

Research & Naturopathic Medicine

Canadian College of Naturopathic Medicine's
Best-in-class Research



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DATA



RESEARCH

COLLABORATION

BUSINESS
QUALITATIVE



CLINICAL

INTERNATIONAL
QUANTITATIVE



Global Research Supports Naturopathic Care

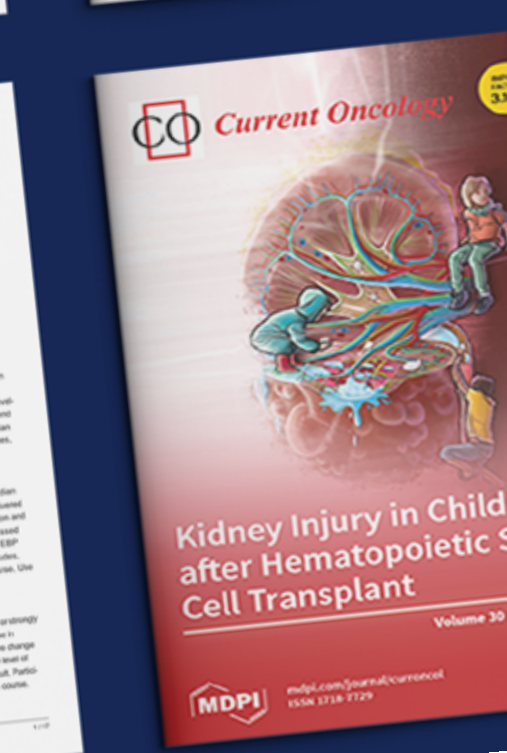
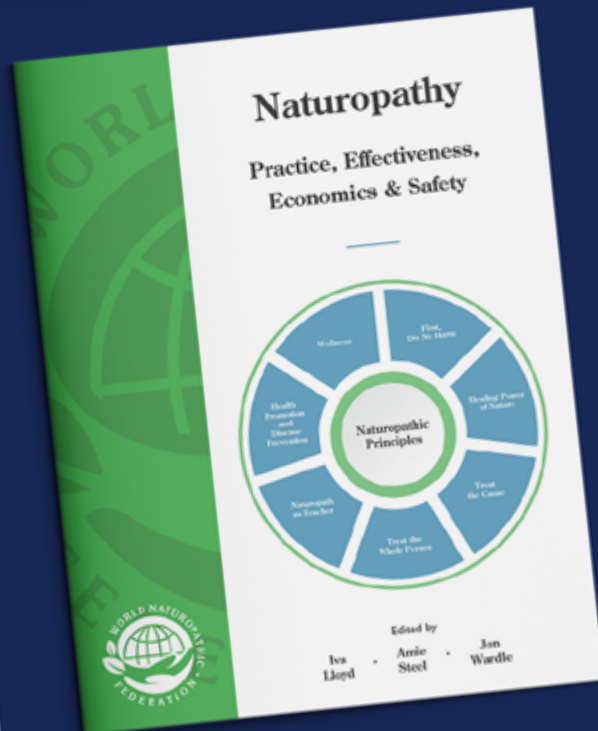
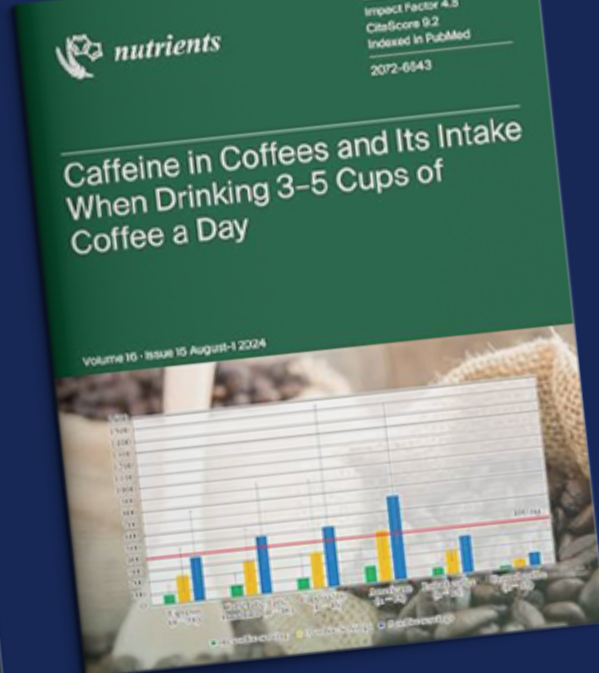
The evidence behind naturopathic medicine continues to grow. A major international report by the World Naturopathic Federation (WNF) brought together research from around the world to examine the safety, effectiveness, and role of naturopathic medicine in today's health-care systems. Developed using internationally recognized research standards and standards for Health Technology Assessments, the report draws on scientific studies and decades of clinical experience.

