

MILLHOUSE INTEGRATIVE —MEDICAL CENTRE—

PARTNERING IN HEALTH AND HEALING

NEWSLETTER AUGUST 2025

Kia ora koutou - warm greetings to the Millhouse community and other readers. Welcome to our latest patient newsletter!

During winter's cold weather, protect your health as the new Covid-19 Omicron variant NB.1.8.1 (Nimbus) spreads rapidly but causes mostly mild illness. Practice good hygiene—wash hands often, use using Betadine-povidone—iodine (dilute one part with 20 parts water) as a gargle and nasal douche at the first signs of illness, and consider supplements like Vitamin D, zinc, quercetin, and Vitamin C—to help reduce infection risk and speed recovery. Stay warm and well.



BON VOYAGE Dr Dan and thank you for your ten years at Millhouse, during which you equipped yourself for general practice and cared for many grateful patients. We wish you, Chanelle, Phoenix, and Summer a safe move and much success in Queenstown. Pictured is the caricature presented to Dan upon his departure.

ARTIFICIAL INTELLIGENCE Following the previous newsletter, questions were raised regarding the security of our system when utilizing the web-based *Heidi AI* for notetaking. <u>Heidi AI</u> anonymously records doctor-patient consultations, and upon completion of the conversation, the recording—whether in full or summarized forms are transferred into the patient's clinical notes. The *Heidi transcript* is then promptly deleted to maintain confidentiality.

ALCOHOL Documents released under the Official Information Act this week indicate that alcohol industry lobbying has adversely impacted Health NZ, resulting in delays in developing updated alcohol recommendations like those adopted in Canada. In January 2023, Canada's public health authorities revised their advice, as detailed in the <u>April-May 2023 newsletter</u>, stating that <u>abstaining from alcohol improves both health and sleep</u>, <u>while limiting consumption to fewer than two drinks per week reduces associated risks</u>. Higher levels of alcohol intake are linked to negative outcomes, including heart disease, cancer, self-harm, and violence toward others. The guidance strongly recommends complete abstinence from alcohol during pregnancy and for individuals under 18 years of age. From a clinical perspective, it is advisable to avoid alcohol and recreational cannabis use until the brain reaches maturity in the early twenties.

In the earlier newsletter I mentioned that genetic variations can protect people from alcohol's harmful effects, as the liver breaks alcohol down into toxic acetaldehyde before it becomes less harmful substances. Alcohol can cause significant harm to society, increase cancer risk, and damage organs—especially in developing fetuses and teenage brains. In my view, avoiding alcohol is best and your money could be better spent elsewhere.

In this newsletter, I continue my discussion from October 2024 on the 'Survival Switch': while the body stores excess fructose as fat for famine, too much leads to metabolic issues like obesity, diabetes, high blood pressure, got and fatty liver.

MILLHOUSE NEWS

FEWER PRACTITIONERS Until we find a replacement for Dr. Dan, wait times to see NP Gabriella or your family doctor may be slightly longer (currently 1–2 days). While the team will be busier, we will prioritize urgent medical issues for same-day appointments.

CONSULTATIONS We want to ensure you get the most out of your visit with us. Our standard consultation time is 15 minutes, which is generally enough to thoroughly address one or two concerns. If you have a longer list or feel you need more time, please consider booking a double appointment so we can give each issue the attention it deserves. There will be an added charge. This helps us stay on schedule for all patients and ensures your health needs are fully met—thank you for your understanding and cooperation.

DIABETES EDUCATION CLASSES are available with Health Coach Rebecca. Please contact Reception if you are interested in attending; patients whose diabetes may benefit from lifestyle training will also be contacted.

HEALTH COACH REBECCA has experience in naturopathy and lifestyle medicine. Individuals seeking support with sleep, relaxation, weight management, diabetic control, or lifestyle modifications to help manage blood pressure can contact Reception to book an appointment. Consultations are provided at no cost.

HEALTH IMPROVEMENT PRACTITIONER VANI offers brief, targeted behaviour change strategies to support preventive and clinical care for mental health, substance addiction, emotional distress, and the impacts of chronic illness. Appointments with Vani are available by contacting Reception for a free 30-minute session to discuss any concerns or challenges.

Fibromyalgia & Gut Microbiota

Medscape 11 June reported research from Haifa's Institute for Pain Medicine showing that fibromyalgia patients have abnormal gut microbiomes compared with those of healthy individuals. Lab analysis of the microbiome could identify fibromyalgia with up to 90% accuracy.

In follow-up studies, transplanting microbiota from fibromyalgia patients into germ-free mice caused pain-like behaviors, which were reversed using healthy donor microbiota.

A recent pilot study found microbiota transplants from healthy donors reduced symptoms in women with treatment-resistant fibromyalgia. Probiotic supplementation using Lactobacillus, Bifido-bacterium and Saccharomyces boulardii also showed benefits.

Current research also suggests the gut microbiome may play a causal role in some chronic pain conditions. The emerging option of microbiome analysis is costly, but just adopting an anti-inflammatory diet can improve gut health and support pain management.



