: Ratilal \(62\), Health Professional. Auckland, NZ](#) – Reality Check Radio (NZ)
- [Covid story: Pauline, Support Worker. Nelson, NZ](#) – Reality Check Radio (NZ)
- [Reality Check Radio editorial standards](#) – Reality Check Radio (NZ)

Treatments suggested for COVID-19



- [Hydroxychloroquine helped save coronavirus patients, study shows; Trump campaign hails 'fantastic news'](#) – July 2020 Fox News (USA)
- [Hydroxychloroquine not recommended for coronavirus treatment: WHO panel](#) – March 2021 Fox News (USA)
- [Gupta admits CNN should not have framed Ivermectin as horse dewormer](#) – Breitbart (USA)
- [Ivermectin: How false science created a Covid 'miracle' drug](#) – BBC (UK)
- [FDA just gave thumbs down to Trump's favorite COVID-19 drugs](#) – Science, American Association for the Advancement of Science (USA)
- [This guy just doesn't get it](#) – Australian Medical Council media (on X formally Twitter) (Australia)
- [Discover the science behind the Biocharger®](#) – Biocharger® (USA)
- [Biocharger's claims too silly to take seriously](#) – Science Based Medicine, New England Skeptical Society (USA)
- [Coronavirus treatment spruiked by chef Pete Evans criticised by health associations, to be investigated by TGA](#) – ABC (Australia)
- [Pete Evans' company fined for alleged COVID-19 advertising breaches](#) – Department of Health, Disability and Ageing, Therapeutic Goods Administration (Australia)
- [Pivot to pandemic: How advertisers are using \(and abusing\) the coronavirus to sell](#) – The Conversation (Australia)

How many rare frogs?

- [Fresh research to support New Zealand's rarest frog](#) – Oceana Gold (NZ)
- [50 million or 5000? Rare frog count latest front in Coromandel mining war](#) – Stuff
- [Going on a frog hunt](#) – Forest & Bird (NZ)
- [Mining company says drilling big gold seam won't harm unique frog](#) – Newsroom (NZ)

Industry undermines scientists re tobacco, alcohol, processed food public health science

- [Carrick Graham: Without apologies](#) – Metro Magazine (NZ)
- [Crushing defeat for Dirty Politics PR man with apology to defamed academics](#) – The Spinoff (NZ) (Judgments from the case are labelled Sellman v Slater and can be found [here](#))

Climate change



- [Why I'm a global warming sceptic](#) – Stuff (NZ)
- [Five commonly used words around energy and climate that are both deceptive and destructive](#) – LinkedIn post
- [What is climate disinformation?](#) – Global Witness (UK)
- [Refuting 12 claims by climate alarmists](#) – US Senate Committee on Environment and Public Works from the Office of the Chairman Jim Inhofe (USA)
- [Debunking eight common myths about climate change](#) – UN Environment Programme (Global)
- [Methane science and target review 2024](#) – Ministry for the Environment (NZ)
- [Independent report shows NZ's methane targets way too high](#) – Federated Farmers (NZ)
- [Climate Commission recommends carbon negative 2050 target](#) – Newsroom (NZ)
- [Methane debate still rages after government-initiated review](#) – RNZ (NZ)
- [Govt's methane review designed to disguise ideology as fact](#) – Greenpeace (NZ)

Polar bears – population in decline or growing?

Stuff opinion piece [Why I'm a global warming sceptic](#) has this statement: "The fact that polar bear numbers are increasing removes the emotional implication in pictures of lonely, isolated bears on ice flows."