As chronic disease places increasing strain on health-care systems, there is growing interest in approaches that focus on prevention, nutrition, lifestyle, and whole-person care. Naturopathic medicine addresses these needs by supporting the body's ability to heal while helping people manage both acute and long-term health concerns.

The WNF report¹ shows that naturopathic medicine is practised in more than 100 countries and is supported by an expanding research base. The findings highlight positive health outcomes for patients, along with an established record of safety when care is provided by well-trained naturopathic doctors.

This growing body of global research provides a solid foundation for the future of naturopathic medicine. As a leader in naturopathic education and research, CCNM is committed to advancing evidence-informed care that improves patient outcomes and supports a more sustainable, person-centred health-care system.

1. World Naturopathic Federation. *Health Technology Assessment (HTA) – Naturopathy: Executive Summary*. 2021.



Message from President & CEO

In a transforming health care landscape increasingly shifting towards preventive and whole-person approaches to health care, the role of the naturopathic doctor (ND) becomes essential.

As the only pan Canadian provider of naturopathic medical education, with campuses in Toronto, Ontario, and Metro Vancouver, British Columbia, the Canadian College of Naturopathic Medicine (CCNM) has a unique responsibility to further our understanding of the interconnected elements that comprise an individual's state of wellness.

The College accomplishes this through investigation – case reports, clinical trials, evidence synthesis, and primary research that elucidate the application of naturopathic therapeutics in clinical settings.

It is within this context that our strategic vision takes shape. Guided by a framework built around 5 “P”s – Participation, Planning, Partnership, Practice, Programming – and five institutional ends, CCNM's objectives and actions are rooted in our belief that

naturopathic medicine is an integral facet of health and wellness promotion. Each end articulates a core dimension of the College's mission, and our third end – developing research as a key pillar – remains central to our purpose.

CCNM's research department began humbly as a volunteer-led effort in the late 1990s, at a time when explorations into complementary therapies were minimal. The College quickly and efficiently filled a gap – within a few short years, CCNM built a research team, formed a research ethics committee, and pursued clinical trials with organizations such as the Canada Post Corporation and the Canadian Union of Postal Workers. CCNM's very first published clinical trial, *Milk thistle and indinavir: a randomized controlled pharmacokinetics study and meta-analysis*, involved collaboration with McMaster University and the University of Toronto.

Trailblazing studies have since emerged from CCNM, informing our clinical approach in diverse areas of focus: managing cardiovascular symptoms with targeted lifestyle interventions, exploring the crucial role of nutrition in alleviating anxiety symptoms, and supporting patients with cancer using adjunctive therapies, to name a crucial few. These contributions reflect the depth and range of our research and reinforce the value of NDs as pivotal partners in integrative health. They also affirm what the earliest practitioners of naturopathic medicine long understood: traditional knowledge, when examined through rigorous scientific methodologies, reveals insights that support the body's own self-healing capabilities.

In recent years, CCNM has further solidified its position as a nationally and internationally recognized leader in naturopathic inquiry. From our active role within the World Naturopathic

“As a leader in naturopathic education and research, CCNM is committed to advancing evidence-informed care that improves patient outcomes and supports a more sustainable, person-centred health-care system.”

Dr. Rahim Karim, B.Sc., DC, MBA, CHE, ICD.D, President & CEO



Federation and participation in international research conferences and working groups, to the study of Maitake mushroom in cancer care and the impactful publications of the Canadian-US Integrative Oncology Study, our contributions continue to influence the international conversation around evidence-informed naturopathic care. Additionally, the ongoing creation of publications and professional monographs supports practitioners worldwide, ensuring that naturopathic treatments and clinical findings are both credible and accessible.

The year 2026 marks two important milestones at CCNM: the 10th anniversary of both Research Day and the Patterson Institute for Integrative Oncology Research. Though the objectives of both are distinct, they reflect a growing literacy and desire for naturopathic research in its various forms. Research Day has become an annual highlight of academic life,

offering students and faculty an in-person platform to share discoveries and celebrate scholarly achievement. Developing a stronger evidence base for integrative cancer therapies is the purview of CCNM's Patterson Institute, which is accomplished by conducting, collating and disseminating high-quality research to support individualized patient cancer care.

