Magazica

Issue June 2026

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TIM STOCKWELL

on Alcohol, Society, and What We Get Wrong

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Interview

From Oxford to Canada

Dr. Tim Stockwell on Alcohol, Society, and What We Get Wrong

Dr. Tim Stockwell has spent his career chasing one question that shapes millions of lives: How does alcohol truly affect us? From the halls of Oxford to the front lines of global substance-use research, he has challenged myths, confronted industry narratives, and illuminated the human stories behind the science. His work bridges psychology, public health, and raw lived experience - revealing why we drink, how it harms, and what it takes to change.

In this conversation, Stockwell brings clarity, humility, and decades of insight to a topic often clouded by culture and confusion. This is the interview that reframes everything you thought you knew.

Keywords: Alcohol and health; Substance use research; Drinking myths; Alcohol risk factors

Magazica: Welcome, and welcome again to Magazica.

Today, we have Dr. Tim Stockwell, who has spent his life asking one deceptively simple question: How does alcohol shape our health, our relationships, and our society?
From Oxford University to Australia's National Drug Research Institute, and finally to the Canadian Institute for Substance Use Research, his work has influenced global policy, challenged long-held beliefs and myths, and helped millions rethink their relationship with alcohol. Today, we sit down with Dr. Stockwell to explore the human stories behind the science - his journey, his insights, and the hope he sees for all of us, for healthier communities. Dr. Stockwell, welcome.

Dr. Tim Stockwell: Thank you very much. I wish half of what you said was true, but it's a very gracious and kind introduction. Thank you.

Magazica: Thank you very much. So, let's start with your journey. You have dedicated your career to understanding alcohol and substance use across three continents. When you look back, was there a moment - maybe early in your training period or your personal life - that made you think, *this is the work I'm meant to do*?

Dr. Tim Stockwell: I can't say that I ever had a moment when I knew I was going to do this kind of work. It would be bizarre to have such a moment, because I think my work is unusual. But I know the moment when I became aware that I was very interested in the subject of - let's just call it addiction. There are many terms for it.

I struggled with my own mental health as a young person. I still do from time to time, and I used nicotine when I was a teenager. I was addicted to tobacco. I became interested in psychology probably because I reflected on my well-being at an early age. You wonder: What is this? Why is it hard to be happy? Why do I get anxious? Why am I sad sometimes? And why is it that I can't stop smoking?
I remember studying at Oxford, going around the psychology department - maybe it was the social sciences library - and coming across this tome on a shelf that said British Journal of Addiction. I thought, What? Are there journals on this subject? People are studying this! I pulled it off the shelf, sat down, and pored over the contents.
A little later, I was accepted to do a PhD at Edinburgh University. I had a choice of a supervisor, and I selected someone interested in the topic of alcoholism, having read a book that inspired me. I also have relatives who have struggled with alcohol. So, my own struggles, and the idea that maybe if we were good at what we do - if we were good psychologists - we could help people, that this was a big problem we could do something about, inspired me as a young person.

Magazica: And that's quite interesting. Out of nowhere, some of the things that make you so engaged lead you to dive deeper and deeper, and you find the subject to be very fascinating.

Dr. Tim Stockwell: Yes.

Magazica: One keyword - one theme - I can make out from that is curiosity. Your curiosity was sparked so much that you drove deep into it. Your path has taken you from Oxford to

London, then Australia, and then, as far as I remember from your profile, to Canada. Along the way, who or what shaped the way you think about human behaviour, health, and the role alcohol plays in our lives?

Dr. Tim Stockwell: I've been very lucky. I had so many wonderful mentors and people who humoured me, took me under their wing, and encouraged this strange, young, nerdy person who believed that study - academia - could help people with their real-life, nitty-gritty, difficult problems. I really had a passionate belief in that.
I could single out many, but I'll mention a gentleman called Griffith Edwards, a very distinguished psychiatrist who was head of the Addiction Research Unit where I did my PhD. He had a multidisciplinary approach, and he hired people in his research unit who were sociologists, psychologists, social workers, medics, and liver specialists. He believed we all had something to offer.

Magazica: The task was to get you all together to be creative and come up with -

Dr. Tim Stockwell: - really big, challenging questions, and think of ways we could contribute insight and guidance not just in treatment, but in prevention and policy as well.

Magazica: True. And from what you're saying, you have a very vast area to cover whenever you're going into research. So whenever we hear the term *research*, you yourself were a PhD student, and you completed it, then worked as a researcher - white lab coats, numbers, statistics, experiments… all these are common phenomena. What is the human side of the research that you have experienced so far? What is that side?

Dr. Tim Stockwell: I think another inspiring person who influenced me early on - and someone I didn't mention earlier - was my PhD supervisor, Ray Hodgson. He was a clinical psychologist at the Maudsley Hospital in London, and he told me about a tradition from one of his mentors, a gentleman called Aubrey Lewis, who specialized in individual case studies. He listened to people, but he also did this behavioural, psychological work of getting measures of people's well-being.
My supervisor got me thinking about multiple ways we could measure and get valid empirical evidence to help us solve problems. But it started at the individual level. This is all based on describing individual experience - our emotions, our feelings, our relationships, the physical and mental health consequences, short and long term, of using different substances. So, really understanding phenomena - the phenomenology of substance uses in our lives.

Magazica: After a long time, I've heard the word *phenomenology*. My bachelor's was in sociology, so the word is familiar to me. Phenomenology, epistemology, ontology - those are the terms that make you pause and think. Okay, let's now go to the myth-busting phase of our discussion.
There is a myth of "healthy drinking." For example, debunking the famous J-curve, which suggested moderate drinking is good for health.What was it like to challenge such a popular belief - that one or two pegs will not do

anything, or that a small amount is not harmful but rather beneficial for health? And what helped you stay grounded as the conversation shifted from research to this myth-busting phase?

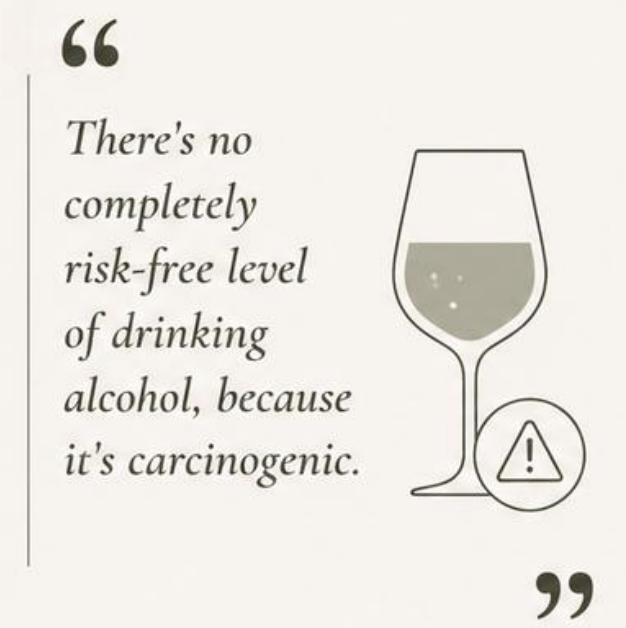
Dr. Tim Stockwell: I have to say that I've followed other people's lead in this area. There's been a long tradition over the last four or five decades. I remember observing people challenging this many years ago. Initially, it was all over the news: yes, there's evidence that a little bit of alcohol reduces heart disease and has all these benefits.

Then I remember it being covered - I'm talking about the 1970s and 80s. I remember, in the UK as a young person, reading about contradictory views on this. Then the idea emerged that this is an illusion because they compared drinkers with abstainers who were unhealthy. If you gather a group of older people and find that those who aren't drinking have often given up alcohol because they're unwell, of course, they're not going to live as long as their robust, healthy friends who are well enough to keep drinking.

But then people revisited the data and said, no, we've controlled for that, and we still get benefits. That debate still goes on. It goes back and forth, but I think it has shifted toward more people being skeptical. My position is that I'm skeptical. I don't have certainty.

And I think that's really important. Evidence is mounting that if there are benefits, they're fairly minor. There may be something special in red wine. If there is, you can get it from red grapes - particularly the grape skins. You can also get similar benefits from exercising and eating well.

But we do know that even a little bit of ethanol is a carcinogen. It's carcinogenic. There's no safe level in relation to cancer risk. There are low-risk levels, but no complete risk-free level of drinking alcohol because it's carcinogenic.



There has been pushback. I try not to read my hate mail. I've been absolutely torn to shreds in some of the right-wing tabloid media that are industry-friendly. They have been rude and unpleasant, and I try not to look there. Increasingly, though, people like yourself are coming to talk to me about this - I've been getting a lot more positive feedback. I think times are changing.

There's been a real shift. A massive cultural shift worldwide. It's seen here in North America. Maybe less so in my old country, the UK. When I go back there, it's like they think you're seriously odd if you don't drink every day and at every possible moment.

Magazica: I know. I was in Liverpool for a few years, so I understand. Two very small questions - not a tangent, but just two quick clarifications. You mentioned the word *carcinogen*, and carcinogenic means it causes cancer?

Dr. Tim Stockwell: Yes.

Magazica: Okay. And second: for a person who never drank - for example, I don't drink - some people tell me that at my age, if I start drinking now, I'm close to 50, so by the time it's my probable time to die, alcohol won't do anything. So, at what point, for example, if a person starts drinking at a certain age - say 20 or 25 - at what point will it start to show the negative impact, or whatever impact it has on the body? Is there a certain timeline, physical condition, or anything?

Dr. Tim Stockwell: We're all very varied, and we have different susceptibilities.

Magazica: Yes.

Dr. Tim Stockwell: And so, that's the first thing to say. There's no absolute cut-off point. As younger people, there's a different profile of risks. There's the tendency - particularly for young men - to do risky or reckless things. Young men take more risks, and alcohol-related violence, alcohol-related crime, crashes, and workplace injuries are predominantly associated with men. That's both because they drink more and because they take more risks. So, people can die or get injured at younger ages.

As we grow older, we tend to calm down in some of those behaviours - not always, there are notable exceptions, but these are generalities. The sad thing is that a link has been drawn between the drinking habits of young adults and their risk of heart disease or cancer in later life.

It's clear that people who get married and settle down after having some wild drinking days carry that risk with them into old age. But the longer they go without drinking, or drinking very little, the better their chances will be. It's about risk. If you don't drink at all, then you have zero risk of an alcohol-related cancer. And of course, you have zero risk of the acute problems - poisoning, violence, injuries, accidents.

So, no absolutes. We all have different degrees of risk, different profiles. One thing we do know is that more vulnerable people - generally in terms of mental health or socioeconomic status - people on lower incomes have a much greater risk of all of the above: the physical harms, the mental health harms, the social consequences. We have protections if we are in a more privileged, higher-income bracket.

Magazica: Over the years, if a person - specifically a male - settles down and the drinking habit attenuates, then yes, they will still carry over the risk, even if it's reduced. So again, back to square one a bit. Why do people drink? What are the factors beyond biology? Why do people drink?

Dr. Tim Stockwell: That's a really good question, and obviously, I've thought about it. One place to start is that we've been doing this for a long time. Our ancestors drinking probably goes back millions of years. Our earliest ancestors found fruit that was fermenting. Animals do this, primates do this - they get drunk on fermented fruit.

So, it's a natural progression. Going back thousands of years, people have done this. We mammals - creatures - but *Homo sapiens* in particular seem to have a fondness for alcohol. We have a long history of finding different ways to consume it. Initially, it was accidental: you

eat the fruit, it happens to be fermented, and it gives you a nice effect.

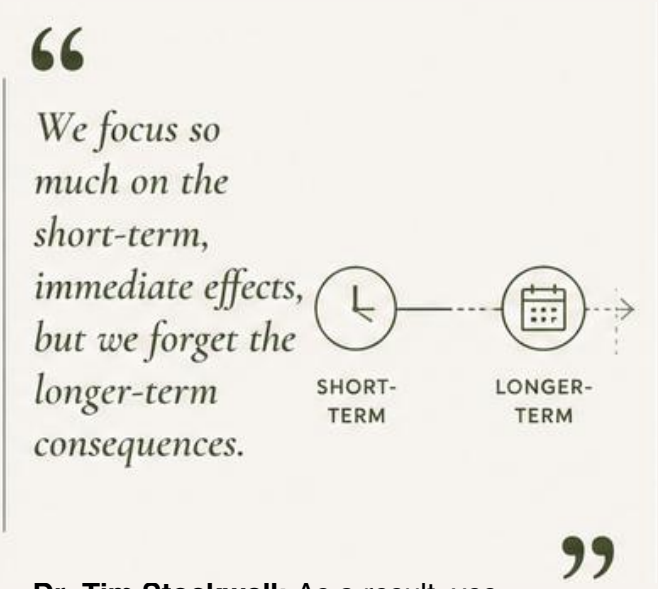
Over time, we cultivated ways and developed systems. Our society is now the most efficient it has ever been at producing alcohol. You can make alcohol from almost anything that grows - fruit, nuts, crops, whatever is around. We've developed ways of making alcohol from it and storing it so it doesn't go off. It used to be that you could only get drunk at harvest time for a few days. You'd stop everything, all rules could be broken, and then you'd forget about it. But now it's in refrigerators, trucked, transported, flown, shipped all over the world.

We've distilled alcohol so it can be very concentrated. But basically, it hits the reward centers of our brain. In the short term, it makes us feel good. It can facilitate certain important things, like dealing with anxiety, feeling less anxious, feeling more comfortable with other people. In the short term, it stimulates social interaction.

The trouble is that later - after an hour or two - it has a sedative effect. It's a depressant substance. It suppresses the activity of our nervous system. It calms or sedates us, and we get tired, bored, or even hostile and bad-tempered. Our sleep can be disrupted, and then we have a terrible day the next day.

So, it's very important that we're aware of the short-term versus the middle- and long-term consequences of using any psychoactive substance. Alcohol is just one that's easy and available. We have this relationship with it, and it seems to be anathema to regulate it or restrict access to it, unlike other substances we've discovered more recently.

Magazica: And it's worldwide, socially accepted, and everything.



Dr. Tim Stockwell: As a result, yes.

Magazica: Resulted in various uses.

Dr. Tim Stockwell: Various uses, and it's something we do as a group.

