



MILLHOUSE INTEGRATIVE MEDICAL CENTRE

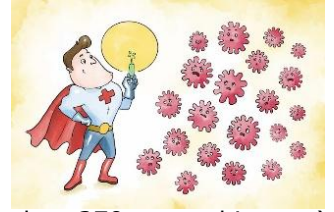
PARTNERING IN HEALTH AND HEALING

NEWSLETTER APRIL 2026

Kia ora koutou - warm greetings to the Millhouse community and other readers.

What a topsy-turvy world we live in!

As I write, another "tropical river" of rain has drenched Northland this week, but today's summer warmth offers a brief reprieve before winter's chill, winds, and rise in respiratory infections. New Zealand is now facing its ninth COVID-19 wave — over 500 cases and about 50 weekly hospitalisations in early March, mostly among older adults — though thankfully, well below previous peaks.



Influenza remains low for now but will increase soon. RSV, colds, pertussis (already more than 370 cases this year), and imported dengue are adding further pressure.

Be proactive: book your flu vaccine with Reception. If you're coughing or have cold symptoms, please stay home. Maintain good hygiene, use hand sanitiser, and seek early GP care — these small steps help prevent serious illness and hospital admissions.

Supporting immunity: Vitamin D helps modulate the immune function. Also keep some Betadine (10% povidone-iodine) on hand — dilute 1:20 for early gargle or nasal rinse at the first sign of infection. Zinc and quercetin may also enhance innate defences.

Sadness and loss: I've just returned from a wonderful Tasmanian vacation, where I was confronted with the stark history of convict life at Port Arthur and Strahan. What was missing, though, was the story of Australia's First Nations people. Reading [Dark Emu](#) by Bruce Pascoe reminded me how the Aboriginal and Torres Strait Islander peoples — arriving 80,000 years ago, and reaching Tasmania 40,000 years ago — thrived through an Ice Age. They were far more than "nomadic wanderers": they built homes, cultivated grains and native rice, irrigated land, and practised ecological stewardship of sea and land.

It's humbling to reflect that colonial "Darwinian" thinking — survival of the strongest — nearly destroyed them. Sadly, we haven't entirely learned from history. Conflict continues in the Middle East and Ukraine, and its ripple effects reach New Zealand through higher oil prices and growing financial hardship. February saw 3,827 mortgagee sales; credit card debt reached \$6.3 billion in December 2025; and over 21,000 Kiwis are now behind on mortgage repayments.

Community support: Driving to Millhouse this week, I heard Northland's [Otetao Reti marae](#) leader from Punaruku speak about the remarkable resilience they've built since Cyclone Gabrielle in 2023 — installing solar power, independent water supplies, and storing emergency equipment. These steps have helped their marae act as a lifeline during floods, offering food and shelter to others.

How can we build the same resilience in our own lives and neighbourhoods? Remember: a problem shared is a problem halved. Be kind — what goes around comes around. If you don't know your neighbours, start a conversation or form a small support group. Join a social network or faith community. And if times feel overwhelming, please don't hesitate to reach out to the Millhouse team. We're here to help.

In this newsletter, I discuss how to activate your vagus nerve to support resilience, mood, and recovery from illness.

MILLHOUSE NEWS

EASTCARE EXTENDED HOURS If you require after-hours urgent medical care, Eastcare A&E are now open till 1am each morning.

ONE-YEAR PRESCRIPTIONS As mentioned in the last newsletter, one-year prescriptions have now commenced. They

12 MONTH SCRIPT CHECKLIST

- STABLE medical condition
- 1YR UNCHANGED medication
- NO polypharmacy
- NO controlled restricted meds
- NO misuse of meds
- BIOMARKERS in target range (BP, weight, blood - Hba1c, LDL, TFTs, etc)
- Face to face review completed
- NO ongoing monitoring needed
- AGREES to annual review
- DOCUMENTED in clinical notes
- AUDIT review code inserted

are intended to reduce medical costs but will only be offered where it is clinically safe and appropriate. These prescriptions generally apply when your condition is stable, your medications have been unchanged for at least a year, and your key health markers (such as blood pressure, weight, and blood tests) remain within agreed targets.

One-year repeats are not suitable for complex medical conditions, patients on multiple medications, or those taking controlled drugs such as opioids, benzodiazepines, or stimulants. They are also unsuitable where there are concerns about medication safety or misuse.

The criteria used for 12-month prescriptions are summarised in the adjacent sidebar. For many patients, a six-month prescription may be more appropriate. You can review the Repeat Prescription Policy online at <https://tinyurl.com/2knwp6wr> or by visiting the Millhouse Medical website.

CANCEL EARLY TO HELP OTHERS. Life happens, but if you can't make your appointment, please let Reception know as soon as possible. This opens spots for folks with urgent needs - and just a heads-up, there's a service charge if we aren't notified in time. Your understanding makes care accessible for everyone.

MAKE THE MOST OF CONSULTS. We are here to give your health the focus it needs. Our standard 15-minute slots work great for one or two issues, letting us dive deep without rushing. Got a longer list or something that needs extra time? Book a double appointment—we do charge more for it, but it means we can unpack everything properly, stay on schedule, and get your health concerns sorted. Thanks for your cooperation!