Our commitment to research is inseparable from our commitment to case-based education and clinical training. Advances in understanding how students learn and retain knowledge inform and strengthen our curriculum; exceptional graduates shape the future of naturopathic clinical practice; and insights gained through hands-on patient care generate new questions and opportunities for research. For nearly 50 years, this continuous cycle of learning, practice, and discovery has been central to CCNM's growth and evolution.

I invite you to explore the breadth of research highlighted in this report and discover how CCNM continues to advance student learning, strengthen the naturopathic profession in Canada and beyond, and contribute to the growing body of evidence supporting naturopathic interventions.

We continue to be deeply grateful to the researchers whose work advances our understanding of naturopathic medicine and brings new knowledge into our classrooms and clinics.

With much respect and admiration,



Dr. Rahim Karim
B.Sc., DC, MBA, CHE, ICD.D
President & CEO

Guided by a framework built around 5 “P”s and five institutional ends, CCNM’s objectives and actions are rooted in our belief that naturopathic medicine is an integral facet of health and wellness promotion.



THE 5P FRAMEWORK

The 5P Framework, developed by Dr. Rahim Karim, is CCNM's North Star. This bold and innovative approach drives the College's objectives and actions in order to achieve CCNM's five ends. Much like naturopathic treatment, the 5Ps are meant to be interwoven and complementary to support a growing, healthy institution.

Participation – ensures the well-being, success, and engagement of our students and employees by fostering an inclusive community.

Planning – enhances financial sustainability, strategic enrolment management, and growth-focused initiatives.

Partnership – builds and broadens our strategic partnerships and profile with academic institutions, government, industry, community, professional associations, sector, and international partners.

Practice – supports excellence in clinical services, innovation, research, and scholarship and is bolstered through innovation, evidence, and patient-centred care.

Programming – focuses on quality and ensuring our curriculum is innovative, relevant, flexible, evidence-based, practice-focused, and enhanced by facilities and technology.



OUR VISION

CCNM will make naturopathic medicine an integral part of health care through pre-eminent education, research and clinical services.

OUR MISSION

The Canadian College of Naturopathic Medicine will:

- Demonstrate excellence in education to our students, supporting them throughout their careers;
- Provide a working environment that allows our faculty and staff to excel;
- Expand our knowledge of naturopathic medicine through high quality research;
- Excel in delivering naturopathic medicine to our patients;
- Forge a strong relationship between allopathic and naturopathic medicine with a focus on affordable, accessible and effective health care;

...and so, make the practice of naturopathic medicine widely acknowledged as key to maintaining patient health.

FIVE ENDS

The Board of Governors articulates and advances this vision through five ends:

Excellence in Education

Educate naturopathic doctors on the basis of a clear and focused curriculum, delivered by the most competent faculty, and graduate high-quality naturopathic doctors.

High-Quality Clinical Services

Provide high-quality naturopathic care in a clinical setting, resulting in positive educational experiences for students and positive outcomes for patients and clients.

Excellence in Research

Conduct and disseminate research relevant to naturopathic medicine and help develop skills among faculty, students, and graduates that foster research activity and a culture of evidence-informed clinical practice.

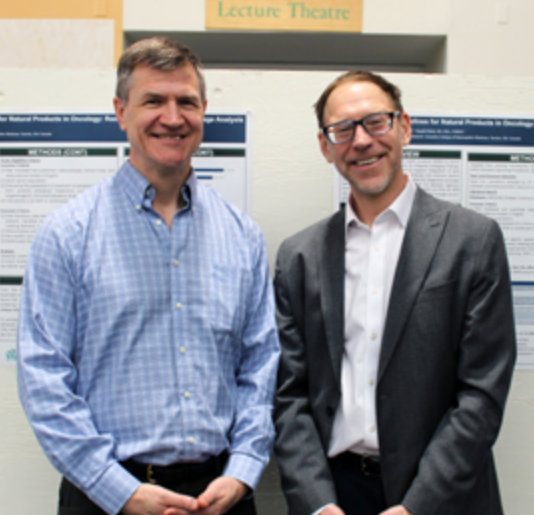
Leading Voice

Increase the awareness and trust of CCNM as a leading voice for naturopathic medicine.

Change Agent

Be a leader and advocate of naturopathic medicine as positive change to our health, our environment and our health-care system.