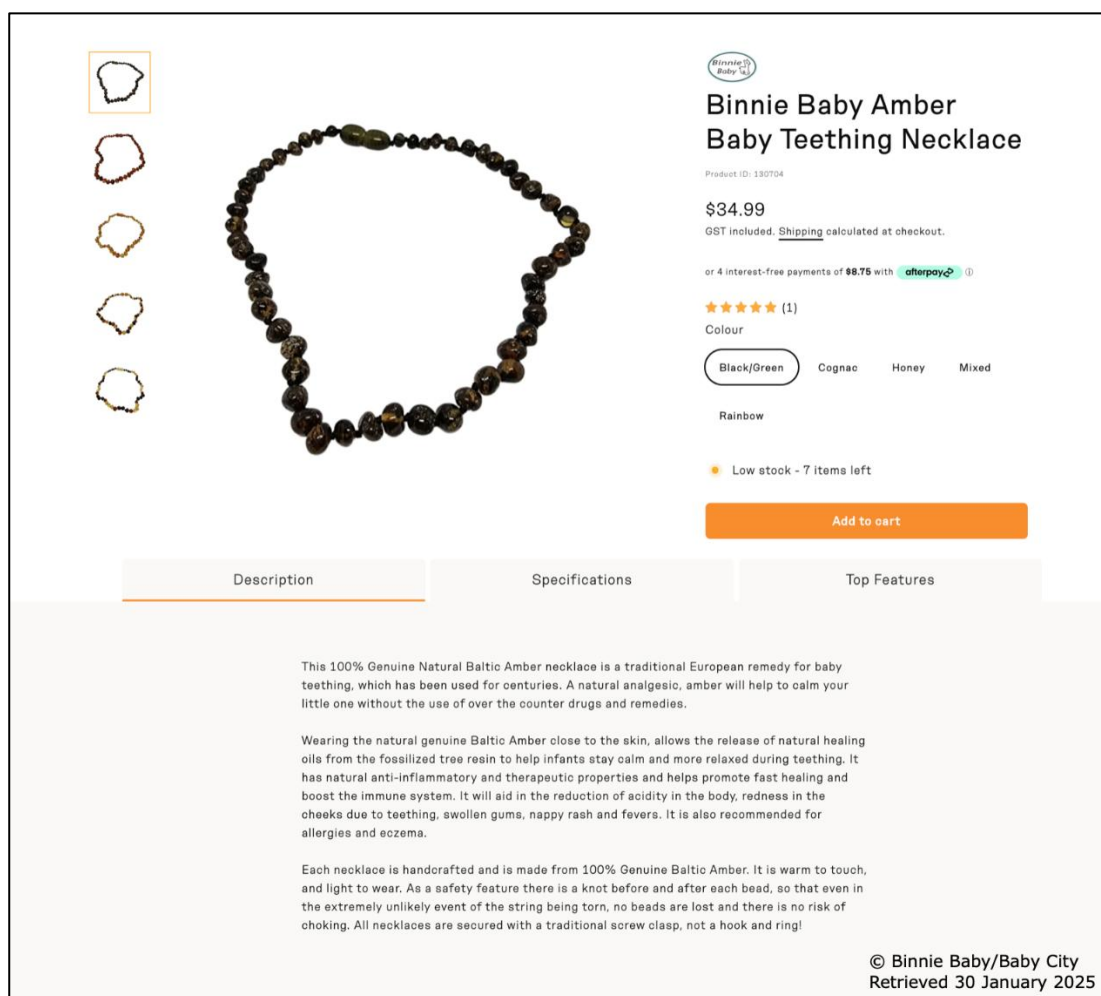
- [Are polar bears endangered?](#) – Polar Bears International (USA and Canada)
- [Polar bears are not increasing](#) – Polar Bears International (USA and Canada)
- [Polar bear population](#) – WWF (global)

- [50 years after hunting ban polar bears are thriving, new report shows](#) – The Global Warming Policy Foundation (UK)
- [The state of polar bear report 2023](#) – The Global Warming Policy Foundation (UK)

Crystal healing

- [Healing crystals 101: Everything you need to know](#) – Healthline (USA)
- [The 10 best crystals for health, wellness, and vitality](#) – Center of Excellence e-learning platform (UK and US)
- [The stone age – How crystals could help support your mental health and overall wellbeing](#) – Good NZ (NZ)

Amber teething necklace



The screenshot shows a product page for a 'Binnie Baby Amber Baby Teething Necklace'. On the left, there are five small images of different necklace styles. The main image shows a large, circular necklace made of dark, irregularly shaped beads. To the right of the main image, the product name 'Binnie Baby Amber Baby Teething Necklace' is displayed, followed by the price '\$34.99' and a note 'GST included. Shipping calculated at checkout.' Below the price, it says 'or 4 interest-free payments of \$8.75 with afterpay®'. There is a star rating of 5 stars (1 review) and a 'Colour' section with options: 'Black/Green' (selected), 'Cognac', 'Honey', and 'Mixed'. A 'Rainbow' option is also visible. A 'Low stock - 7 items left' warning is present. An orange 'Add to cart' button is at the bottom right. Below the product image, there are three tabs: 'Description', 'Specifications', and 'Top Features'. The 'Description' tab is active, showing text about the necklace's benefits for teething. At the bottom right, it says '© Binnie Baby/Baby City Retrieved 30 January 2025'.