Magazica: As a group, yes. It's a way of gathering. It's a conversation.

Dr. Tim Stockwell: We gather over meals, and we gather with alcohol. It makes us feel good, and we can all feel good together. Often, we attribute that feeling good to the alcohol, as if it were essential for the feeling. It's quite extraordinary to try connecting with people and situations - if you're someone who always drinks in those situations - and discover that you can feel connected and good without alcohol. It isn't essential.

Magazica: I read somewhere that alcohol disrupts our deep sleep, like delta-level sleep. Does alcohol disrupt that? Is it true?

Dr. Tim Stockwell: Yes, there's very good evidence that alcohol might help you get to sleep, but you're going to wake up early, and

the more you've drunk, the harder it will be to get back to sleep. The simple reason is what some psychologists call the opponent process theory, which means you get the opposite effect of the short-term effect over time. So, you get the sedative effect - you have a tot of rum, whiskey, whatever it is, before bed, and a glass of wine calms you.

Two or three hours later, you get a reaction. Your nervous system gives you the opposite. It makes you anxious, more alert, more vigilant. And the more you've drunk, the stronger that reaction will be. The more frequently you drink, the more reliable and stronger that reaction becomes. That's where you get tolerance. So, we drink more and more, and then there is a vicious circle that leads people to becoming, if you like, addicted, dependent - developing a substance use disorder, whatever people's preferred term is.

Magazica: So, what is the recent trend we are seeing on social media and in social gatherings? There are zero-alcohol drinks, or people are practicing dry months - like, "January is my dry month because I enjoyed a lot during the year-end holidays," or "February is my dry month." Is this beneficial in any way?

Dr. Tim Stockwell: Yes. There have been some nice studies indicating fairly simple, predictable benefits. People say they have better well-being, they sleep better, they feel their memory and concentration improve. These are people who might be regular, moderate, or heavy drinkers - those most likely to notice these things. They save money. And there are even physiological measures of improved well-being and physical functioning.

People say, "What's the point of being off it for a month?" Well, the studies show that people usually drink less afterward. Many start drinking again, but less. They've developed skills for choosing whether or not they drink, or drinking less, or finding things like zero-alcohol beverages actually quite great.

You can kid yourself. The placebo effect is fantastic. I was fascinated by this as a young psychologist. I used to do tricks on my friends and give them alcohol that was actually 0%. This was way back - the early ones tasted terrible. But now, really good ones are available because there's a market.

And one thing the industry likes is that they can sell this product. It's great branding and advertising. You can go to your supermarket or grocery store and see things that look exactly like alcohol. But they're zero proof. They get great advertising, people like them, and they charge almost as much as the real thing. Profits are massive because they don't pay tax on them.

And they convince us that this is as good a product. I pay a small fortune for zero-proof beverages, and I know retailers make the most profit on those drinks. Well, hats off to them. If that makes us drink a little bit less and we achieve our health and well-being targets, that's fine. I don't really have a problem with it.

Magazica: Last two questions, very quick ones. You do research and heavy, grounded work - heavy work. How do you keep yourself grounded during all the heavy lifting, research work, deep work? How do you keep yourself grounded?

Dr. Tim Stockwell: Look, I'm an academic now. I used to be a clinical psychologist, and I cared a lot. You'd worry about the people you'd

seen, and some of them had really terrible lives, and awful things happened to them. It was devastating to them, but you carry that burden and strain yourself. I don't think it's possible to do that for very long. I think I did it for maybe ten years.

Because I love academia - as I said, I'm curious-minded - I love the research process. It's not hard for me to do research in this area. I find it fascinating. I love designing the study, finding out what the data have to say, writing it up, and hearing what other people have to say about what you've found.

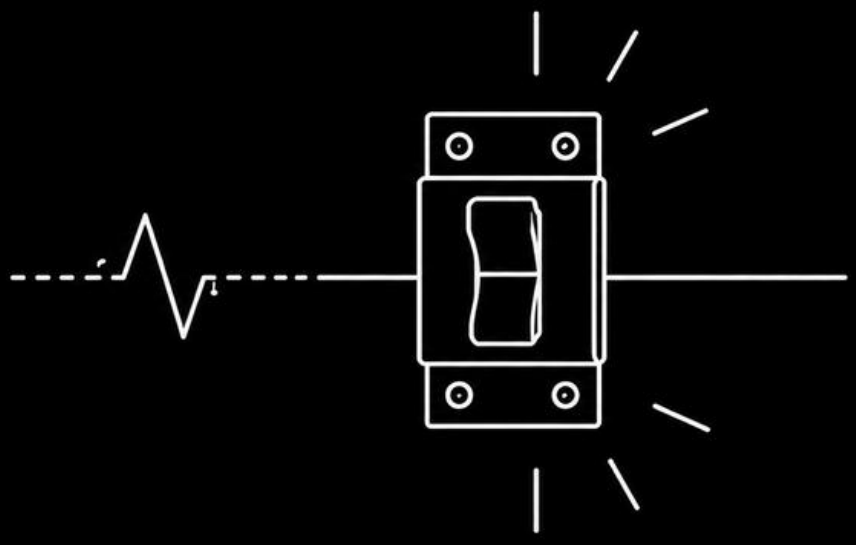
And this whole thing about dreaming up a research question that will help answer a practical policy or practice question - sometimes the data can be a circuit breaker. People are stuck. They have doubts: "We can't do this because this might happen."

And you do the research, and it says, "Yes, we did it, and that didn't happen." Or "Oh no, a lot of that happened - we shouldn't go there."

Research can help with that. I've seen that happen, where research has made a difference. It's not the only thing - people say, "How can research affect policy or practice?" Well, it isn't the only thing. You need a champion, you need a political context, and you often need a crisis. But every now and then, everything freezes, and people want to ask the question: "What's the evidence?" And if you've been doing your job, you've got the answer.

Often you have to do that opportunistically - "They won't be interested in this for very long; we'd better quickly do some research to answer it." That's when I've had the most fun. It's dynamic, it's related to what's going on, it's trying to answer current, important questions.

> *"Research can be a circuit breaker—sometimes the data shows us that what we fear won't happen, or that we shouldn't go there at all."*



Magazica: By hearing you, it's clear you've found that spark in your work - something so rare, something very few people ever find. Your work becomes fun; it becomes a challenging fun ride. You solve challenges, you match patterns, and you find joy in it. It's a blissful life. Thank you for sharing that with us.

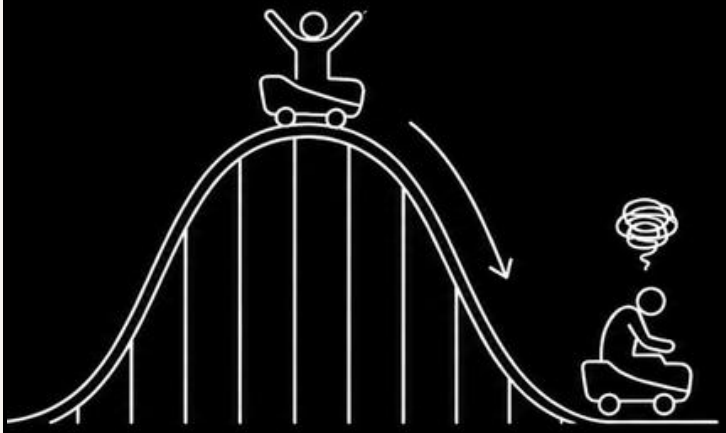
Dr. Tim Stockwell: Yes. In summary, I've been very fortunate.

Magazica: Yes. And last question, very quickly - we have to be conscious of the time. You have lots of lessons from the way you've lived your professional life and carried out your tasks. You've learned a lot. So, for our readers, for the general public, for people from non-medical backgrounds - what are a few lessons you've learned that would be valuable for us?

Dr. Tim Stockwell: Look, I don't want to presume too much here. But one thing that has helped me - and I don't know whether I get too wrapped up in it, or whether it will be useful - is going back to what I was saying about individual case studies and psychologists trying to really understand what people are going through, but also getting measures and trying to quantify what is happening with a problem you're concerned about.

So, if it's about substance use, maybe keep a diary. Be aware of the times when you really want to have a drink, or a cigarette, or whatever it is you feel you need. Be aware of those times. Reflect a little on whether you can do other things - have coping strategies. But also become aware of the later effects: the short-, mid-, and long-term effects, this whole opponent process.

We focus so much on the short-term, immediate effects - cocaine will make us high, opioids will take our pain away and make us less anxious, and alcohol will do whatever it does. But be aware. Keep a diary about how you're feeling. If you balance it up - maybe you get 10 or 15 minutes of feeling pretty good if you have a drink - and then look at how it affects your sleep, how you feel the next day.



"Substance use gives you the quick, short-term benefit, and often a pretty nasty whiplash afterward."

Just stand back and think about how we balance these short-term, immediate pleasures or relief from pain with longer-term patterns in our lives and feelings of well-being. Focus on what we can do that has longer-term benefits. There are things we can do that are the opposite, like exercise. It's painful, you have to discipline yourself, but you feel great afterward.
I actually hate swimming, but I do it quite often. I loathe it, but once I've finished, I feel fantastic, and that feeling lasts, and I sleep well. And connecting with people - I find that helps. Having a nice social occasion, I often sleep well and feel good. I think we need to be aware of those things: when we put the effort in, when we experience the pain, we get more enduring benefits. Substance use is always the opposite - you get the quick, short-term benefit, and often a pretty nasty whiplash afterward.

Magazica: Dr. Stockwell, thank you so much for sharing your journey and your wisdom. Your work reminds us that science isn't only about numbers - it's about people, how they master themselves, and their choices. We appreciate your time and your voice in this conversation. Thank you very much.

Dr. Tim Stockwell: My pleasure. Lovely talking with you.

Magazica: Thank you.

Author Profile:

Dr. Tim Stockwell is a leading international authority on alcohol research whose career spans Oxford University, Australia's National Drug Research Institute, and the Canadian Institute for Substance Use Research. With a background in clinical psychology and decades of empirical work, he has shaped global understanding of alcohol's impact on health, behaviour, and society. His research has challenged long-standing myths, informed public policy, and illuminated the human realities behind substance use. Stockwell's work continues to influence how communities, clinicians, and policymakers navigate alcohol-related harm.

Managing Vacation Anxiety - How to Unplug from the Office Truly

Prepared By
Suman Dhar
Editor-in-Chief

Visualize this. It is the first day of what has been anticipated by you all the way since March. You made an overnight drive five hours north into a cottage rental, and the lake has proven to be exactly what you expected – calm, clear and tranquil. At nine o'clock in the morning, when the rest of your family is still sleeping, you are already sitting at the end of the dock sipping your morning cup of coffee with your phone in your hand, not for capturing pictures of the sunrise, but for reading two days' worth of emails. Your colleague has a question. Your client needs clarification. The message didn't go to your phone. Apparently, it didn't reach your mind either.

This scenario may be a bit too close to reality for most Canadians. And according to mounting evidence from the field of occupational health, failing to switch off work properly can no longer be perceived as being obsessive about your job or dedication – it is an acknowledged obstacle to recovery.

The Switch You Think You're Flipping: Psychological Detachment

Occupational health psychologists refer to the concept of psychological detachment when describing the essence of detaching oneself from work, both physically and psychologically. Psychological detachment involves the phenomenon whereby individuals stop thinking about their work outside working hours, as described by one measure of this concept: "not thinking about work at all."

Psychological detachment forms part of the recovery experiences of Sonnentag and Fritz's.

widely accepted model of stressor-detachment, featured in the Journal of Organizational Behaviour. The other three recovery experiences include relaxation, mastery, and control. In situations where such recovery experiences occur during downtime, the depleted psychological resources that have been exhausted through work-related stress are renewed. Failure for these experiences to happen means that the systems stimulated by the stressful work-related demands will be unable to return to their neutral states, hence creating an accumulation of stress over the years.

It is not just an academic idea. Research conducted in PLOS ONE by following up with working individuals during the COVID-19 pandemic in 2025 showed that individuals who had lower psychological detachment at the time of the first lockdown suffered from poor mental health after a year, suffering from depression, and were less satisfied with their lives. The capacity for psychological detachment was among the most significant predictors of their well-being.

"It's Not That I Check It - I Just Know It's There": The Email Expectation Effect

Surprise finding #2: You needn't even read one email for work stress to manifest itself on your vacation!