CCNM's Best-in-class Research

Our research department is a leader in advancing our understanding of complementary and naturopathic medicine as a contributor to a sustainable health-care system.

As one of CCNM's core goals, expanding research relevant to enhancing naturopathic medicine and developing skills among faculty, students, and graduates that foster research activity is of utmost importance. Our research department is a leader in advancing understanding of complementary and naturopathic medicine as a contributor to a sustainable health-care system.

CCNM operates in a culture of evidence-informed clinical practice, with research results published in top-tier medical journals including *Canadian Medical Association Journal (CMAJ)*, *The Lancet* and *The British Medical Journal*, as well as in leading journals specific to complementary and integrative medicine.

Members of CCNM's research team are regular fixtures at conventions and symposia across North America and around the world, including ones hosted by the Association of Accredited

Naturopathic Medical Colleges (AANMC), the American Association of Naturopathic Physicians (AANP), the World Congress on Traditional, Complementary and Integrative Medicine (WCTCIM), the Society for Integrative Oncology (SIO), the Oncology Association of Naturopathic Oncology (OncANP), the Canadian Interdisciplinary Network for Complementary and Alternative Medicine Research (INCAM), and the International Congress on Integrative Medicine & Health (ICIMH) to name a few.

CCNM's research department also organizes and moderates a Research Club which is an open forum for academic discussion. The Research Club is held monthly during the academic year, and all students and faculty are invited to attend, and discuss new research and presentations on topics relating to medicine, health care, and naturopathic medicine. The Research Club is also the hub for the Student Innovation Fund,

an internal grant competition that supports student-led research projects under faculty supervision.

In addition, CCNM hosts an annual CCNM Research Day, a conference that celebrates high quality student-faculty research collaborations, providing opportunities for its students to showcase their involvement in research.^{2,3}

CCNM's research priorities include: integrative oncology, chronic diseases and their prevention, mental health, nutrition, the microbiome, defining the naturopathic profession, advancing research methods for naturopathic medicine, planetary health and education research.

2. Arnold M, Barbaro D, Turner T, Aucoin M, Ebrahimi N, Cooley K. The 8th Annual CCNM Research Day: Student Research & Innovation in Naturopathic Medicine. *URNCTJ Journal*. 2024 Mar 18; 8(1). DOI Link: <https://doi.org/10.26685/urncst.589>
3. Arnold M, Nafisa, N, Aucoin M, Pletch J, Lakhan H, Cooley K. The 9th Annual CCNM Research Day: Student Research & Innovation in Naturopathic Medicine. *URNCTJ Journal*. 2025 Mar 17; 9(1). DOI: <https://doi.org/10.26685/urncst.810>

CCNM hosts an annual Research Day that celebrates high quality student-faculty research collaboration.



CCNM's Research Priorities Include:

- Integrative cancer care
- Chronic diseases and their prevention
- Mental health
- Nutrition
- The microbiome
- Defining the naturopathic profession
- Advancing research methods for naturopathic medicine
- Planetary health
- Education research

Integrative Oncology Research

As more people living with cancer seek out complementary care options, CCNM research is building the bridge between conventional and naturopathic therapies. Some examples of research being conducted to further naturopathic care within cancer care settings, both complementary and traditional, include:



Partnerships Strengthen Cancer Care

CCNM has raised more than \$10 million to support studies, many of which focus on examining a variety of adjunctive therapies for integrative cancer care, to advance understanding and improve practices in Canada.

CCNM and the Patterson Institute for Integrative Oncology Research (the Patterson Institute), which was established in 2016, are leading the field of integrative cancer care. Together, they are creating foundational information that is changing the cancer-care landscape and providing high-quality, patient-centred care.

\$10M+

raised to support studies currently being conducted to advance understanding and improve integrative cancer care practices in Canada.



The Canada/US Integrative Oncology Study (CUSIOS)

In partnership with Bastyr University, CCNM conducted a \$3-million North American multi-site study to explore the impact of integrative cancer care delivered by naturopathic doctors for patients with advanced (stage 3 and 4) cancer. Eleven clinics across North America recruited patients to participate in this observational study to describe the quality of life and survival outcomes for patients with advanced breast, colorectal, ovarian, and pancreatic cancers. The CUSIOS study enrolled 400 patients over eight years. Findings have been published that suggest improvements in quality of life and survival, with more findings to be presented related to the patient experience and cost impacts of this care.

