



The Wellness Column

by Amanda J. Butler

Trigger note: This article touches on topics such as fluoride use and alternative health perspectives, which can be controversial. The intention is to explore emerging ideas and invite informed conversation.

In the world of wellness, we often search for complex solutions to complex problems. Yet sometimes, the most powerful answers lie in something almost invisible.

Nitric oxide

Rarely discussed outside scientific circles, this simple molecule plays a profound role in human health – supporting circulation, brain function, hormone balance, and even the way our bodies age.

Increasingly, researchers and practitioners are asking a provocative question:

Could declining nitric oxide levels be at the root of many modern diseases – including cardiovascular health and neurodegenerative conditions such as Alzheimer's?

The Body's Silent Regulator

Nitric oxide is essential for the dilation of blood vessels, allowing oxygen and nutrients to flow efficiently throughout the body. Without it, circulation becomes compromised.

This matters not just for heart health – but for the brain.

Reduced blood flow is one of the key features observed in cognitive decline. When nitric oxide production diminishes, the brain may quite literally receive less of what it needs to function optimally.

Some researchers, including Dr. Nathan Bryan, suggest that impaired nitric oxide production could be a significant – yet overlooked – factor in conditions such as Alzheimer's and Dementia. While this perspective is still being explored, it opens an important conversation around prevention, rather than treatment alone.

Why Levels Decline With Age

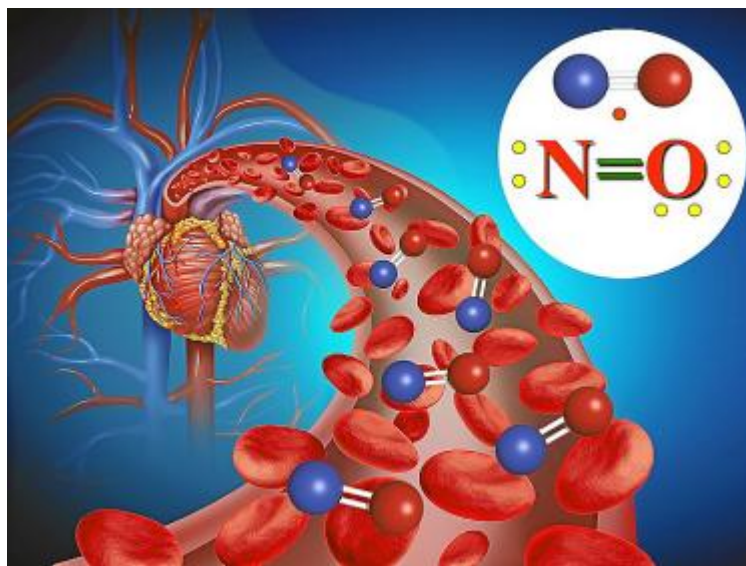
One of the most compelling aspects of nitric oxide is how closely it is tied to ageing.

As we get older, our bodies naturally produce less of it.

Hormones play a key role here:

- In men, **testosterone supports nitric oxide production**
- In women, **oestrogen is essential for its synthesis**

This helps explain why cardiovascular and cognitive risks often in-



NitricOxide Blood flow.

NITRIC OXIDE: The invisible molecule that could change how we age

crease with age – particularly during hormonal shifts.

For women, this also brings attention to the role of **HRT (Hormone Replacement Therapy)**, which have been shown in some scientific trials to support nitric oxide production post – menopause by restoring oestrogen levels.

Dr Nathan Bryan.

The Oral Microbiome Connection

Perhaps the most surprising piece of the nitric oxide puzzle lies in the mouth.

The oral microbiome – bacteria living on the tongue and in the saliva – plays a crucial role in converting dietary compounds into nitric oxide.

Which



means..... everyday habits matter. According to Dr. Bryan's research and commentary:

- **Using a tongue scraper** may support microbial diversity
- **Avoiding antiseptic and fluoride mouthwash** helps preserve beneficial bacteria
- **Overuse of fluoride disrupts this natural eco system**

This brings us to a more controversial topic.

Fluoride: A Necessary Protection or Hidden Disruptor?

Fluoride has long been

promoted for dental health. However, some researchers argue that its widespread use – particularly in toothpaste and water – may have unintended consequences for the oral microbiome.

From this perspective, fluoride and antiseptic mouthwashes may reduce the friendly bacteria required for nitric oxide production, potentially influencing systemic health. It's important to acknowledge that this remains a debated issue, with strong views on both sides – including, and in particular, within the dental community.

It is worth noting, however, that fluoride is classified in high doses as an "acute toxin," and excessive exposure is harmful – hence long-standing guidance to use only a "pea-sized" amount of toothpaste. In practice, many people use significantly more, raising questions around cumulative exposure. Water fluoridation policies also vary widely: most **Western European countries** have rejected water fluoridation including Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Sweden, and Switzerland, while others – including Ireland, many regions of Spain and the United Kingdom – continue their water fluoridation policies.

At the same time, dental caries remain a significant public health issue, and fluoride has played a recognised role in reducing tooth decay – but might this be to the detriment of the body's microbiome? This opens a broader conversation between conventional dentistry and more holistic approaches – one that continues to evolve. Alternatives such as hydroxyapatite-based toothpastes, which work by remineralising enamel and repairing micro-damage, are gaining attention as part of this shift.

From a functional perspective, oral

care may be less about eliminating bacteria altogether and more about maintaining balance. Practices such as gentle brushing, tongue scraping, and avoiding overly aggressive anti-septic products may help support a more diverse oral environment – one that contributes not only to dental health, but to wider physiological processes, including nitric oxide production.

What is increasingly clear is that the oral microbiome plays a far more significant role in overall health than previously understood.

Lifestyle, Diet & Nitric Oxide

Modern living may be quietly depleting our nitric oxide levels.

Factors that may impair production include:

- High sugar intake (which interferes with key enzymes)
- Sedentary lifestyle
- Poor diet quality
- Chronic stress

On the other hand, simple shifts can help support it:

- Regular movement and exercise
- Nasal breathing (which naturally stimulates nitric oxide production)
- A balanced, nutrient-rich diet
- Supporting hormonal health

A Shift in Perspective

Rather than searching for a single "cure," nitric oxide invites a different way of thinking. It connects multiple systems: circulation, hormones, brain health, heart health and even the microbiome.

Perhaps most importantly, it brings us back to something fundamental: Health is not built in isolation. It is built through interconnected systems – many of which we are only just beginning to understand.

Final Thought

The idea that something as small as a molecule could influence conditions as complex as Alzheimer's may sound extraordinary.

But wellness is evolving.

And sometimes, the future of health lies not in adding more – but in understanding what we may have unknowingly disrupted.

Personal note: I chose to move away from fluoride toothpaste some years ago, opting for hydroxyapatite alternatives known to support enamel repair. Emerging research also highlights xylitol gum for oral health. During pregnancy, some practitioners advise limiting fluoride use – decisions that are best made with professional guidance.

Amanda J Butler is a Mallorca-based writer exploring Mallorca's evolving culture of wellness, lifestyle and conscious living. Discover more at www.mallorcawellnessliving.com or follow IG @amandabmalorca.