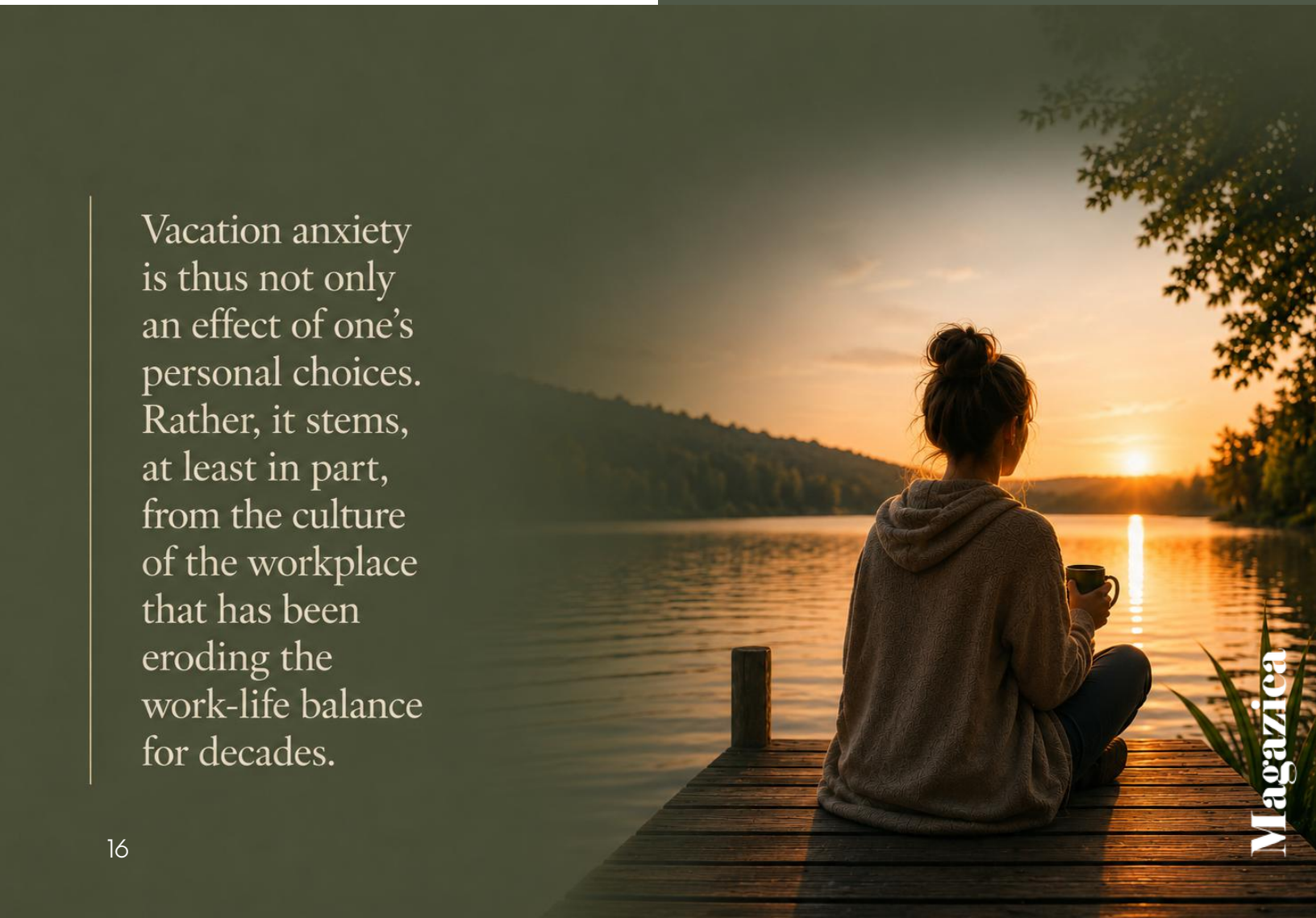
In studies examining what the researchers call "organizational expectations for email monitoring" - in other words, the implicit (and sometimes explicit) assumption that the employee will be available outside of work

hours - Becker, Belkin, Conroy, and Tuskey have demonstrated in the Journal of Management that this very assumption constitutes a specific form of psychological stressor leading to the so-called "attention allocation conflict": an inner struggle between the work role and personal time during which neither can be truly engaged. And that stress didn't confine itself to the individual; it was passed along to his partner and children, who were experiencing work-related stress at the same level and lower relationship satisfaction because of it.

The 2024 scoping review in the journal PLOS Digital Health analyzed the body of existing research on non-workplace-related use of smartphones outside of work hours and concluded that there is agreement on two findings: first, the culture of always being available enabled by the technological world leads to increased levels of stress and anxiety; and second, management holds an especially crucial position in the issue in question, as they can choose whether to uphold or tear down this culture by setting out clear (or intentionally vague) guidelines regarding after-hours communication.

Vacation anxiety is thus not only an effect of one's personal choices. Rather, it stems, at least in part, from the culture of the workplace that has been eroding the work-life balance for decades.

Vacation anxiety is thus not only an effect of one's personal choices. Rather, it stems, at least in part, from the culture of the workplace that has been eroding the work-life balance for decades.



The Fade-Out Problem: Why the Benefits Wear Off Faster Than You'd Think

Even when people do successfully disconnect, the benefits of vacation tend to be shorter-lived than most of us hope.

In a meta-analysis conducted by de Bloom et al., published in the Journal of Occupational Health, various data collected from different studies revealed that vacations positively impact health and wellness. However, the unpleasant truth is that these benefits gradually dissipate within the next two to four weeks when individuals return to work, and in many instances, start to disappear in the first week back. It was evident that the "fade-out effect" took place across the studies under review.

An editorial published in Cureus in 2025 by Giridharan and Pandiyan considered the latest literature concerning the phenomenon and came to an interesting finding: contrary to popular belief, taking several short vacations throughout the year seems to yield better results than using all vacation days to enjoy one long holiday. An earlier study examined workers' experiences during a 23-day vacation and established that their health and wellness were optimized during eight days and started to decline after this period, getting close to the baseline within one week after the end of the vacation.

Quality of vacation and not the duration of the vacation seems to be the most reliable factor in studies, especially with respect to how successful employees were at achieving psychological detachment during their time off.

Work intrusions during vacation can have an extremely detrimental effect on recovery. Just one work-related task completed during vacation signals to the nervous system that the workday continues.

What Actually Restores: The Evidence for Nature and Active Recovery

In occupational health research, the evidence converges around four key components of authentic recovery: physical activity, social involvement, learning experiences (mastering something), and, perhaps most importantly, being outside in nature.

One study on the physiological effect of nature exposure on stress levels was published in the Frontiers in Psychology journal by Hunter, Gillespie, and Chen from the University of Michigan. The scientists used two biomarkers of physiological stress reactions: salivary cortisol (a known biomarker) and salivary alpha-amylase (indicating sympathetic nervous system activation). In a two-month study involving 36 participants living in an urban environment, all individuals were instructed to spend at least ten minutes in an outdoor setting three times weekly. The effect was dramatic and consisted of lowering the cortisol levels by more than 21 percent per hour of being outside. This effect was stable and consistent over the entire duration of the experiment. The authors labelled this activity "nature pill," an accessible tool to relieve stress with no location, equipment, or training needed.

Even for those who spend their vacations in cities, campuses, or places where there are

very few opportunities to connect with nature, this theory applies. The Attention Restoration Theory, which forms the basis of this study, is based on the concept that any place which creates feelings of novelty, complexity, and distance from the demands of daily life will always help in regaining mental resources, irrespective of whether the environment is an evergreen forest or even a city park.

A Canadian Context: When Policy Begins to Reflect the Science

It cannot be said that this issue has gone unnoticed by government officials. In June of 2022, Ontario became the first province in Canada to enact legislation that would force companies employing 25 or more workers to draft a written policy regarding disconnection from the workplace. Disconnecting from the workplace means not engaging in any communication relevant to the work, including emails, calls, video calls, or other messaging so as to ensure that one is not engaging in any work activity.

The policy does not give employees an enforceable right to be out of reach at all times, but the legislation does demand that workplace communication standards should be laid down. It is important because, based on the evidence reviewed in this paper, ambiguity contributes to the issue in question. When people are unsure about the need for engagement, they become anxious about being available, which hampers recovery.

Indeed, scientific evidence confirms this policy strategy: when organizational culture is used to

The Vacation That Actually Works

However, the results obtained over several decades of research are very clear: vacations are good for one's health. They help people to have low levels of cortisol, boost mood, decrease tiredness, and replenish the depleted mental and psychological resources. The problem is not even in getting free time but rather about achieving the right mindset that makes free time beneficial.

Even if one spends seven days at a campsite without working, from the point of view of neurobiology, such a week may not be considered as a complete vacation period since the nervous system will keep performing the task it was not created for – constant monitoring of the email box.

As shown in the scientific literature, true switching off is not a matter of luxury; on the contrary, it is a key part of the vacation.

Key Takeaways

- **Psychological Detachment is the Mechanism:** A mental break away from work rather than physical separation from the workplace is what is meant by recovery. It is difficult to recover without mental break-away, no matter how beautiful the environment is.

- **The Expectation Alone Causes Anxiety:** Studies have revealed that merely the organizational expectation of being available during non-work hours can be a source of psychological stress, causing anxiety even in those who do not respond to their emails and calls; partners and families of workers also experience this.

- **Vacations Peak and Fade Quickly:** Studies have shown that vacations increase wellbeing levels significantly and that wellbeing peaks on the eighth day of vacation and goes back to the baseline state in a period of one or two weeks after coming back to work. Frequent short-term breaks appear to contribute to sustaining wellbeing rather than annual vacations.

- **Nature Exposure Has Measurable Effects:** The level of salivary cortisol falls by over 21 percent in an hour when people engage with nature in some way. This fact further solidifies the importance of engaging in outdoor, nature-based, or other restorative vacations.

- **Culture Matters as Much as Personal Intent:** Disengaging from work involves individual effort; however, a cultural context of work needs to be supportive of this activity to achieve real disengagement.

Sources

Peer-Reviewed Journals

Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. Journal of Organizational Behaviour, 36(S1), S72–S103. https://doi.org/10.1002/job.1924

Blake, H., Hassard, J., Thomson, L., Choo, W. H., Dulal-Arthur, T., Karanika-Murray, M., Delic, L., Pickford, R., & Rudkin, L. (2025). Psychological detachment from work predicts mental well-being of working-age adults: Findings from the 'Wellbeing of the Workforce' (WoW) prospective longitudinal cohort study. PLOS ONE, 20(1), e0312673. https://doi.org/10.1371/journal.pone.0312673

Becker, W. J., Belkin, L. Y., Conroy, S. A., & Tuskey, S. (2021). Killing me softly: Organizational e-mail monitoring expectations' impact on employee and significant other well-being. Journal of Management, 47(4), 1024–1052. https://doi.org/10.1177/0149206319890655

Blake, H., Hassard, J., Singh, J., Teoh, K., Kocaballi, B., & Simões de Almeida, R. (2024). Work-related smartphone use during off-job hours and work-life conflict: A scoping review. PLOS Digital Health, 3(7), e0000554. https://doi.org/10.1371/journal.pdig.0000554

de Bloom, J., Kompier, M., Geurts, S., de Weerth, C., Taris, T., & Sonnentag, S. (2009). Do we recover from vacation? Meta-analysis of vacation effects on health and well-being. Journal of Occupational Health, 51(1), 13–25. https://doi.org/10.1539/joh.k8004

Giridharan, S., & Pandiyan, B. (2025). Maximizing recovery: The superiority of frequent vacations for well-being and performance. Cureus, 17(7), e87569. https://doi.org/10.7759/cureus.87569

Hunter, M. R., Gillespie, B. W., & Chen, S. Y. P. (2019). Urban nature experiences reduce stress in the context of daily life based on salivary biomarkers. Frontiers in Psychology, 10, 722. https://doi.org/10.3389/fpsyg.2019.00722

Legislative Reference

Ontario Ministry of Labour, Training and Skills Development. (2022). Your guide to the Employment Standards Act: Written policy on disconnecting from work. Government of Ontario. https://www.ontario.ca/document/your-guide-employment-standards-act-0/written-policy-disconnecting-from-work

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This article is for informational and educational purposes only and does not constitute medical advice. It should not be taken as a medical diagnosis or treatment.
Always consult with a qualified healthcare professional for personalized medical guidance.

Men's Health Checklist: Screenings You Shouldn't Ignore This Year

Conceptualized by
Anthony Testa
Editor

The Canadian Man's 2026 Health Checklist: Screenings That Could Save Your Life

For decades, Canadian men have embraced a "if it isn't broken, don't fix it" approach to health. "As a man, I can understand that, of course, it's our mantra, passed down by our fathers."

But the data tells a startling story.

According to a report supported by Movember Canada, nearly **half of Canadian men (44%) die prematurely** from largely preventable causes. Men die of heart disease, cancer, and suicide at rates significantly higher than women.

"Green living" isn't just about saving the planet—it's about sustainable personal health.

We have put together a screening checklist for Canadian men this year.

Why This Matters Now

The Canadian government is developing its first-ever National Men's Health Strategy, acknowledging that men face unique barriers to healthcare, including stigma and a lack of tailored services. Leading causes of early death for Canadian men are malignant cancers, coronary heart disease, accidents, and suicide. Proactive screening beats those statistics.

The 2026 Screening Checklist

Use this guide to speak with your family doctor or nurse practitioner.

1. Blood Pressure & Cholesterol

When to start: Age 18+ (BP); Age 35+ (cholesterol, or 20+ with risk factors).

High blood pressure and cholesterol are "silent killers." Heart disease remains a leading cause of death for men in Canada.

- **What to do:** Request a fasting lipid panel and blood pressure reading.
- **Canadian context:** With long winters and salt-heavy diets, cardiovascular risk is a national issue. Your provider may use the Framingham Risk Score to calculate your 10-year risk.

2. Colorectal Cancer Screening

When to start: Age 45–50 (varies by province).

Colorectal cancer is the **second-leading cause of cancer death in Canadian men**, yet it is highly preventable if polyps are caught early.

- **The FIT Test:** Most provinces (Ontario, Quebec, BC) offer mail-out Fecal Immunochemical Test kits. It is non-invasive and looks for blood in stools. “This test has evolved, it’s now simpler and easier to do. I know, I just did one this past couple of months.”
- **Colonoscopy:** If the FIT is positive or you have a family history, you will need a colonoscopy. The prep is hard—but it beats cancer.

“If you smoke, the most ‘green’ thing you can do for your body is to stop.”

3. Lung Cancer Screening

When to start: Ages 55–74, specifically with a **20 "pack-year" history** (e.g., 1 pack/day for 20 years).

Lung cancer is the most diagnosed and most fatal cancer in Canada. Low-Dose CT (LDCT) scans can catch it early.

- Green living link: If you smoke, the “greenest” thing you can do is stop. Ask your doctor about provincial Lung Cancer Screening Programs (available in Quebec and BC).

4. Prostate Cancer (PSA Discussion)

When to start: A shared decision between ages 55 and 69.

Prostate cancer is the most common cancer in men, but not all prostate cancers are aggressive.

- In Canada, routine PSA screening is NOT recommended for every man because it can lead to over-treatment of slow-growing tumors.
- What to do: Ask your doctor, "Should I have a PSA test based on my family history and ethnicity?" Men of African descent or with a strong family history may need to start earlier.

5. Mental Health & AAA Check

When to start: Annually, at any age (mental health); ages 65–80 who ever smoked (AAA).

Canadian men account for **3 out of 4 suicides**. Depression in men often looks like irritability, , anger, or increased alcohol use, not sadness.

- **The Audit:** Be honest about alcohol and drug use. A quick PHQ-9 questionnaire can screen for depression.
- **Abdominal Aortic Aneurysm (AAA):** For men aged 65–80 who ever smoked, a one-time abdominal ultrasound is recommended. A ruptured AAA is almost always fatal, but screening takes 10 minutes.