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THE GREAT NERVE – VAGUS NERVE – A QUIET CONDUCTOR OF HEALTH AND LONGEVITY

The vagus ‘wandering’ nerve is the longest cranial nerve, exiting from the base of the brain and travelling through the neck and chest into the abdomen, with branches to the internal organs. It is a key part of the autonomic (or “automatic”) nervous system, helping balance the sympathetic “fight-or-flight” and parasympathetic “rest-and-digest” systems. When vagal tone is strong, the body tends to slow its pulse, reduce inflammation, and sustain homeostasis — all linked with better long-term health and longevity.

Recently I read [The Great Nerve](#), the autobiography of Dr Kevin Tracey, a neurosurgeon, scientist, and entrepreneur who directs the Feinstein Institute for Medical Research in New York. For over forty years, he has explored the biology of inflammation and discovered that branches of the vagus nerve can inhibit inflammation — a finding that opened a new frontier in treating disease through bioelectrical stimulation.

Early in his career, Dr Tracey became fascinated by the inflammatory response that drives both acute and chronic diseases. He was among the first to use biologic therapies — treatments targeting specific inflammatory molecules such as tumour necrosis factor (TNF), cytokines, and monoclonal antibodies — to control severe inflammation. While these agents offered breakthroughs for many, they did not always work and often carried significant side-effects.

In the opening chapter of his book, Dr Tracey recounts the remarkable story of Kelly Owens, diagnosed at age 13 with severe Crohn’s disease and inflammatory arthritis. Despite years of hospitalisations, surgeries, and immune-suppressing treatments including biologics, she became completely dependent on prednisone and her spouse for mobility. In 2014 she learnt of [Dr Tracey’s research](#) through a *HuffPost Live* interview, made inquiries and joined a clinical trial in Amsterdam that implanted a small vagus nerve stimulator behind the collarbone. This delivered gentle pulses to activate the body’s anti-inflammatory reflex. Within weeks, she was walking unaided. Within two months her bowel symptoms had resolved and shortly afterwards she stopped the prednisone and has remained medication-free.

It was the Greek physician Claudius Galen in the 2nd century AD who first described the “wandering” vagus and christened it ‘the great nerve’. This remarkable nerve contains about 200,000 neurons, with long axon projections that transmit tiny electrical impulses — a constant current of information, around 80% flowing toward the brain and 20% outward to the body.

In 1992, Dr Kevin Tracey and colleagues at the Feinstein Institute demonstrated in mouse experiments that the vagus nerve can regulate the immune system by suppressing the inflammatory molecule tumour necrosis factor (TNF). In a later study, his team examined blood samples from patients before and after implantation of a vagus nerve stimulator for intractable epilepsy — a therapy now known to reduce seizures by about 50%. They found that TNF levels fell significantly once vagal nerve stimulation (VNS) began, confirming its systemic anti-inflammatory effects.

Dr Tracey termed this mechanism the “inflammatory reflex” and recognised that stimulating the vagus nerve might offer a promising new way to reduce inflammation across many diseases, especially rheumatoid arthritis (RA) and inflammatory bowel disease (IBD).

In 2011, Pero — a truck driver crippled by RA — became the first person to receive a permanent VNS device for an autoimmune disease. The device delivers a mild alternating current for five minutes, three to four times a day. Within weeks, Pero’s joint pain improved markedly. It takes time and millions of dollars to validate a response, but finally in 2025, a 250-person clinical trial confirmed these findings. VNS is now FDA-approved for epilepsy and treatment-resistant depression and shows promise for IBD, migraine, post-stroke rehab, obesity and other inflammatory conditions.

Implanted vagal nerve stimulators remain expensive (US\$10–50,000 including hospital costs), but affordable non-invasive portable devices are now available, as well as TENS ear stimulators.

In the sidebar, I’ve outlined simple ways you can boost your own vagal tone — supporting resilience, mood, and recovery. Why not give it a try?

Autonomic Nervous System Vagal tone and HRV

The **autonomic nervous system** controls automatic functions like heart rate, breathing, digestion, and stress responses, balancing the “fight-or-flight” (sympathetic) and “rest-and-digest” (parasympathetic) branches.

A useful window into this system is **heart rate variability (HRV)** — the variation in time between heartbeats.

In general, a higher HRV suggests better vagal tone, greater resilience, and healthier stress regulation. Good vagal tone is linked with lower inflammation, better stress resilience, and healthier ageing, making it an important marker of longevity.

Many digital watches and rings now track HRV, including Apple Watch, Garmin, Fitbit, Oura Ring, and WHOOP. Prices range from roughly NZ\$400–\$600 for watches to NZ\$700–\$1,000+ for premium rings and subscriptions.

Simple ways to boost vagal tone

Stimulating the vagus nerve can improve resilience, mood, and recovery, and may also help reduce inflammation.

Practical options include:

- **Meditation and mindfulness:** reduce inflammation and stress but do not directly stimulate the vagus.
- **Slow, deep breathing:** 5–6 breaths (inhale 4–5 seconds, exhale 6–7 seconds) per minute to activate “rest-and-digest” vagal pathways.
- **Gentle exercise and rest:** regular moderate activity with good recovery.
- **Good sleep:** 7–8 hours with consistent bedtime and minimal screens before sleep.
- **Temperature:** brief cold-water exposure or a warm bath can briefly engage the vagus.
- **Singing, humming, chanting, gargling:** simple activities that may strengthen vagal pathways.
- **Ear-based TNS devices:** emerging non-invasive tools being studied for vagal modulation.