



## Hot water causes cancer? Don't believe it: Column

Alex Berezow and Julianna LeMieux<sup>3</sup>: 15 p.m. EDT August 10, 2016

***The World Health Organization cancer research agency is abusing its reputation by promoting hype.***



(Photo: Fred Dufour, AFP/Getty Images)

If nanny state critics want a fine example of regulation gone wild, they should look to the World Health Organization. The group's International Agency for Research on Cancer has given us a reason to fire up our espresso machines by [declaring](#) that coffee does not cause cancer. But don't celebrate too hard. The IARC also says that [any very hot drink](#) probably causes cancer, including hot water.

You're definitely not alone if that doesn't make a lot of sense to you. The agency's own [evaluation](#), published in *The Lancet Oncology*, even admitted that there was "[limited evidence](#)" for this conclusion. So why make it?

Unfortunately, IARC's actions have long appeared to be influenced by factors other than sound science. For example, even though both the [U.S. Environmental Protection Agency](#) and the [United Nations](#) have declared that glyphosate (an herbicide commonly used with genetically modified crops) is unlikely to pose a health risk, IARC still [considers](#) it to be "probably carcinogenic to humans."

Do you like processed meat and alcohol? Indeed, consuming too much is linked to [bowel cancer](#) or [liver cancer](#), respectively, but IARC goes several steps further and lists both as "[Group 1](#)" carcinogens, alongside tobacco, asbestos, and plutonium. Putting bacon and beer in the same risk category as a radioactive metal demonstrates a lack of common sense and a striking inability to handle scientific nuance.

And despite the fact that it is not physically possible for cell phone radiation to cause cancer (because the microwave photons associated with it do not carry enough energy to break chemical bonds), IARC believes that radiofrequency electromagnetic radiation is "[possibly carcinogenic](#)" to humans.

If you look hard enough, you will find that pretty much [anything on Earth](#) has been linked to cancer by some research group. Apparently, that is sufficient to make IARC's naughty list.

Part of the problem is IARC's methodology. Their study was [focused on South America](#) and based on case studies that show an increased risk of esophageal cancer if people consumed very hot drinks. However, the data is so weak that they include [the following](#):

"Although the mechanistic and other relevant evidence for very hot beverages is scant, biological plausibility exists for an association between very hot beverages and cell injury and the sequelae that might lead to cancer."

In other words, IARC admits there is little to no evidence for their claim that hot water causes cancer, but because it is biologically plausible, they feel justified in alarming the public. Not only is that scientifically dubious as it undermines the rigorous methodology applied by scientists in their pursuit of knowledge, it is socially irresponsible.

Put another way, just because something is biologically plausible does not make it probable. It is also biologically plausible that if we exercise more, we can all look like Chris Hemsworth and Gigi Hadid. But it's certainly not probable.

Furthermore, if hot drinks are dangerous, then why should IARC stop there? Maybe that chicken soup or burrito that you left in the microwave for too long is slowly killing you. And don't even get us started on that piping hot pizza.

Undoubtedly, IARC's [stated mission](#) is an admirable one: "Cancer research for cancer prevention." When it comes to recommendations on what causes cancer, only the best, evidence-based advice should be made available to the public.

But all too often, IARC seems more interested in promoting a particular lifestyle — one that does not include GMOs, cell phones or even hot drinks — than it does about promoting sensible health decisions. That's a shame because IARC is abusing the good name and reputation of the WHO to dabble in hype.

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