Where to Get These Checks in Canada

If you lack a family doctor—a common issue in many provinces—explore **virtual care options** like Teladoc or TELUS Health, which offer preventive assessments. Nurse practitioners are also excellent resources for men's health checkups.

Your body, your temple.

Your body is primary for experiencing life. By running through this checklist, you aren't being a hypochondriac—you are being a steward of your own health.

As the government rolls out the National Men's Health Strategy, take the first step yourself.

Canadian Sources Used in this Article:

Source #1 – Gouvernement du Québec
Title: Preventing health problems during adulthood (Screening guidelines for AAA, colorectal, and lung cancer)
Link: https://www.quebec.ca/en/health/advice-and-prevention/accidents-injuries-and-diseases-prevention/preventing-health-problems/preventing-health-problems-during-adulthood

Source #3 – Care& Family Health (Toronto)
Title: Men's Health Checkup at 40: The Essential Screenings You're Probably Skipping (Clinical advice on labs and timing)
Link: https://careand.ca/blog/mens-health-checkup-40-essential-screenings

Alternative Link for Source #4
(Movember Canada directly)
If you prefer a direct Movember source, the charity's official page on the same report is available here:
Link: https://ca.movember.com/story/the-case-for-a-canadian-mens-health-strategy

Wearable Tech: Are Fitness Trackers Helping or Hurting Your Body Image?

Conceptualized by
Anthony Testa
Editor

The Double-Edged Screen: How Fitness Trackers Are Reshaping Body Image in Canada

“By the time you finish reading this sentence, your fitness tracker has likely logged another dozen steps.” In my own experience, the device can be useful when I treat it as a guide rather than a judge. It helps me stay aware of my habits and gives me structure, but only when I remember that the numbers are meant to inform me—not define me.

For the one in five Canadians wearing these devices, that constant stream of data—steps, calories, heart rate, sleep quality—has become a normal part of daily life. But as these screens have wrapped around our wrists, a pressing question has emerged: are fitness trackers helping Canadians build healthier relationships with their bodies, or are they quietly fueling body shame and disordered eating?

The Promise: Awareness and Accountability

For many users, the benefits are real. Health tracking devices can help your awareness of lifestyle patterns and motivate behavioural changes. The data can empower users by providing a source of accountability that helps them stick to fitness goals. When a wearable nudges someone to take the stairs instead of the elevator or go for an evening walk, that is a clear win for public health.

However, even proponents acknowledge that the outcome depends heavily on the individual. A person's age, gender, and personality traits—particularly perfectionism and how they cope with setbacks—strongly influence whether tracking becomes a positive tool or a psychological burden.

The Hidden Cost: Guilt, Pressure, and Poor Body Image

The darker side of fitness tracking is well-documented. A 2023 systematic literature review found that health and fitness tracking technology is consistently associated with guilt, pressure, stress, anxiety, frustration, rumination over unmet goals, poor body image, and a disconnection from the body's internal signals.

When a user fails to hit their arbitrary step goal or calorie target, the device transforms from a cheerleader into a judge. The constant reminders and notifications can become nerve-racking. What began as a healthy habit can spiral into an unhealthy fixation, where exercise and eating choices start to generate internal judgment and criticism rather than wellness.

Even for someone like me who sees value in tracking, it is easy to understand how a missed goal can start to feel less like neutral data and more like a setback.

Young Adults at Greatest Risk

The concern is particularly acute among younger Canadians. A 2025 systematic review led by Ontario researchers and published through the Ontario Dental Hygienists' Association found that diet and fitness apps are associated with disordered eating symptoms. The review, which examined thirty-eight peer-reviewed studies, concluded that young adults

who use these apps regularly have greater disordered eating symptoms, including body image concerns and compulsive exercise behaviours.

The emphasis on dietary restriction and weight loss that pervades many fitness apps may reinforce maladaptive behaviours, especially for individuals who already have preoccupations with their weight or body image. The research also revealed unintended consequences, such as feeling pressure to meet goals and experiencing guilt when those goals are not attained.

The authors caution that while causal conclusions cannot yet be established, the cross-sectional evidence is troubling: the very tools marketed as pathways to better health may be harming vulnerable users.

Athletes: A Particularly Vulnerable Population

For athletes, the stakes are even higher. A master's research project from the University of Alberta, completed in September 2024, specifically examined the relationship between digital self-tracking technologies and disordered eating behaviors within athlete populations. The study found that for some athletes, wearables like the Apple Watch and Fitbit, along with apps like MyFitnessPal and Strava, are associated with positive health outcomes. But for others, these same technologies are linked to "unintended negative health and athletic performance outcomes, including initiating and intensifying disordered eating behaviours."

The researcher, Michael Peel, interviewed ten experts from product design, clinical psychology, and health sciences. Key findings included recognition of control, obsession, and addiction in health data tracking, as well as the potential for these technologies to disconnect users from their own internal sensory awareness. In other words, a runner might learn to ignore their body's signals of hunger or fatigue because the data on their wrist tells a different story.

The study's consent form explicitly warned participants: "Wearable health tracking devices and associated digital applications may also promote body dissatisfaction and disordered eating behaviours for some users."

The Broader Canadian Context: Body Image and Physical Activity

The fitness tracker debate sits within a larger Canadian conversation about body image and exercise. Research from Memorial University of Newfoundland, completed in July 2024, explored how physical activity affects body appreciation in adolescent girls. The study noted that body image is one of the most prominent factors inhibiting physical activity engagement among adolescent girls—and that this problem has intensified following the COVID-19 pandemic, when physical activity levels among Canadian youth sharply declined.

While this Newfoundland research focused on general physical activity rather than tracking devices specifically, its findings are relevant: the relationship between exercise and body image is complex, and for many young women,

the pressure to conform to specific physique and fitness ideals can prompt disengagement from healthy activities. Fitness trackers, with their constant quantification of calories burned and steps taken, risk amplifying that pressure rather than alleviating it.

A Healthy Balance

The Canadian research consensus suggests that fitness trackers are neither inherently good nor evil—their impact depends entirely on the user's psychology and relationship with their body. For individuals prone to perfectionism, anxiety, or pre-existing body concerns, these devices may do more harm than good.

Experts recommend focusing on "process-oriented" goals—such as minutes of activity or sleep quality—rather than "outcome-oriented" goals like weight or calorie burning. Users should also be mindful of whether they feel guilt or anxiety when reviewing their data. If the answer is yes, a digital detox may be in order.

As wearable technology continues to evolve, the question is not whether these devices are good or bad. The real question is whether Canadians can use them as tools for genuine wellness, rather than allowing the numbers on a screen to dictate their self-worth.

For me, the healthiest mindset is to let the tracker support awareness and progress without letting it take control. It is important to remember that health is a marathon, not a sprint, and that meaningful progress often happens slowly.

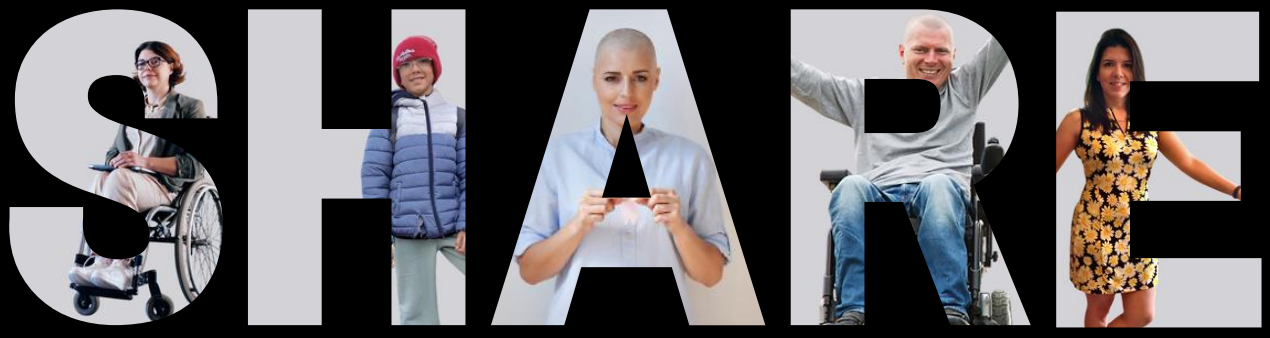
Sources

- This article draws from a 2024 feature in Canadian Living titled "Are Health Trackers Actually Making Us Healthier?", which reviews the pros and cons of fitness tracking, including findings from a 2023 systematic literature review on guilt, pressure, and poor body image.

- A 2025 article from the ODHA Dental Hygiene Newswire reports on a systematic review led by Ontario researchers that links diet and fitness apps to disordered eating symptoms, body image concerns, and compulsive exercise behaviours among young adults.

- A 2024 Master of Design research project by Michael Peel at the University of Alberta titled "Digital Self-Tracking Technologies, Disordered Eating Behaviours, and Athlete Populations" examines how wearables like the Apple Watch and Fitbit can both help and harm athlete mental health, including the initiation and intensification of disordered eating.

- A 2024 master's thesis by Laura O'Keefe from Memorial University of Newfoundland titled "Exploring the Relationship between Physical Activity Intensity and Body Appreciation in Adolescent Girls" provides important Canadian context on how body image affects physical activity engagement, particularly among youth following the COVID-19 pandemic.



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Outdoor Yoga: Canada's Most Beautiful Studio Is Outside

Conceptualized by
Anthony Testa
Editor

The Rise of Outdoor Yoga in Canada

Fresh air, birdsong, a mat beneath your feet, and the scent of pine or saltwater in the breeze—outdoor yoga is quickly becoming one of Canada's most appealing wellness rituals. Across the country, people are taking their practice out of the studio and into parks, beaches, forests, and mountain towns, where nature becomes more than a backdrop: it becomes part of the experience.

From conservation areas in Ontario to the forest floors of British Columbia and the dramatic peaks of Alberta, Canadians are discovering that the natural world can be as restorative as any fitness studio—perhaps even more so.

Why Nature Changes the Practice

The appeal isn't only aesthetic. Outdoor yoga combines the familiar benefits of yoga—better strength, balance, flexibility, and heart health—with the restorative effects of time spent in green space. According to Healthing.ca, simply being outside can help lower blood pressure, reduce stress, and support immune function, giving an ordinary practice an extra layer of wellness.

That idea connects naturally with the growing popularity of "forest bathing," or *Shinrin-Yoku*, across Canada. A 2024 study published in *Forests* by researchers at Université Laval found that forest-based health practices—including yoga and meditation—draw part of their power from the setting itself, describing the forest as "a therapeutic ally." The study

also notes that landscapes with water, such as lakes and rivers, can be especially supportive, helping explain why so many practitioners describe outdoor yoga as deeply calming and immersive.

Rolling your mat out into Nature

One of the pleasures of practicing in Canada is the sheer variety of scenery. Whether you live in a major city or a quieter rural community, a natural studio is rarely far away.

The Atlantic Coast: In New Brunswick, **Youghall Beach Park** offers an enviable setting for practice: a dedicated outdoor yoga platform overlooking the warm waters of Chaleur Bay. The wooden surface provides welcome stability underfoot while still delivering the full sensory experience of sea air, open sky, and shoreline views.

Ontario's Conservation Areas: In Ontario, yoga is increasingly being woven into outdoor wellness programming. The Nottawasaga Valley Conservation Authority hosts "Nature Infused Yoga" at the Tiffin Centre, where sessions often begin with a quiet forest walk before easing into a mindful Vinyasa flow. Conservation Halton's "Wellness Series" at the restored Area 8 offers another memorable setting, with evening classes on the grass beside a former quarry turned swimming hole.

The Mountain Parks: For drama and scale, Alberta is hard to beat. **Forest Fix** in Canmore offers "EcoYoga," blending hiking, walking meditation, and yoga amid the Rockies, while the Town of Canmore's "Yoga in the Park" invites participants to move with mountain views, riverside air, and a distinctly communal energy.

Taking it Outside

Of course, nature doesn't come with climate control. Uneven ground, gusty wind, and the occasional mosquito are all part of the package, which means outdoor yoga asks for a little more flexibility—both physical and mental.

Preparation helps. A thicker mat or old blanket can soften rocky or root-covered ground, while sunscreen and bug spray are must-haves even for evening sessions. But perhaps the biggest lesson of practicing outdoors is acceptance: you can't control the weather, the breeze, or the bird calling from a nearby branch. Instead, the practice becomes about adapting—steadying yourself through a balance pose in the wind or finding calm despite the sounds around you.

A Practice for Every Season

While summer may be peak season, outdoor yoga in Canada doesn't have to end in August. Spring brings the scent of thawing earth, autumn offers crisp air that keeps a hot flow comfortable, and some groups even continue with snowy "frosty flows" once winter arrives. With the right layers—and the right attitude—the outdoor studio stays open year-round.

Whether it's a forest bathing session in Quebec or a sunrise salutation on an Ontario beach, outdoor yoga offers something many indoor classes cannot: a feeling of connection to the

landscape itself. In a country defined by its natural beauty, that may be the real luxury—discovering that sometimes the best place to find your balance is outside.

Canadian Sources & Further Reading

- **Conservation Halton (Ontario):** Provides information on Wellness Series including yoga at parks like Area 8. Link
- **Forests Journal (MDPI):** Forest-Based Health Practices: Social Representations of Nature and Favorable Environmental Characteristics (Université Laval, 2024). Link
- **Travel Alberta:** Lists organized experiences like "Rise: Run, Yoga, Meditate" in Calgary. Link
- **Nottawasaga Valley Conservation Authority (Ontario):** Details on Nature Infused Yoga sessions. Link

Hydration Hacks: Beyond Plain Water for Summer Sweat Sessions

A Canadian perspective on staying properly fueled and fluid through the heat.

Conceptualized by
Anthony Testa
Editor

Canada's summers pack a punch. From the humidity of southern Ontario to the dry heat rolling across the Prairies, the season demands more from our bodies — and more from our hydration strategies. If you're someone who laces up for a morning run, heads to an outdoor boot camp, or bikes the local trail network, plain water alone may not be enough to keep you performing at your best.

Here's a practical, science-backed guide to hydrating smarter this summer — no overpriced neon drinks required.