11

clinics across North America recruited patients to participate in the CUSIOS study



Complementary and Alternative Medicine

CCNM is collaborating with Australia's Southern Cross University to conduct the first global study on the use of complementary and alternative medicine for pain in patients with cancer.





Intravenous
Vitamin C

CCNM and the Ottawa Hospital Research Institute are conducting a placebo-controlled randomized controlled trial on high-dose intravenous vitamin C in lung cancer.



The Thoracic Peri-Operative Integrative Surgical
Care Evaluation (POISE) Trial

Working in collaboration with the Ottawa Hospital Research Institute (OHRI), CCNM research has launched an 11-year study to explore the impact of integrative cancer care for patients with lung and gastroesophageal cancers. The Thoracic POISE⁴ Trial uses a randomized design to enrol patients into either a combination of conventional and complementary medicine care (integrative care group) or conventional care alone (control group). Outcomes associated with thoracic surgery, quality of life, survival, and cost effectiveness will be evaluated within three centres across Canada. These include Ottawa, Toronto, and Halifax with an aim of involving 180 participants.

4. Dugald Seely, Julie E. Ennis, Ellen McDonnell, Anna Fazekas, Linlu Zhao, Tim Asmis, Rebecca C. Auer, Dean Fergusson, Salmaan Kanji, Donna E. Maziak, Tim Ramsay, Paul Chamberland, Chris Spooner, Jennifer Threder, and Andrew Seely. *The Journal of Alternative and Complementary Medicine*. Mar 2019.S112-S123. <http://doi.org/10.1089/acm.2018.0419>



Exploring Vitamin D
in Multiple Myeloma

As cases of multiple myeloma rise worldwide, identifying modifiable factors for prevention is critical. CCNM research has mapped the role of vitamin D in this disease⁵, finding that deficiency is common among patients and may influence disease staging, peripheral neuropathy, and prognosis. While links between vitamin D and disease onset remain unclear, this work highlights key knowledge gaps and potential avenues for future research, guiding efforts to improve outcomes and inform prevention strategies.

5. Mirhosseini N, Psihogios A, McLaren MD, Seely D. Vitamin D and Multiple Myeloma: A Scoping Review. *Curr Oncol*. 2023; 30(3):3263-3276. Published 2023 Mar 11. doi:10.3390/curroncol30030248



Advancing Integrative Care
in Prostate Cancer

CCNM researchers examined the role of naturopathic medicine in supporting men with low-risk prostate cancer undergoing active surveillance. This narrative review highlights how evidence-informed lifestyle and integrative approaches – including plant-based and Mediterranean diets, targeted exercise such as high-intensity interval training, and selected nutritional supplements – may support overall health and potentially influence disease progression. The study emphasizes the importance of addressing cardiometabolic health alongside cancer monitoring and suggests that personalized, comprehensive naturopathic care may offer meaningful benefits for motivated patients, while identifying key areas for future clinical research.

11 yr

study was launched by
OHRI and CCNM to explore the
impact of integrative cancer
care for patients with lung and
gastroesophageal cancers.

Five priority research areas
have been identified as
fundamental to advancing
integrative cancer care
practice and policies:

1 Clinical
effectiveness

2 Safety

3 Economic
context of care

4 Development and
evaluation of integrative
oncology models

5 Knowledge translation
and dissemination

In addition to these research projects, the Patterson Institute is creating guidelines for integrative cancer care that will provide a much-needed platform of synthesized knowledge and structure for naturopathic education and practice. Other research projects at the Patterson Institute include the following areas of focus:



Head Start Program Evaluation

Building on the successful analysis of Inspire Now, a program designed to support people living with lung cancer, we have embarked on a multi-round evaluation of the Head Start program. This program is designed to support people with a recent diagnosis of breast cancer who are grappling with the changes and challenges that comes from such a diagnosis. Through nutrition, mindfulness, exercise and stress management, Head Start has supported many hundreds of women and its evaluation will hopefully enable expansion and further impact.



Maitake for Immune Support

Enabled through industry funding this trial has allowed us to evaluate the impact of a novel mushroom extract on the immune function of people going through immunodepressive treatment therapies like chemotherapy. This is an open-label, single-arm trial with enrolment completed in Ottawa and Toronto.



Evidence-based Summaries

The Patterson Institute conducts extensive rigorous reviews of the literature for specific therapies used by naturopathic doctors to support good clinical care in cancer. Both professional and patient-based summaries are generated from the information gathered. These can then be used by clinicians to communicate the evidence for and against certain therapies that are not well understood to both patients and where helpful to their oncologist or allopathic physician for consideration.