- [Binnie baby amber baby teething necklace](#) – Babycity (NZ)
- [Amber waves of woo](#) – Science-Based Medicine (USA)
- [Amber teething necklace](#) – Huggies (NZ and Australia)
- [Amber beads are bullshit and other parenting quackery debunked](#) – The Spinoff (NZ)

GE and food

- [Genetically modified food controversies](#) – Wikipedia
- [Are GMO foods safe for my child? AAP policy explained](#) – American Association of Paediatricians (USA)
- [Pediatrics academy accused of 'fearmongering' over GMO ingredients in kids' diets](#) – Science (American Association for the Advancement of Science, USA)

- [Viewpoint: 'Pumping toxic chemicals onto breakfast tables' – Nigerian activists claim GMOs are part of Western effort to depopulate African continent](#) – Genetic Literacy Project (USA)
- [GE Honesty](#) – website and campaign (NZ)

1080

- [1080 Science](#) – Dr Jo Pollard (NZ)
- [Poisoning paradise](#) – Clyde and Steve Graf (NZ)
- [Saving our wildlife – Ban 1080 Party policy](#) – Scoop article on now disbanded Ban 1080 Party (NZ)
- [1080 – a wicked problem](#) – Science Learning Hub (NZ)
- [So what does the actual Science say about 1080?](#) – Dr Alison Campbell (NZ)
- [What would happen if we stopped using 1080?](#) – Interview with Forest & Bird by OSPRI (NZ)

Hair dyes and breast cancer



- [A harrowing study of 46,000 women shows hair dyes are heavily associated with cancer](#) – Fast Company (USA)
- [Hair dyes could raise risk of breast cancer: study](#) – New York Post (USA)
- [Spinning science: Overhyped headlines, snarled statistics lead readers astray](#) – Fred Hutch Cancer Center (USA)

Black market tobacco

- [Illegal tobacco trade](#) – British American Tobacco NZ (NZ)
- [Independent report on black market tobacco trade published](#) – Ministry of Health (NZ)
- [False zombie arguments about illicit tobacco shouldn't be given any more oxygen](#) – Public Health Communication Centre (NZ)
- [Why tobacco companies' warnings about a black market are inflated – and misleading](#) – The Conversation (NZ)

- [Perceptions of illicit tobacco sources following a proposed reduction in tobacco availability: A qualitative analysis of New Zealanders who smoke](#) – Oxford Academic Nicotine and Tobacco Research (UK/NZ)

Water fluoridation



- [Fluoridation: an update on the evidence](#) – Office of the Prime Minister's Chief Science Advisor (NZ)
- [Fluoride in water: Want to remove fluoride from your drinking water?](#) – Aquaworks (NZ)
- [Hamilton's fluoride debate](#) – Science Learning Hub (NZ)
- [Finding the truth about fluoride](#) – New Zealand Herald (NZ)
- [Fluoride Free NZ](#) – Fluoride Free New Zealand (NZ)
- [Tauranga will continue to fluoridate its water despite Mayor's no-vote](#) – New Zealand Herald (NZ)

Activated almonds

- [Activated nuts 101](#) – Honest to Goodness (Australia)
- [Are activated nuts better for you?](#) – Nuts for Life (Australia)
- [Is nut activation nuts?](#) – RNZ (NZ)
- [Activated nuts: What's the fuss?](#) – Finest & Friends (NZ)
- [Does 'activating' nuts affect nutrient bioavailability?](#) – National Library of Medicine (USA)
- [The nutritional magic of activated seeds and nuts unleash the power within](#) – Earth Shine (South Africa)