Why Plain Water Falls Short During Intense Exercise

Water is essential, but it tells only part of the hydration story. When you sweat heavily, you're not just losing water — you're losing electrolytes, particularly sodium, potassium, magnesium, and chloride. These minerals regulate fluid balance, nerve function, and muscle contractions. Replacing water without replacing electrolytes can actually leave your cells unable to retain the fluids you're drinking, and in extreme cases can lead to hyponatremia — a dangerous drop in blood sodium levels.

According to **Dietitians of Canada**, proper hydration for active individuals involves replacing not just fluids but the salts and carbohydrates lost during prolonged effort. Their sports nutrition resources emphasize that healthy eating after intense exercise is critical to "replace the energy, fluids, salts (electrolytes) and carbohydrates that are lost or burned." (Source: Dietitians of Canada – Sports Nutrition)

Know Your Numbers Before You Sweat

Before reaching for any bottle, it helps to know your baseline. **Dietitians of Canada** recommends 2.2 litres (about nine cups) of fluid daily for women and 3.0 litres (12 cups) for men — and that's just for everyday hydration, not accounting for sweat losses during a workout. (Source: Alive+Fit – "5 Essential Hydration Hacks for Summer")

In summer, especially during outdoor sweat sessions, those numbers climb. A practical starting point recommended by sports health experts is to consume roughly half your body weight in pounds as ounces of water per day — then adjust upward based on heat, humidity, and workout intensity. Urine color is a reliable real-time indicator: pale yellow means you're on track; dark amber is a red flag.

Hack 1: Infuse Your Water

Let's face it — water can get monotonous. Vancouver-based registered dietitian Desiree Nielsen says there's no shame in admitting that and offers a simple fix: infuse it.

"It can be as simple as infusing water in the fridge with your favorite fruit, or even veggies," Nielsen told CBC News. "I find cucumber water incredibly refreshing, and just that little bit of taste really changes the way it hits your palate." (Source: CBC News – "4 Summer Hydration Tips Served Up")

Try combinations like strawberry-basil, lemon-mint, or watermelon-lime. They cost next to nothing, contain no added sugar, and make it far easier to hit your daily fluid targets. Prep a pitcher the night before and you'll have flavoured hydration ready at sunrise.

Hack 2: Eat Your Water

Nielsen also reminds us that fruits and vegetables are a surprisingly powerful hydration tool. "People forget that fruits and vegetables are a wonderful source of hydration. Particularly melons — something like watermelon is 90 per cent water," she said. By gravitating toward local, in-season produce at peak freshness — think Ontario strawberries, BC cucumbers, Quebec blueberries — you're hydrating and nourishing at the same time.

Cucumbers, celery, peaches, tomatoes, and zucchini all have high water content and are abundant at Canadian farmers' markets through July and August. Consider building your summer meals and snacks around them.

Hack 3: Time Your Hydration Around Exercise

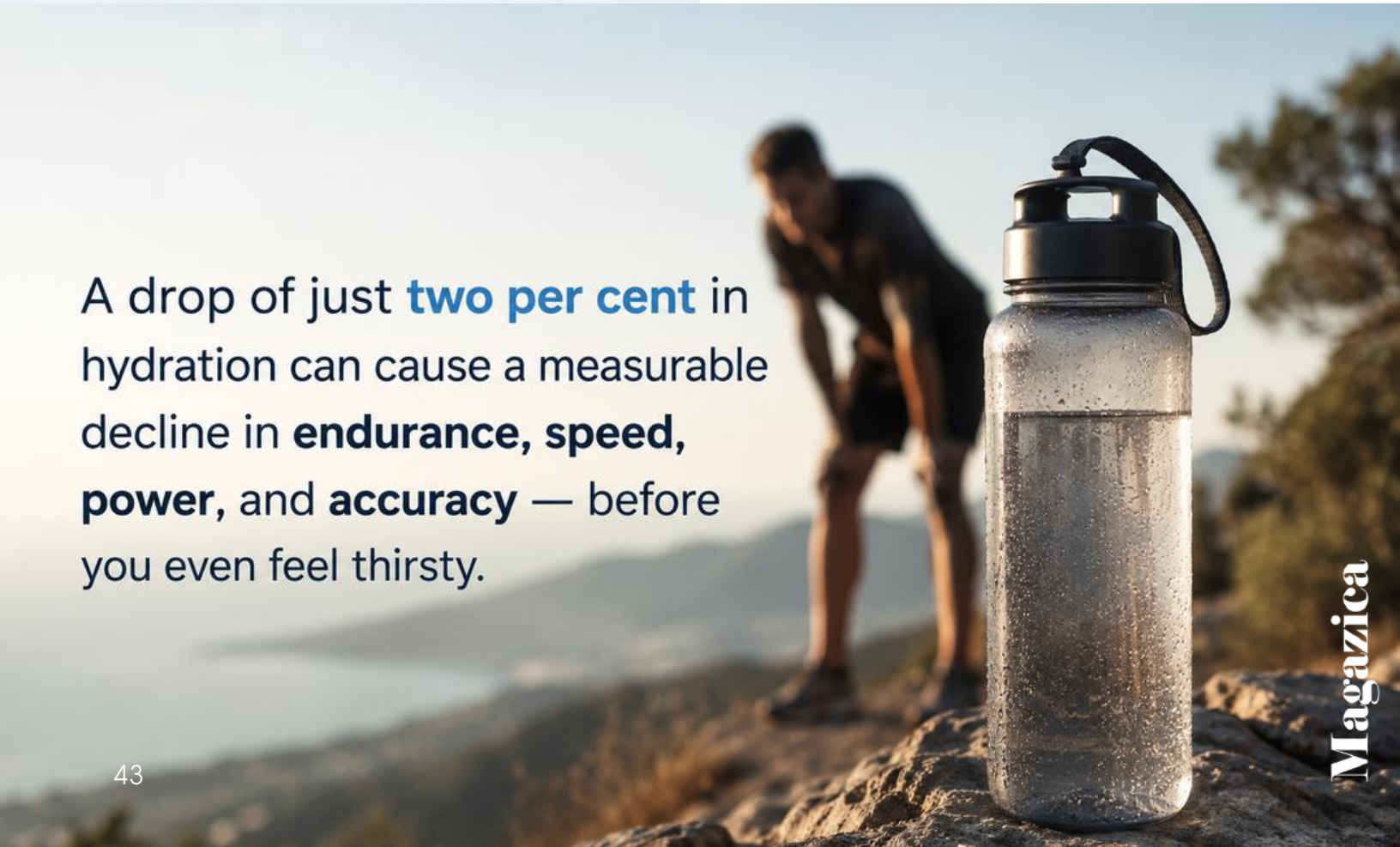
Timing matters as much as quantity. **Canadian Running Magazine** recommends drinking 300–500 ml of water roughly two hours before a run or outdoor workout — enough time for your body to absorb it and excrete any excess before you start moving. (Source: Canadian Running Magazine – "Hydration Strategies Every Runner Needs This Summer")

During activity, the goal is to sip consistently rather than gulp reactively. Small amounts every 15–20 minutes keeps fluid absorption steady and prevents that heavy, sloshing feeling mid-run. As soon as you finish, begin rehydrating immediately — even before you've caught your breath.

Hack 4: Add Electrolytes for Longer Sessions

For workouts lasting more than 45–60 minutes, or any session in high heat and humidity, electrolyte replacement becomes important. This doesn't mean you need a sugary sports drink. Alive+Fit, drawing on the work of Canadian health practitioners, highlights simple, natural options: coconut water (rich in potassium and magnesium), a pinch of high-quality sea salt stirred into your water bottle, or a homemade electrolyte mix using citrus juice, water, a small amount of honey, and a pinch of salt.

Dr. Nathalie Beauchamp, a Canadian doctor of chiropractic and wellness expert, notes that even a two per cent level of dehydration can cause a significant drop in endurance performance, speed, power, and accuracy — along with fatigue and dizziness. Electrolytes help your body actually retain and use the fluids you're consuming, making every sip count.



Dietitians of Canada recommends

9 cups
a day for women

12 cups
a day for men

— and that's before a single summer workout is factored in.

Hack 5: Don't Wait for Thirst

Thirst is a lagging indicator. By the time you feel it, dehydration has already begun. Especially on hot Canadian summer days — when humidex readings in cities like Toronto, Windsor, or Montreal can make 30°C feel like 40°C — you need to be proactive.

Canadian Running Magazine advises taking small, consistent sips throughout the day to maintain a steady hydration baseline, rather than playing catch-up after a tough session leaves you depleted.

Hydration Strategy

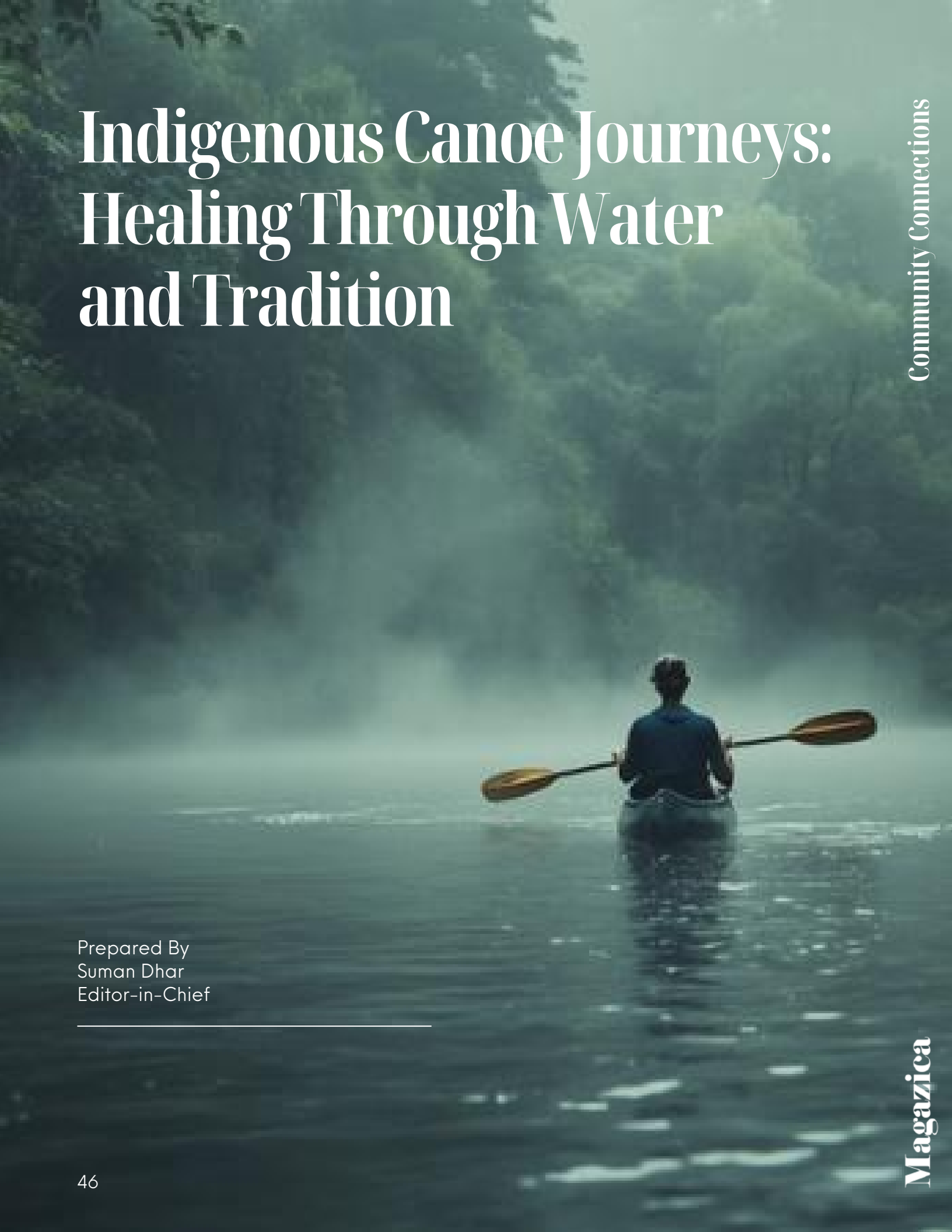
Hydration in summer is a strategy, not an afterthought. Between Dietitians of Canada's evidence-based guidelines, advice from registered dietitians like Desiree Nielsen, and practical tips from Canadian fitness publications, there's plenty of made-in-Canada wisdom to draw on. Infuse your water, eat hydrating foods, time your intake around movement, replenish electrolytes when needed, and stay ahead of your thirst.

Your best summer sweat sessions start with what's in your bottle — and sometimes, with what's on your plate.

Sources:

- Dietitians of Canada – Sports Nutrition (Adult): https://www.dietitians.ca/Your-Health/Nutrition-A-Z/Sports-Nutrition-(Adult).aspx
- Alive+Fit – "5 Essential Hydration Hacks for Summer" by Dr. Nathalie Beauchamp, DC: https://www.aliveandfit.ca/5-essential-hydration-hacks-for-summer/
- CBC News – "4 Summer Hydration Tips Served Up" (featuring Desiree Nielsen, RD, Vancouver): https://www.cbc.ca/news/health/4-summer-hydration-tips-served-up-1.2700295
- Canadian Running Magazine – "Hydration Strategies Every Runner Needs This Summer": https://runningmagazine.ca/health-nutrition/hydration-strategies-every-runner-needs-this-summer/

Indigenous Canoe Journeys: Healing Through Water and Tradition



Prepared By
Suman Dhar
Editor-in-Chief

Think of a river upon which no cedar canoe had set foot for more than a hundred years. Not due to any changes in the river; it hadn't. Nor had all knowledge of building and using canoes been lost. Rather, a concerted effort had been undertaken by colonial policies to break the people's connection with the river, and via the river, themselves.

In 2017, after a period of over one hundred years, four adults and five youth from the Anishinaabe First Nation community of Biigtigong Nishnaabeg embarked on a paddle down the Biigtig Ziibii, or the river they traditionally inhabit. What is remarkable about this particular trip is not only that it happened at all, but what scientific research was conducted during the trip.

Water, Land, and the Architecture of Wellbeing

Within Western biomedicine, the connection between individuals and their natural surroundings can be considered a backdrop. Within many Indigenous frameworks of medicine, this connection is not a backdrop at all; rather, it forms the basis for the entire system.