“A majority of people living with cancer are using complementary medicine alongside conventional care to help manage their disease and wellbeing. We are synthesizing evidence to enable greater understanding and appreciation of the evidence for naturopathic medicine and how this can be safely and effectively integrated into cancer care.”

Dr. Dugald Seely, ND, M.Sc.
Executive Director, Patterson Institute
for Integrative Oncology Research

The Patterson Institute is a research institute focused on a whole-person approach to cancer care. This approach encompasses the social, psychological, emotional, spiritual, and functional aspects of the patient journey.



Nutrition and Mental Health Research

Emerging clinical research supports the role of nutrition in improving mental health outcomes, particularly anxiety symptoms and maternal mood regulation.



Nutrition and Anxiety

The Eating and Supplementation for Generalized Anxiety Disorder (EASe-GAD) trial – the first ever study of its kind – evaluated the impact of dietary counseling combined with omega-3 fatty acid supplementation on women diagnosed with generalized anxiety disorder (GAD). In addition to confirming feasibility and acceptability of this treatment approach, the EASe-GAD study reported a 55% reduction in average Beck Anxiety Inventory score among those receiving the treatment. These findings suggest that integrative nutrition approaches may meaningfully support mental health care and warrant further investigation in larger trials.⁶

Currently underway is a pilot feasibility study investigating the use of probiotics, fish oil, and dietary counseling in pregnant women with a history of depression or anxiety. Findings from the study will inform the design of future research in this often under-researched population and may provide important information on how to provide additional support to women through pregnancy and the critical first months following birth.⁷

6. Aucoin M, LaChance L, van der Wurff I, McLaren M, Monteiro S, Miller S, Jenkins A, Sabri E, Cooley K. Dietary counseling plus omega-3 supplementation in the treatment of generalized anxiety disorder: results of a randomized wait-list controlled pilot trial (the 'EASe-GAD Trial'). *Nutr Neurosci*. 2025 Jun;28(6):635-648. doi: 10.1080/1028415X.2024.2403901. Epub 2024 Sep 24. PMID: 39316026.

7. Gallant F, Cooley K, Grigoriadis S, Ebrahimi N. Targeting maternal gut microbiome to improve mental health outcomes-a pilot feasibility trial. *Front Psychiatry*. 2024 Aug 7;15:1414291. doi: 10.3389/fpsy.2024.1414291. PMID: 39171074; PMCID: PMC11335611.

A study published in *Nutritional Neuroscience* demonstrates how nutritional interventions – such as dietary counseling plus omega-3 supplementation – can reduce anxiety symptoms in women with generalized anxiety disorder (GAD).



Mental Health Research

CCNM's naturopathic researchers are uncovering the links between healthy lifestyle changes and mental wellness.



Food for Mood Disorders

Funded by the Canadian CAM Research Fund, CCNM is collaborating with researchers from McGill University, and the Centre for Addiction and Mental Health (CAMH) to develop a tool that can be used by various health-care providers to support the implementation of food-based approaches to treating various mood disorders.⁸

8. LaChance, L., Aucoin, M. & Cooley, K. Design and pilot evaluation of an evidence-based worksheet and clinician guide to facilitate nutrition counselling for patients with severe mental illness. *BMC Psychiatry* 21, 556 (2021). <https://doi.org/10.1186/s12888-021-03575-7>



Naturopathic Care in Managing Depression

The objective of this chart review was to characterize and evaluate the effectiveness of adjunctive naturopathic medicine in reducing symptoms of anxiety and depression in patients seeking care from the Mental Health Focus at CCNM's Schad Naturopathic Clinic.

Naturopathic treatment approaches included nutritional guidance, lifestyle and sleep support, stress-management techniques, nutraceutical and botanical medicine. Results showed that 76% of patients with depression and 59% of patients with anxiety saw significant symptom reduction.⁹

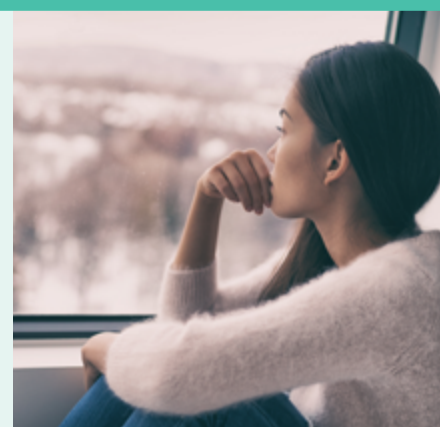
9. Dertinger J, Aucoin M. Adjunctive Naturopathic Medicine in the Management of Depression and Anxiety Symptoms: A Retrospective Chart Review. *CANDJ* [Internet]. 2024 Mar. 21 [cited 2026 Feb. 11];31(1):29-36.