NEWSLETTER AUGUST 2025

SURVIVAL SWITCH

In the October 2024 newsletter I addressed the sharp increase in obesity, diabetes, and hypertension compared with stats from a century ago; this parallels the increased consumption of sugar and high fructose corn sugar, especially present in processed foods and beverages. Referencing Professor Richard Johnson's 2022 book "Nature Wants Us to Be Fat," I explained the "survival switch," a biological process that prompts fat storage during abundance. This mechanism was once protective against famine but is now problematic in an era of constant high-fructose consumption.

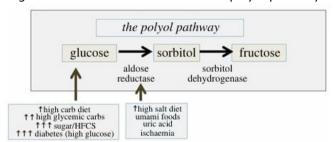
FRUCTOSE FLIPS A "FAT SWITCH"

Unlike glucose, which our bodies use directly for energy, fructose takes a different path. Mostly processed in the liver, fructose is more likely to be converted into fat rather than being burned for immediate fuel. This metabolic shortcut can set off a cascade of effects: increased hunger, greater fat storage, and, in animal studies, more foraging and food-seeking behaviours. These patterns may also appear in humans. Excess fructose blunts the body's natural signals of fullness, making it easier to overeat and gain weight. It also raises uric acid levels, which are linked to higher blood pressure and key features of metabolic syndrome, including obesity and fatty liver.

Research suggests that these processes might overstimulate the drive to seek food, potentially influencing impulsive or hyperactive behaviours, though this link is not yet firmly established in humans. In short: consuming too much fructose can "flip the fat switch," increasing appetite, promoting fat storage, and contributing to both metabolic and, perhaps, behavioural risks.

SWEET, SALTY, AND SAVOURY: FOOD, FRUCTOSE, AND THE "SURVIVAL SWITCH"

<u>Professor Richard Johnson</u> became convinced that one reason low-carb diets were so effective for weight control is that they're low in fructose. Yet, this didn't explain why some animals—like camels eating desert plants or whales on marine diets—still become obese, despite consuming little or no fructose. This puzzle led researchers to revisit a long-overlooked metabolic route: the polyol pathway.



Since the 1950s, it's been known that the body can convert glucose into sorbitol (a sugar alcohol or "polyol" linked to diabetic complications like cataracts and perhaps diabetic neuropathy) and then into fructose. While the polyol pathway was originally thought to be minimally active, more recent work from Johnson's group reveals it ramps up under stress. High glucose (as in poorly controlled diabetes), overconsumption of refined carbs, dehydration, low blood pressure, low oxygen (such as in heart attacks or high altitude), high uric acid, and even large amounts of

dietary fructose all boost the production of endogenous (internally generated) fructose, especially in the liver. This, in turn, can accelerate weight gain and features of metabolic syndrome. Intriguing evidence emerged in the 1970s, when New Zealand cattle rapidly gained weight after being given salt licks. Salt-induced dehydration and excess sodium intake both appear to trigger the body's "survival switch." In fact, people with obesity are 10 times more likely to be dehydrated than those of normal weight. Fructose also stimulates vasopressin, a hormone that helps us retain water—further linking sugar, salt, and hydration to weight regulation.

Even umami-rich savoury foods (like soy and fish extracts, yeast, dried tomatoes, organ meats, beer, or MSG, all high in glutamate) are potent endogenous fructose triggers for overeating—possibly even more powerful, gram for gram, than salt or sugar.

THE SWITCH DIET SOLUTION

In summary, the "survival switch" highlights how fructose—whether ingested or produced in the body—powerfully stimulates cravings, impulsivity, and hunger, while overriding normal satiety signals through inducing leptin resistance. Leptin, a hormone released by fat cells, normally communicates to the brain that energy stores are sufficient, reducing appetite and promoting energy expenditure. However, when fructose increases leptin resistance, the brain fails to receive these "fullness" signals effectively, causing persistent hunger and promoting fat storage rather than energy use. The Switch Diet Solution offers a clear set of practical interventions: avoid fructose, limit high-glycemic carbohydrates, stay hydrated with water, restrict salt and alcohol, moderate umami-rich foods, and manage uric acid levels under medical guidance. By following these steps, the diet aims to turn off the survival switch, prevent unnecessary fat accumulation, and promote optimal metabolic health—a science-based approach to addressing the modern epidemic of obesity and its related diseases.

Noho ora mai - stay well and care for yourself,

THE SWITCH DIET

SUGARS

- Eliminate all sugar beverages
- Eliminate all fruit juices, dried fruit, fruit syrups & concentrates.
- Avoid all sugar added to foods.

CARBOHYDRATES

- Avoid high Glycaemic Index (GI) carbs
- Prefer whole grains, high fibre low GI vegetables
- Limit fruit 3-4 servings daily & prefer low GI.

PROTEIN

Emphasize fish, poultry, dairy & vegetable proteins.

LIMIT HIGH UMAMI FOODS

 red & organ meats, shellfish, rich savoury cheeses

SALT

- reduce to 5gm daily
- limit processed food containing high salt & sugar

ALCOHOL - eliminate or reduce WATER

 drink 6-8 glasses (250ml) daily URIC ACID lower is better Women less than 0.36mmol/l Men less than 0.41mmol/l Additional Vitamin C lowers uric acid