The work of Jennifer Redvers, published in the journal International Journal of Indigenous Health, was based on interviews with eleven land-based healing practitioners in Canada's three northern territories: Yukon, Northwest Territories, and Nunavut. These land-based healers did not present their practices as any form of program or service. Instead, they saw land-based healing as a process that inherently involved a relationship with the land, where the land and the water were not merely a place where healing occurred but were actively engaged with in the process. Cultural identity was not something that one brought to water but was made through it.

This notion is further corroborated by Acharibasam et al. (2024) in their paper published in the EXPLORE journal, where they collaborated with Ministikwan Lake Cree Nation in Saskatchewan to investigate how land-based healing relates to water governance. The conclusions they reached were clear: disconnecting from both land and water within this community was not just an issue of lack of accessibility or geography but a disconnect from the cultural spirituality and ways of knowing upon which healing is built. Engaging again in culturally relevant activities centred on reconnecting with water had significant repercussions for the well-being of the community beyond what any clinical treatment could achieve.

Paddling the Biigtig: A Peer-Reviewed Story of Return

This event did not only serve as an example of community life, but it was also analyzed by Kayla Mikraszewicz and Chantelle Richmond in their paper in the journal Social Science & Medicine. These authors conducted interviews with the participants and discovered what kind of health effects the Biigtigong Nishnaabeg River Journey had produced.

There were three important themes discussed by the researchers in their analysis. The first

one concerns the role that the journey played in the transmission of Indigenous Knowledge. Specifically, Mikraszewicz and Richmond noted that "portages [along the route] had names said out loud in Anishinabemoen; youth heard the history of certain bends in the river for the first time in their lives, and they experienced the reclamation of the story behind each landmark that was being passed during the journey." The second theme concerned the development of social relations between the Elders and the youth. This process was achieved in ways that could not be reached by any other institution, such as a school, municipality, or even a health care institution. The last theme involves the personal connection with place that was developed among the younger participants of the event.

All of these were discussed within the context of the Anishinaabe tradition of mino bimaadiziwin (living a good and healthy life). As articulated by the authors, this particular journey of the canoe was no reenactment of the past; rather, it was an enactment of philosophy itself.

A related study conducted by Nightingale & Richmond in the International Journal of Environmental Research and Public Health examined another camp experience led by the same Biigtigong Nishnaabeg community in 2019. This time, the camp took place at Mountain Lake – a culturally important site from which the community had been removed for several decades. This particular camp involved the participation of fifteen members of different ages: Elders, youth, and band staff members. As found in the thematic analysis of their story-based interviews, the camp allowed for the development of better relationships among the community members, the practice of Anishinaabe knowledge, and pride in their community. For instance, one of the youth expressed amazement in arriving at the ancestral lands that others did not care much about: "It was really interesting seeing how much we have to 'fight for' there."

The Canoe Journey as a Health Intervention: Pacific Northwest Evidence

In addition to community-specific research conducted in Canada, this same theme of healing is investigated in other health-based research that takes place further down the Pacific coast. “Healing of the Canoe,” an intervention developed at the Alcohol and Drug Abuse Institute of the University of Washington in collaboration with the two Pacific Northwest tribes of Suquamish and Port Gamble S’Klallam Tribes.

Donovan et al. publish their work on this program in the American Indian and Alaska Native Mental Health Research, which utilizes the annual event of the Tribal Canoe Journey – wherein canoes from different Indigenous Nations from the coasts of Alaska, BC, Washington, and Oregon meet each year – as both a metaphorical and tangible practice for cultural interventions aimed at preventing substance abuse among high school age adolescents.

In addition, the participants in the program expressed increased levels of hope, optimism, and self-efficacy, decreased substance use,

and increased levels of cultural identification and understanding of alcohol and drug issues. Significantly, it should be highlighted that the described intervention did not only imply the participation in the tribal canoe ride, but that the participants devoted themselves to preparation for this event for a whole year and lived substance-free lives during this time.

It was stressed by the authors that the actual Tribal Canoe Journey is, first of all, an event that restores the strong maritime identity of the Coast Salish people, whose lives were tightly connected with the canoes – a means of fishing, communication, trade, and spirituality of this culture. The young participants are taught how to navigate in deep waters under challenging conditions; how to resolve any conflicts that might arise during their joint stay.

Traditional Activity and Holistic Wellness: What Systematic Research Finds

These results are embedded within the larger literature on this topic. Akbar, Zuk, and Tsuji conducted a systematic review in the International Journal of Environmental Research and Public Health on the impacts on health and wellness of traditional physical activities, such as canoeing, on Indigenous youth in Canada, the United States, New Zealand, and Australia. In doing so, Akbar et al. employed an integrated Indigenous ecological theory that structures the results into the dimensions of health and wellness, intrapersonally, interpersonally, organizationally, communally, and policy-wise, utilizing the medicine wheel as an organizing theory.

Indeed, the results of their analysis, which were drawn from nine independent studies, were consistent throughout: traditional physical activities engaged in by Indigenous youth resulted in both physiological and psychosocial benefits, ranging from improvements in physical fitness and physical self-concept to an increase in cultural identity, intergenerational connections, and engagement with community. However, most importantly, it was observed that the participants did not regard the activities as exercise at all, but rather as life, as part of their daily routine and identity.

It is important because it highlights an aspect of the practice of wellness which is often overlooked by standard theories of health promotion; that is, the practice of wellness through traditional processes, such as journeying by canoe, is not achieved because of physical activity alone, but because of all those other things which are done at the same time.

Cultural Continuity as a Determinant of Health: A Canadian Foundation

Beyond these particular studies lies a more fundamental and established finding within Canadian Indigenous health research. In 1998, two psychologists, Michael Chandler and Christopher Lalonde, wrote a seminal paper on the issue of Indigenous youth suicide rates among nearly 200 First Nations bands located in the province of British Columbia.

Their finding was one of extraordinary variability. Although youth suicide rates among Canada's Indigenous population were significantly higher than in other parts of the country, the national figure did not do justice to the complexity of the situation, according to Chandler and Lalonde. Instead of reflecting some sort of uniform pattern of youth suicides across different communities in BC, their data showed that some Indigenous communities experienced rates hundreds of times greater than others. Yet these rates were not randomly determined but were systematically related to what Chandler and Lalonde referred to as cultural continuity.

It doesn't imply that travelling by canoes prevents suicides, as the connection between cultural integrity and psychological well-being is far more complicated and dependent upon individual communities. What the finding proves is that cultural activities and indigenous self-determination, as practiced through the act of canoe travelling, are no longer seen as a marginal aspect of health but rather a significant determinant thereof.

The River Has Always Known the Way

There is an exact knowledge that can only be passed down from person to person when one is on the water – the name of a particular rapid in the language of the people who have used it for ten thousand years, how to understand a current, the history of those who were lost at a particular portage and those who lived through it and why. When colonial policy cut off the passing of such knowledge for decades, it wasn't just interfering in a cultural tradition. Rather, as recent peer-reviewed studies have shown, it was disrupting a practice of healing.

Reconnecting with the canoeing tradition in places like Biigtigong Nishnaabeg in Ontario or the Suquamish and Port Gamble S'Klallam peoples of the Pacific Northwest does not constitute cultural reminiscing. It is neither a cultural tour nor a healing program. It is a grassroots effort of restoration that the data suggests leads to significant positive effects on mental health, cultural awareness, family relations, and the health of children and young adults. The river has always been the healer; only recently has the research begun to confirm it.

Key Takeaways

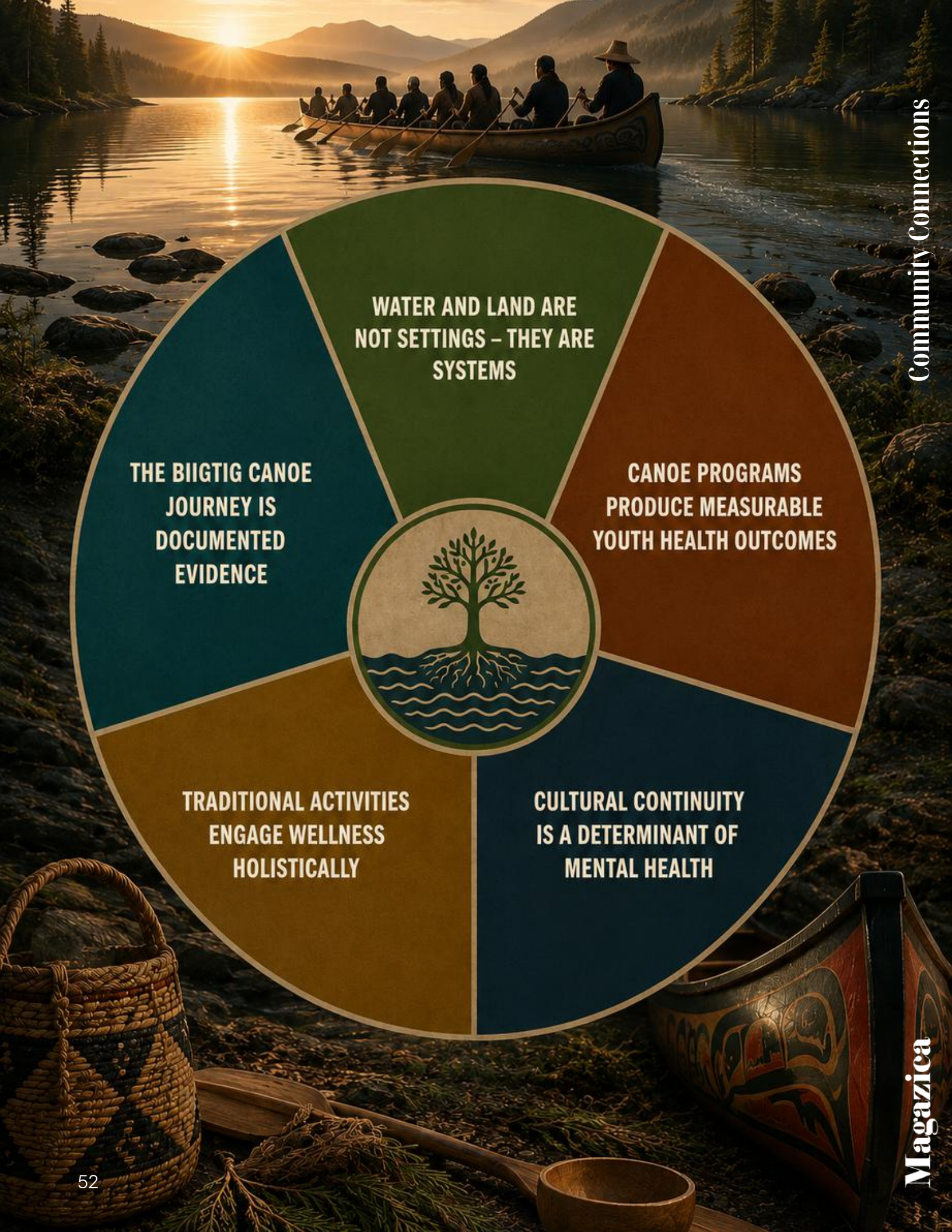
- **Water and Land Are Not Settings - They Are Systems:** The indigenous health paradigms, as shown by the findings of Canadian practitioners, recognize the land and water as integral elements of the process of healing rather than merely serving as settings for the conduct of cultural activities.

- **The Biigtig Canoe Journey Is Documented Evidence:** According to a peer-reviewed study examining the first ever canoe journey conducted by the community of Biigtigong Nishnaabeg in more than 100 years, it helped promote intergenerational knowledge exchange, Elder-youth relationships, and a connection with the traditional territory, which are key aspects of living in a good and healthy manner.

- **Canoe Programs Produce Measurable Youth Health Outcomes:** The "Healing of the Canoe" program conducted in the Pacific Northwest was found to have led to increased levels of hope, optimism, and efficacy and decreased substance use among indigenous youth, where culture acted both as a means and end.

- **Traditional Activities Engage Wellness Holistically:** Systematic review on traditional physical activities such as canoeing among indigenous youth revealed consistent physiological and psychosocial benefits resulting from the operation of intra-, inter-, and interpersonal mechanisms.

- **Cultural Continuity Is a Determinant of Mental Health:** Significant studies in Canada revealed that the suicide rate among young people in First Nations was extremely low because the communities retained their cultures and exercised self-determination, making cultural restoration key to the provision of health care rather than merely an addition to it.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Sources

Mikraszewicz, K., & Richmond, C. (2019). Paddling the Biigtig: Mino biimadisiwin practiced through canoeing. Social Science & Medicine, 240, 112548. https://doi.org/10.1016/j.socscimed.2019.112548

Nightingale, E., & Richmond, C. (2022). Reclaiming land, identity and mental wellness in Biigtigong Nishnaabeg territory. International Journal of Environmental Research and Public Health, 19(12), 7285. https://doi.org/10.3390/ijerph19127285

Redvers, J. (2020). "The land is a healer": Perspectives on land-based healing from Indigenous practitioners in northern Canada. International Journal of Indigenous Health, 15(1), 90–107. https://doi.org/10.32799/ijih.v15i1.34046

Acharibasam, J. B., Hurlbert, M., Datta, R., & Lewis, K. w. (2024). Meanings of Indigenous land-based healing and the implications for water governance. EXPLORE, 20(4). https://doi.org/10.1016/j.explore.2024.04.002

Donovan, D. M., Thomas, L. R., Sigo, R. L. W., Price, L., Lonczak, H., Lawrence, N., Ahvakana, K., Austin, L., Lawrence, A., Price, J., Purser, A., & Bagley, L. (2015). Healing of the canoe: Preliminary results of a culturally tailored intervention to prevent substance abuse and promote tribal identity for Native youth in two Pacific Northwest tribes. American Indian and Alaska Native Mental Health Research, 22(1), 42–76. https://doi.org/10.5820/aian.2201.2015.42

Akbar, L., Zuk, A. M., & Tsuji, L. J. S. (2020). Health and wellness impacts of traditional physical activity experiences on Indigenous youth: A systematic review. International Journal of Environmental Research and Public Health, 17(21), 8275. https://doi.org/10.3390/ijerph17218275

Chandler, M. J., & Lalonde, C. (1998). Cultural continuity as a hedge against suicide in Canada's First Nations. Transcultural Psychiatry, 35(2), 191–219. https://doi.org/10.1177/136346159803500202

