



MILLHOUSE INTEGRATIVE MEDICAL CENTRE

PARTNERING IN HEALTH AND HEALING

NEWSLETTER OCTOBER 2022

A warm welcome to the Millhouse community and other readers, Since I last wrote nearly seven months ago much has changed.

Radio NZ reported on the fiery destruction affecting Portugal, Spain and France where extreme heat has also caused many deaths among the elderly. The Middle East and India experienced also extreme temperatures but creative residents in Ahmedabad (Gujarat) found some relief by painting their roofs white, which reflects up to 85% of sunlight and can cool houses by up to 5° Celsius. In England, railway lines were also painted white, to stop the expansion and buckling that may have led to train disasters. More recently, hurricanes have ravaged Florida and torrential rains led to massive flooding in southern parts of Australia.



Sadly, the Ukraine conflict continues, with the Russian leaders indiscriminately and systematically blitz-bombing villages and cities, killing, maiming, and destroying morale. With the annexing by Russia of a considerable slice of border territory, the Ukraine military is pushing back. However, one mistake by either side could easily provoke a European confrontation or even a limited nuclear war.

Healthwise, a new viral entity, the Monkeypox virus, is spreading globally, with a few cases reaching New Zealand, and the ancient polio virus has been discovered in a New York sewer. Meanwhile COVID-19 is bedding in across the world. This year new variants of Omicron have been reported every few months and entered our community via the international border. The latest, BA 2.75, was detected in two returnees on 1st July; this variant may be more transmissible than Omicron with greater ability to evade detectionⁱ. Covid vaccination did not stop viral transmission of Omicron as it swept through New Zealand but we need to remember that immunisation does prewarn the immune defences, enabling greater resistance against acute infection.

For most COVID is a benign illness and a recent observational studyⁱⁱ on the Omicron variant in urban Los Angeles demonstrated that 56% of participants who were positive on blood testing were unaware they had the infection. Those with compromised immune responses, particularly the elderly (see February-March 2021 newsletter for those at greatest risk), must continue to be vigilant: wearing masks, performing regular hand washing, avoiding public places, where infection can take place, and forbidding those with respiratory symptoms from entering the house.

More broadly, I continue to encourage the use of simple strategies - a healthy diet, quality sleep, avoiding stress, and adding specific nutrients to enhance immune capabilities; nasal and mouth washes used early in the viral phase can decrease the COVID infection load. In this newsletter I review again the four countries COVID experience and discuss the importance of the sun's infrared radiation in strengthening the immune response.

MILLHOUSE NEWS

PERSONNEL CHANGES Receptionist *Ashleigh* has commenced Medical Assistant training with emphasis on disease screening and initial patient assessment. Receptionist *Linda* resigned and *Yvonne* reduced her work hours, but we are delighted to have *Shernaz* and *Sarah* on front desk, as well as *Brianna* filling in before commencing University study. Student *Adam* you will also meet, covering early evening and Saturday mornings.

Practice Nurse (PN) Michael, who began as a receptionist many years ago before undertaking nurse training, has also resigned and PN Josie has moved to the South Island for a more leisurely life after four years with us. Thank you both for your contribution to Millhouse; our best wishes go with you in your new ventures. Fortunately, we have found two experienced nurse replacements in *Sue* and *Phyll*, who have joined the medical team.

HAVING YOUR OWN DOCTOR is a core value of the Millhouse clinic. When registering at Millhouse, you select

Dr Aileen	Child & women's health complex medical conditions, IUCD insertion - Cantonese & Mandarin
Dr Dan	Nutritional medicine
Dr Ric	Nutritional medicine, acupuncture, minor surgery
Dr Satya	Child & women's health, IUCD insertion. minor surgery - Tamil, Teluga, Hindi
Dr Stephanie	Child & women's health - Korean
Dr Therese	Child & women's health, IUCD insertion - Arabic

a doctor of your choice, and we endeavour to maintain that ongoing relationship.

However, there are times, especially during emergencies or when your doctor is on holiday, when you will need to consult another of the medical team - a doctor, Gabriella our Nurse Practitioner or one of the Practice Nurses. The text box opposite outlines our doctors' special interest areas and the alternate languages in which they can communicate.

PROTECTIVE MASKS continue to be worn at Millhouse, so the COVID virus is neither given nor received during a consultation. If you are uncomfortable with this decision, please choose a Video or Phone consultation to discuss your medical concerns with your family doctor or Practice Nurse. Face-To-Face consultations are available by phoning Reception; other appointments can be made online.

FLU VACCINATION has been our focus, for all ages, from children six-months-old to our seniors; just ring for an appointment to receive a shot. COVID Vaccination is no longer offered at Millhouse but is available at community Pharmacies.

RAT TRAVEL CERTIFICATION is available at Millhouse for \$50.00. Please ring Reception for an appointment.