76%

of patients with depression and 59% of patients with anxiety saw significant symptom reduction with the use of naturopathic treatment approaches.

When used as part of a collaborative care approach, naturopathic medicine may help reduce symptoms of depression and anxiety safely and effectively.





Diet and Psychosis

Schizophrenia spectrum disorders (SSD) represent a cluster of severe mental illnesses. Diet has been identified as a modifiable risk factor and opportunity for intervention in many physical illnesses and more recently in mental illnesses such as depression; however, no dietary guidelines exist for patients with SSD. CCNM, along with CAMH, the University of Toronto, and the University of Technology, Sydney, presented dietary recommendations to support persons diagnosed with SSD as well as recommendations for further research, including more studies that modify dietary patterns to detect mental health outcomes.¹⁰

10. Aucoin, M., LaChance, L., Cooley, K., & Kidd, S. (2018). Diet and Psychosis: A Scoping Review. *Neuropsychobiology*. 2020; 79(1):20-42. doi: 10.1159/000493399. Epub 2018 Oct 25. PMID: 30359969



Anxiety

Research shows that what we eat can affect our mental health and emotional well-being. Adopting the Mediterranean diet may help reduce symptoms of anxiety and depression. In particular, olive oil – a key part of this diet – has been linked to improvements in mood and anxiety when included regularly as part of a healthy eating plan.¹¹

11. Eedy V, Aucoin M. The role of olive oil and its constituents in mental health: a scoping review. *Br J Nutr*. 2024 Dec 19:1-11. doi: 10.1017/S000711452400299X. Epub ahead of print. PMID: 39696776; PMCID: PMC12240357.



The Microbiome

The microbiome is the genetic material of all the microbes – bacteria, fungi, protozoa and viruses – that live on and inside the human body. CCNM's Principal Investigator, Dr. Neda Ebrahimi, PhD, is currently exploring the interaction between the microbiome and maternal and infant health, particularly the impact of dietary fiber, omega-3 fatty acids and probiotics on mood and anxiety symptoms during pregnancy and postpartum.^{12, 13} This work is being conducted in collaboration with Sunnybrook Research Institute.

12. Gallant F, Cooley K, Grigoriadis S, Ebrahimi N. Targeting maternal gut microbiome to improve mental health outcomes-a pilot feasibility trial. *Front Psychiatry*. 2024 Aug 7;15:1414291. doi: 10.3389/fpsy.2024.1414291. PMID: 39171074; PMCID: PMC11335611.

13. Ebrahimi N, Turner T, Gallant F, Chandrakumar A, Kohli R, Lester R, Forte V, Cooley K. Maternal Fiber Intake and Perinatal Depression and Anxiety. *Nutrients*. 2024 Jul 31;16(15):2484. doi: 10.3390/nu16152484. PMID: 39125364; PMCID: PMC11313952.

“My hope is that as the scientific evidence continues to expand and we learn more about the precise impact of dietary counseling as a treatment for mood and anxiety disorders, nutrition professionals like naturopathic doctors and dietitians will be seen as an important and valued part of mental health-care delivery.”

Dr. Monique Aucoin, ND, M.Sc.
Senior Research Fellow

We're proud to be collaborative partners with the Comprehensive Research Evidence Synthesis Training (CREST) Program and the RAND Research Across Complementary and Integrative Health Institutions (REACH) Center in leading initiatives that advance research in integrative health.



Chronic Disease Research

CCNM research explores how naturopathic therapeutics, focusing on nutrition and lifestyle, can effectively treat chronic health conditions.



COVID-19

A growing body of research highlights the role of natural health products and integrative therapies in supporting health during the COVID-19 pandemic. A global evidence mapping initiative by the World Naturopathic Federation identified a wide range of studies exploring nutrients, herbal medicines, and other natural interventions for prevention, treatment, and recovery, while emphasizing that evidence varies in quality and continues to evolve.¹⁴ Complementing this, an umbrella review published in the *CAND Journal* examined traditional, complementary, and integrative health-care approaches more broadly, finding emerging but mixed evidence for their effectiveness in COVID-19 care and highlighting the need for more rigorous, high-quality research.¹⁵ Together, these findings reflect both the growing interest in naturopathic and integrative approaches during the pandemic and the ongoing need to strengthen the evidence base guiding their use.