Note on Language: *This article uses the terms First Nations, Anishinaabe, Anishinabemoen, and mino bimaadiziwin with reference to specific communities and research sources cited. The diversity of Indigenous nations, languages, and healing traditions across Canada and beyond cannot be generalized.*

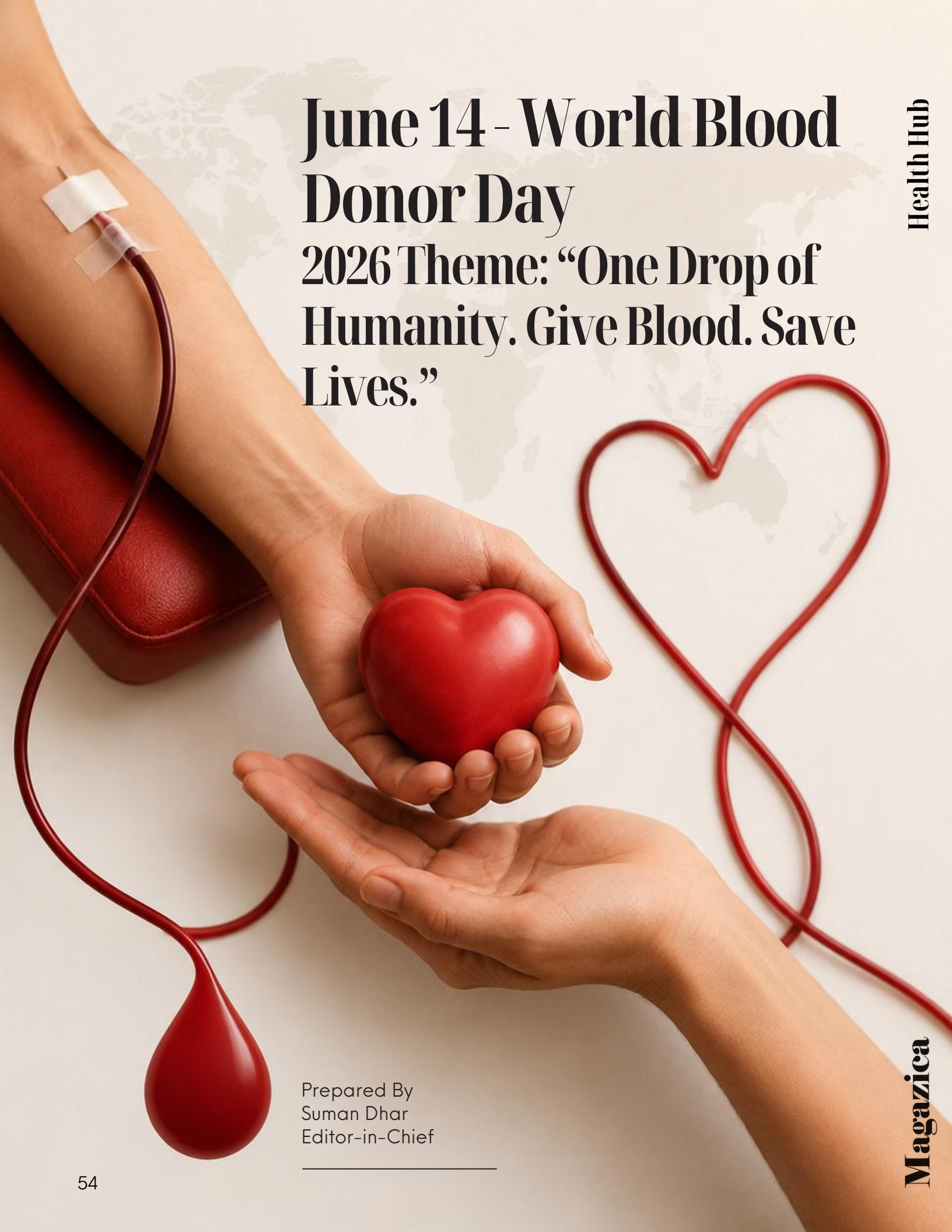
Disclaimer

This article is for informational and educational purposes only and does not constitute medical advice. It should not be taken as a medical diagnosis or treatment.
Always consult with a qualified healthcare professional for personalized medical guidance.

This article references research on youth suicide and mental health outcomes. If you or someone you know is experiencing mental health challenges, please reach out to a healthcare provider or contact the Hope for Wellness Help Line at 1-855-242-3310, available 24 hours a day, 7 days a week, to Indigenous peoples across Canada.

June 14 - World Blood Donor Day

2026 Theme: “One Drop of Humanity. Give Blood. Save Lives.”



Prepared By
Suman Dhar
Editor-in-Chief

Just picture this: It's a hectic day at a Toronto trauma centre, and a patient comes in after sustaining severe injuries in a road accident, resulting in rapid loss of blood. As the surgical team sprang into action, what made the entire process possible was the act of generosity performed a few weeks ago by someone who simply rolled up his/her sleeve during lunchtime. And that is precisely what the World Blood Donor Day, celebrated each year on June 14, aims to promote.

A Date With History: The Man Who Made Transfusion Safe

Why June 14 then? No surprise there either. This is because the date coincides with the birth anniversary of the great scientist who discovered the secret of safe blood transfusion. Born on June 14, 1868, in Vienna, Karl Landsteiner had, through his discovery made in 1901, solved a medical mystery for which several patients lost their lives. Human beings have different kinds of blood, mixing which causes an immune reaction known as agglutination.

The discovery, which led him to receive the Nobel Prize in Physiology or Medicine in 1930, paved the way for safe blood transfusions and formed the basis of transfusion medicine. The first type-specific successful blood transfusion took place in 1907; blood banks were established in the 1930s. It can be said that all blood banks, crossmatches, and compatibles are directly descended from that 1901 research paper.

Celebrated for the very first time in 2004, the day became international thanks to its joint organization by the WHO (World Health Organization), IFRC (International Federation of Red Cross and Red Crescent Societies), and other prominent health organizations. A theme and host country are chosen each year to

celebrate this day on an international scale. The country hosting the 2026 celebrations is Italy, with its National Blood Centre, and its slogan is: “One Drop of Humanity. Give Blood. Save Lives.”

The Global Picture - and Canada’s Place in It

According to the WHO, the number of blood donations worldwide is estimated to be 118.5 million units annually. However, there is a disparity evident in the figures, as 40 percent of those donations are provided by rich nations, which comprise only 16 percent of the world's population. In poor countries, blood is most critical for managing health problems such as childbirth difficulties, childhood anemia, sickle cell anemia, and injuries.

Canadians cannot escape the reality of such a problem. As early as May 2025, Canadian Blood Services launched its most ambitious campaign to recruit new donors, targeting at least one million within the five-year period. There is a lot of truth in the call for action since there will be a 10 percent increase in demand for blood in the country in the coming five years. Meanwhile, there may even be as much as a 50 percent increase in immunoglobulin demand, which is produced from plasma donations. Nevertheless, only 4 percent of Canadians eligible for blood donation have been donating voluntarily to date.

Think of it like a community well. Everyone benefits from it, but very few are currently refilling it. And unlike a reserve of medication, blood cannot simply be manufactured or stockpiled indefinitely — which brings us to the often-overlooked reality of shelf life.

What Happens to a Single Donation?

It takes only one unit of blood to derive these three products: red blood cells, platelets, and plasma, which are all used to treat certain health conditions. Transfusion of red blood cells is mostly done when a patient undergoes a surgical operation or is anemic. The platelet product is critical in cancer cases where patients are undergoing chemotherapy because the process usually leads to the suppression of platelet formation. Lastly, the plasma component, the fluid portion of the blood, provides crucial life-saving medications, which include clotting factor for those with bleeding disorders and immunoglobulin for those with weakened immunity.

This is where the shocker comes in: blood products do not last forever. Red blood cells can be stored for about 42 days, while platelets expire after seven days. This means that a steady flow of donors – not just one-time donors in emergency cases – is crucial in sustaining the health system. Donations are allowed to donate whole blood every 56 days, but platelet donors may donate every seven days, up to 24 times per year.

Unlike sanitizers, blood donation is not like building a stockpile. It requires a living, breathing, routinely replenished supply.

Blood Diversity: Why the Full Spectrum of Donors Matters

This is one thing that does not get covered by the media often – the diversity of blood types among the donors is medically important. While

everyone knows about the well-known A, B, AB, and O blood types, there are actually over 300 different blood group antigens. The benefit of having transfusions with donor blood that is as close to the patient's blood type as possible is especially noticeable in cases where regular transfusions are required, for example, in sickle cell anemia or thalassemia. The closer the match, the better.

Since some blood types are relatively common among certain ethnicities, Canadian Blood Services puts effort into encouraging people of various nationalities to become donors. Canadian blood type O-negative is highly desirable in emergency cases since it is compatible with all other types and can be transfused to a person regardless of his or her blood type, if there is no time to do otherwise. However, all types of blood are required equally.

Donating Blood in Canada: What to Know

The other company that plays an important role in blood donation in Canada, apart from Héma-Québec, is the Canadian Blood Services, which handles blood donations in all other provinces except Quebec. The two companies work together to ensure that hospitals get their supply of blood throughout the year. The company runs 35 permanent blood donor centers as well as 4,000 mobile blood collections every year.

According to the organization, people who want to give their whole blood must be above 17 years and have a weight of 110 pounds (approx. 50 kilograms). Unlike many organizations that require donors to be younger than a certain age, there is no restriction on how old people should be in order to be able to donate whole blood.

Donations of whole blood in the organization typically last one hour, starting from the point a person gets registered until completion. Individuals with health conditions are advised to ask a health professional at any of the blood centers for more information on their condition.

In Quebec, the organization responsible for blood donations is Héma-Québec.

One Drop, Enormous Reach

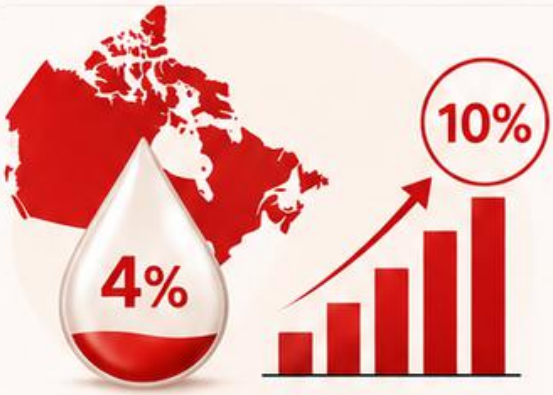
World Blood Donor Day is not just a day marked on the health calendar. It represents a constant reminder of the presence of anonymous voluntary donors without whom none of what goes on in hospitals is possible. The discovery made by Karl Landsteiner in 1901 laid the scientific foundation for blood donation. However, what keeps the system alive and operational day in and day out is humanity itself – the continued readiness of ordinary individuals to donate.

This will be celebrated across the world with the 2026 World Blood Donor Day event being hosted by Italy's National Blood Centre in Rome. As the theme for this day – 'One Drop of Humanity' – reminds us, a million donors in Canada means that everything that goes into a healthcare system is literally embodied in a drop of blood.

Key Takeaways

Why June 14?

This date has been chosen because of the birth date of Karl Landsteiner (1868–1943). This scientist's discovery of the ABO blood group system back in 1901, which allows for safe blood transfusions, won him the 1930 Nobel Prize in Physiology or Medicine.

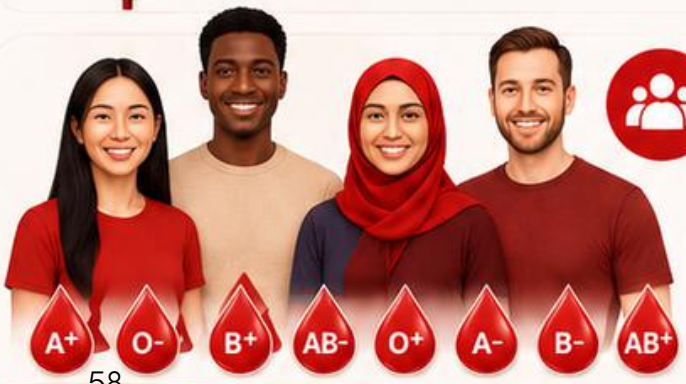


Canada's Supply Gap:

Currently, the amount of donations from eligible Canadians totals 4 percent, while blood demand is expected to increase by almost 10 percent in the next five years. Canadian Blood Services needs one million new donors by 2030.

Blood Doesn't Last Long:

Red blood cells have only 42 days left, while platelets are usable for seven days. What is important here is regular donation rather than sporadic blood collections when there are emergencies.



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There must be variety among the donors regarding their blood types since some patients might need frequent transfusions. In addition, some types of blood can be found more often among certain ethnicities.