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FOUR-COUNTRY COVID REVIEW

I last commented on COVID-19 in the four countries of interest in March. Since then, vaccination has not been able to slow or stop transmission of Omicron. During the last seven months New Zealand has seen a nearly fourfold increase in case numbers, which are now greater per million than reported infections in Taiwan, Sweden, and the USA. Total COVID mortality in NZ has risen from 177 to 3047, mostly among the elderly (83% deaths were over 70 years); the Ministry of Health website states that 2/3 of these were probably due to Covid infectionⁱⁱⁱ. Taiwan has experienced more than 300x surge in cases but during the same period their mortality rate has remained less than NZ. Of the four countries, Taiwan now has the higher vaccination rate (Taiwan 84.3% NZ 81.1%, Sweden 73.9% USA 67.5% of total population) even though their immunisation program was, like ours, slow to begin.

In 2021, NZ was able to prevent circulation of the deadly Delta strain, through strict border closure and focused lockdown which eliminated viral spread from the few Covid-positive travelers who entered. Not only was Delta eliminated but Influenza and childhood RSV viruses were halted for a season; this winter they have been prevalent in the community again. However Omicron, which entered the country after the two-injection vaccination program was completed, spread rapidly when schools reopened.

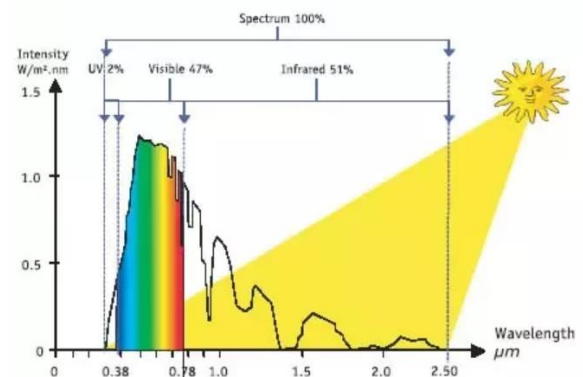
The COVID-19 extended lockdown strategy was highly effective protecting the most vulnerable but has had significant consequences on student learning, absenteeism, and behaviour (ram raids), business enterprise, and social unrest. Health repercussions include increased anxiety, depression and still to be realised missed/delayed diagnoses and treatment.

Most are happy that COVID-19 restrictions have now ended, except for face-to-face medical services, but extra care is still needed if you are vulnerable to disease. Omicron cases are probably near the 60-70% of the population needed for protective "herd immunity", so hopefully this summer will be free of Covid, barring the appearance of a new variant.

MELATONIN AND NEAR INFRARED RADIATION

For millions of years, sunlight radiation has been the largest external stimulus to the human body. Sun rays include the narrow band of visible light which we recognize in the colors of the rainbow (red orange yellow green blue violet), but the greater influence may be the non-visible NEAR INFRA-RED photons (NIR) which sit beyond RED at the right end of the rainbow diagram. These rays contribute the most to natural sunlight and have positive influences on human health.

SOLAR SPECTRUM



NEAR INFRA-RED RADIATION

NIR is the highest (non-visible) radiation that penetrates up to 8cm in the body.

NIR stimulates 95% of melatonin produced in the mitochondria

NIR appears to lower blood pressure & improve cardiovascular health (increases nitric oxide release) & wound healing.

NIR is experienced as heat sensation.

NIR is not blocked by sunscreen.

NIR can pass through clothes and glass producing warmth BUT **NEW BUILDINGS** use non-NIR glass to keep houses cool.

MELATONIN

ENHANCES sleep & mood.

PREVENTS cells over-heating and slows ageing.

BOOSTS immune function, is strongly antiviral & has anticancer activity.

The cycle of Day and Night dictates the body's natural circadian rhythms, which appear as physical, emotional and behaviour changes, our "internal clock". When darkness comes, the eye's retinal cells send messages to the pineal gland deep in the brain to release the sleep-inducing hormone MELATONIN, which protects both the cerebrospinal fluid and the blood stream.

But there is more to the melatonin story. This ancient hormone^{iv} is also produced by mitochondria that power the cell with energy, from the photosynthesizing cyanobacterium that gave rise to life, then other microorganisms as well as plants, moulds, and higher species. The mitochondrial melatonin in the human body provides immune-enhancing functions, and anti-ageing and anti-inflammatory effects. In the August 2020 newsletter I mentioned that melatonin could inhibit the NLRP3 inflammasome which promotes the COVID storm of proinflammatory cytokines that cause acute lung injury and even death. This subcellular melatonin is produced in response to Near-Infrared Radiation (NIR), is used locally and appears in higher quantities than the pineal gland.

Near-IR penetrates up to 8cm in the body, even in those with dark skin, also transmitting photons through the skull into the brain. In the growing fetus and young child it impacts nearly 100% of cells, and in adults up to 60% of the body^v. NIR is not blocked with sunscreen, nor by clothes if we feel warm when walking in sunlight. Indoors, NIR may penetrate glass although newer buildings are designed to remain cool with glass that blocks NIR.

Every day enjoy the health benefits of Near-IR, walking in natural sunlight and in green areas where trees and grass reflect its rays. At night, expose yourself to the low levels of red light in a sunset or a flickering fire, and avoid bright lights, especially blue light, one to two hours before bedtime because those rays inhibit melatonin production.

Yours in good health

Dr Richard J Coleman

References on request