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Sources

World Health Organization. (2026). World Blood Donor Day 2026: One Drop of Humanity. Give Blood. Save Lives. https://www.who.int/news-room/events/detail/2026/06/14/default-calendar/world-blood-donor-day-2026-one-drop-of-humanity-give-blood-save-lives

Nobel Prize Committee. (n.d.). Karl Landsteiner — Facts. NobelPrize.org. https://www.nobelprize.org/prizes/medicine/1930/landsteiner/facts/

Noor, N. H. M., & Siti Asmaa, M. J. (2024). Karl Landsteiner (1868–1943): A versatile blood scientist. Cureus, 16(9), e68903. https://doi.org/10.7759/cureus.68903

Rockefeller University. (n.d.). Karl Landsteiner: Nobel Prize in Physiology or Medicine. https://www.rockefeller.edu/our-scientists/karl-landsteiner/2554-nobel-prize/

Canadian Blood Services. (2025, May 8). Canadian Blood Services sets its most ambitious recruitment goal ever. https://www.blood.ca/en/about-us/media/newsroom/canadian-blood-services-sets-its-most-ambitious-recruitment-goal-ever-one

Canadian Blood Services. (n.d.). Am I eligible to donate blood? https://www.blood.ca/en/blood/am-i-eligible-donate-blood

National Day Calendar. (2026). World Blood Donor Day — June 14, 2026. https://nationaldaycalendar.com/celebrations/world-blood-donor-day-june-14

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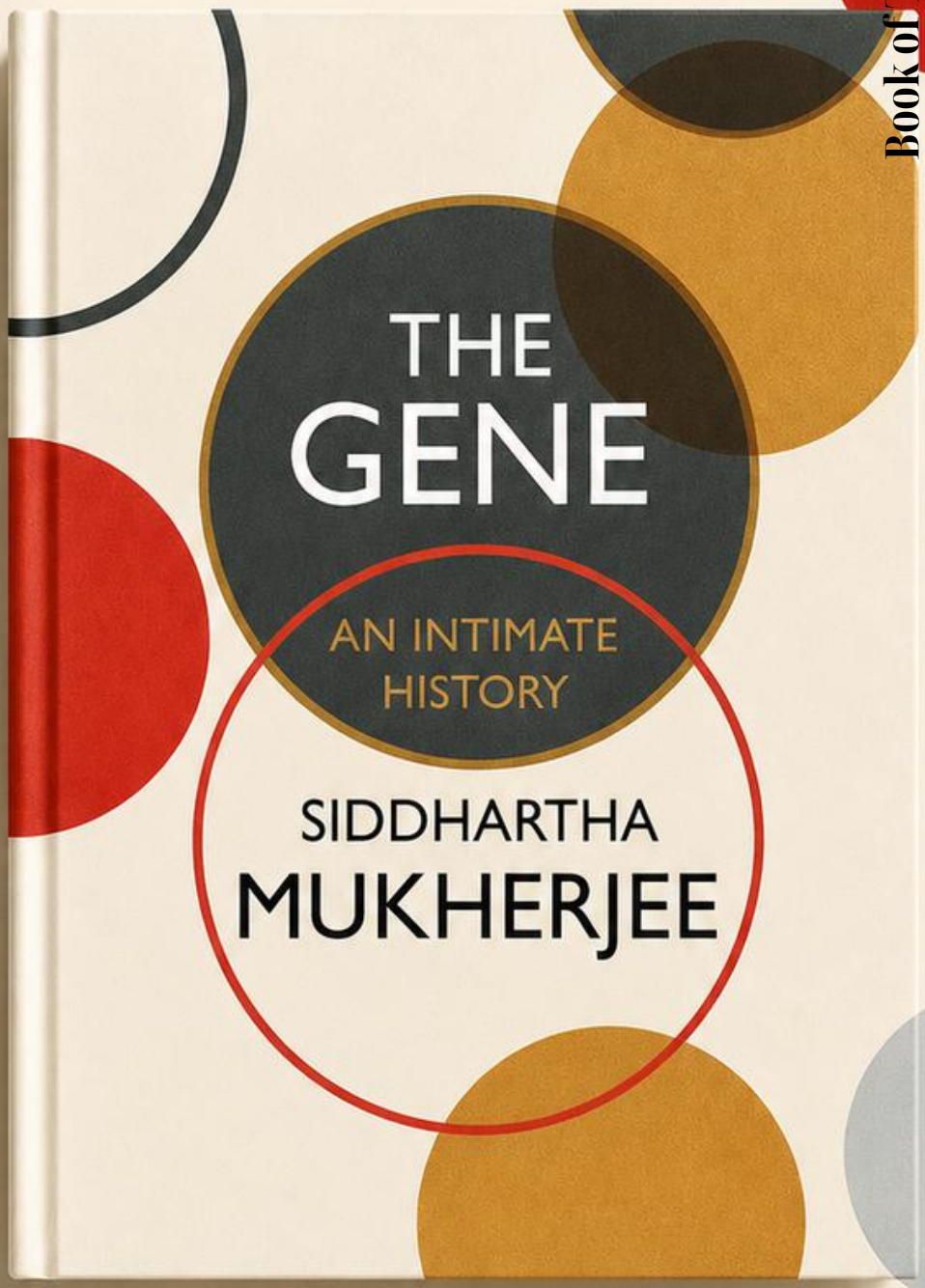
Is Your Destiny Written in DNA? A Review of Siddhartha Mukherjee's "The Gene"

From Mendel's Garden to CRISPR: How Our Genetic Code Defines Health, Identity, and the Future of Wellness



Prepared By
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Editor-in-Chief

Whereas the twentieth century could be described as the age of the splitting of atoms and the creation of the digital bits, the twenty-first century will forever be marked by the study of genes. In “The Gene: An Intimate History”, a poetic and expansive novel by the Pulitzer Prize-winning oncologist Siddhartha Mukherjee, the author states that we do not simply study the "master-code" of life anymore; we have learned how to rewrite it. And for Canadians who are preoccupied with health and longevity, this novel provides a shocking insight into the realization that we already have the power to alter our genome, one that is "perilously, tantalizingly near".

Mukherjee resists the academic style of a textbook by introducing what he refers to as a "red line" that cuts across the scientific narrative with a personal account of his own family's battle against mental illness. His two uncles, Rajesh and Jagu, and his cousin Moni are presented as characters with "splintered minds." Mukherjee introduces this element as a means of setting stakes for the narrative and elevates the historical account of biology into an intriguing investigation into the definition of identity. Should there be a kernel of illness within the family line, how does one separate this from their own sense of self? His father calls the gene Abhed, which translates into "indivisible" or "identity."

The value of infotainment of the historical segments lies in its magnitude. First and foremost, Mukherjee displays the qualities of a novelist by providing us with a picture of Gregor Mendel as an obsessive, dim-witted yet highly intelligent gardener who had the habit of counting several thousand peas to discover the "alphabet of the code." Next comes the mention of James Watson and Francis Crick, who have been referred to as the "self-appointed jesters in a court of fools" who discovered the structure of DNA and established the "central dogma" of biology.

Nevertheless, as a critic of the concept of wellness, it is necessary to point out that the book is really provocative if it takes the discussion from laboratory practice to clinical practice. According to Mukherjee, modern medicine has for a long time functioned in the mode of "mirror writing," when we understand wellness through the prism of its opposite – the lack of abnormality. As a result of the Human Genome Project, however, we now know how to address genetics in terms of "normalcy." However, it is a double-edged sword because, according to the author, we are now approaching the era of "previvors."

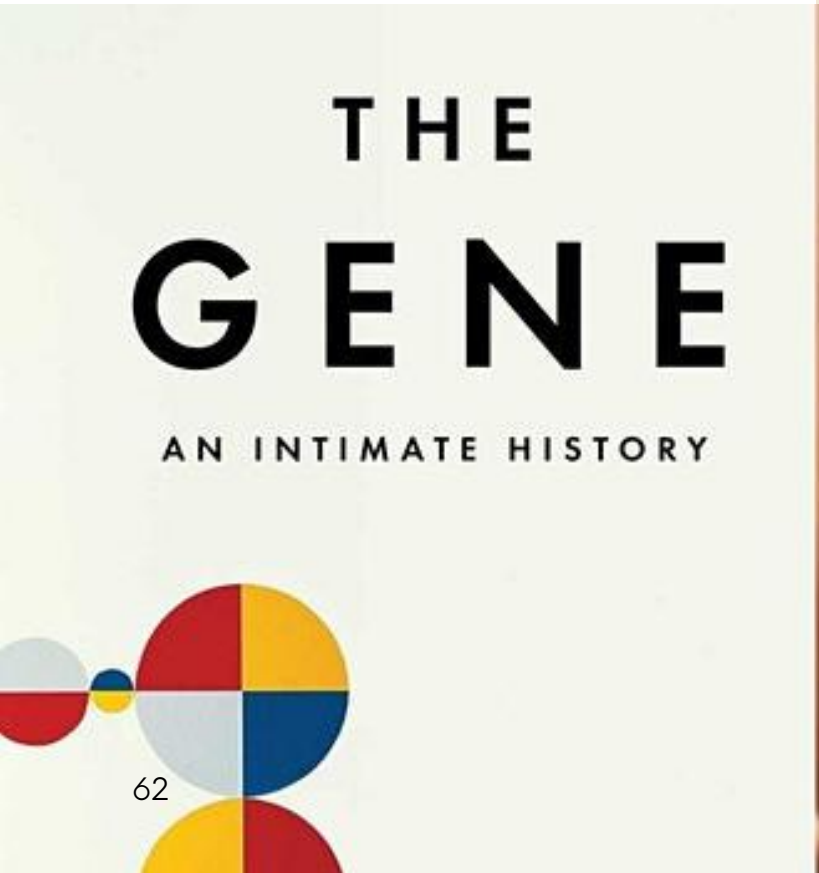
One of the major criticisms by the book about "nature vs. nurture" is especially apt for today’s health-conscious individuals. According to Mukherjee, genes do not represent "blueprints," which mean one outcome, but "recipes." Just like quadrupling the quantity of butter does not only make the cake tastier but may ruin its structural integrity altogether, genetics combined with environmental factors and sheer luck may yield unexpected results. The author describes it as the "last mile" issue, since genetics may show a possibility of having a particular nose or personality but fails to cover the last mile to define a person’s concrete individuality. This point is emphasized through the eerily similar twins who raised separately smoke the same cigarette brand and marry

women with the same name due to their "idiosyncratic and serendipitous events."

The criticism of “newgenics” in Mukherjee’s writing marks one of the strongest examples of his journalistic integrity. While the horrors of state-endorsed eugenics have been left behind by history, today we have entered into what Mukherjee calls a "regime of gene management," motivated by individual autonomy. With the ability to "read" the fetal genome and "write" away any mutations thanks to techniques like CRISPR, the line between "extraordinary suffering" becomes ever-changing. The question becomes, will the eradication of the genes that cause schizophrenia end our suffering, or will it erase the creativity too?

The language used by the author can be considered heavy at times, although it is never so oppressive as to overwhelm the reader; however, the huge size of the human genome (consisting of 3 billion base pairs), mentioned by Mukherjee (which would occupy 1.5 million pages if put into print), poses a threat to become an obstacle on occasion. Nevertheless, the writer succeeds in driving the plot by going back to the "triangle of considerations."

“Gene” is a work of scientific journalism that perfectly achieves the difficult task of being both a “terrifying wake-up call and a hopeful roadmap.” This book is one reminder that even as we have come from a certain script, we are not automatons created out of it. According to Mukherjee, the “imperfect” is our paradise, and the need to make humans homogeneous and “normalize” them must necessarily take into consideration the necessity of sustaining diversity. The book is essential reading for everyone who seeks a manual for their body, which is currently involved in the "intercontinental arms race" to rewrite it.



Book Title: The Gene: An Intimate History.
Author: Siddhartha Mukherjee
Year: 2016

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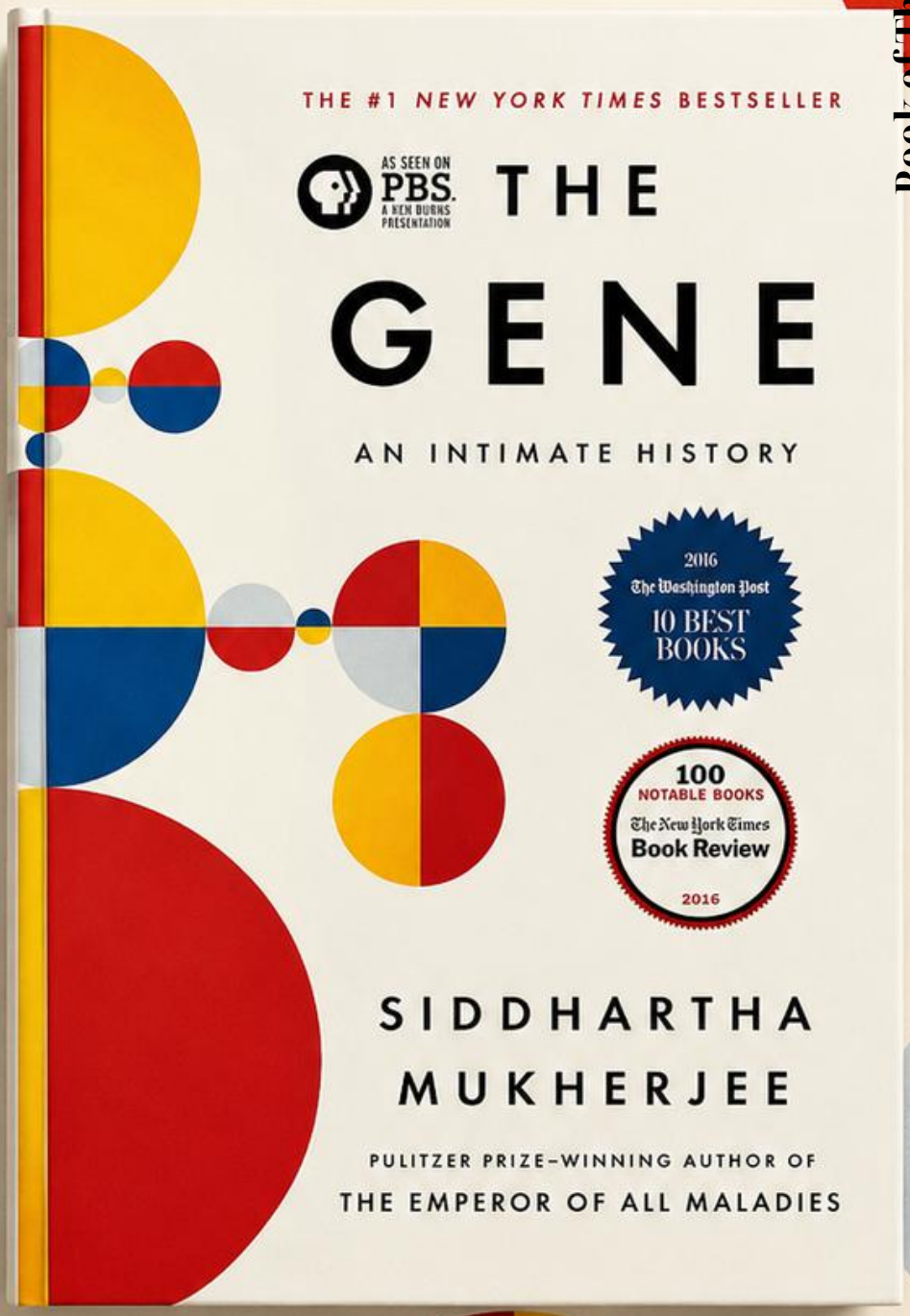

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