14. <https://worldnaturopathicfederation.org/live-review-of-natural-health-products-nhps-researched-with-respect-to-the-covid-pandemic/>

15. Lloyd, I., Cooley, K., & Steel, A. (2023). The Role of Traditional, Complementary, and Integrative Healthcare (TCH) Therapies and Practices in the Prevention and/or Treatment of COVID-19: An Umbrella Review. *CAND Journal*, 30(4), 2-4. <https://doi.org/10.54434/candj.162>

“Naturopathy was a profession built on traditional knowledge, and while you can’t ignore or forget about that, the evidence-based medicine principles are training you to be a sophisticated learner. I think that’s where the real value is – we’re teaching people how to learn and adapt based on new information, and that’s why it has such a key role.”

**Dr. Kieran Cooley, ND (non-clinical),
Director of Research**

Chronic conditions are driving significant increases in health care costs, and these conditions can, in many cases, be effectively treated by health-care providers who focus on nutrition and lifestyle.



Pain Management Research

CCNM's research into pain management includes investigations into fibromyalgia and HIV.



Naturopathic Approaches to Fibromyalgia

Fibromyalgia, marked by chronic pain and heightened sensitivity, often leads patients to explore complementary therapies. Research at CCNM's Schad Naturopathic Clinic reviewed care for 70 patients, revealing common treatments such as vitamin D, magnesium, omega-3s, B12, probiotics, and acupuncture.¹⁶ Many patients also had digestive issues, mental health concerns, or arthritis. Assessments often included the Widespread Pain Index and Symptom Severity tool, and no significant treatment side effects were noted. These findings highlight both consistent and individualized naturopathic approaches, supporting safe, personalized care for improving the quality of life in fibromyalgia patients.

16. Guerin C, Attli B, Cooley K, Hassan S, Sarebanha S, Sadrolsadat P, Chung C. An Assessment of Naturopathic Treatments, Health Concerns, and Common Comorbid Conditions in Fibromyalgia Patients: A Retrospective Medical Record Review. *J Integr Complement Med.* 2022 Apr;28(4):363-372. doi: 10.1089/jicm.2021.0231. Epub 2022 Jan 31. PMID: 35100049.



Chronic Pain and HIV: A National Perspective

A Canadian study¹⁷ funded by the Canadian Institutes of Health Research (CIHR) explored chronic pain among 248 people living with HIV, many of whom have been living with the virus for over 15 years. Seven in 10 participants reported joint or soft tissue pain, and one in three experienced nerve pain, often alongside anxiety or depression. Using Q-sorting, researchers captured diverse perspectives on pain management, highlighting strategies beyond medication, including meditation, prayer, cannabis, exercise, and music. The study underscores resilience, hope, and the importance of being heard, offering valuable insights to improve quality of life for people aging with HIV.

17. <https://www.ctnplus.ca/study/ctn-340-living-with-hiv-chronic-pain-in-canada/>

7 in 10

participants living with HIV reported joint or soft tissue pain, and one in three experienced nerve pain, often alongside anxiety or depression.

Evidence-informed naturopathic therapies such as clinical nutrition, acupuncture, physical medicine, lifestyle counselling, and stress management have been shown to reduce inflammation and improve function, allowing patients to manage their acute and chronic pain conditions.



Understanding the Naturopathic Profession

Through its research team, CCNM leads the way in shaping a clear, evidence-informed understanding of the naturopathic medicine profession



Use of Natural Health Products

A study in the *CAND Journal* highlights how naturopathic doctors across North America assess the quality of natural health products. They identified four key pillars: ingredient sourcing, transparent labelling, evidence-based monographs, and third-party testing. Among these, sourcing – particularly adherence to Good Manufacturing Practices (GMP) – was the most important factor. The findings highlight the importance of transparency, scientific evidence, and rigorous standards in ensuring safe, effective care, while supporting greater consistency in how practitioners evaluate and recommend natural health products.¹⁸

18. Remy, D., Gratton, A., & Cooley, K. (2024). Establishing a Unified Framework for Natural Health Product Quality: Insights from North American Naturopathic Practitioners. *CAND Journal*, 31(4), 3–10. <https://doi.org/10.54434/candj.178>



Seeking Naturopathic Care

A global systematic review and meta-analysis examined how often people seek care from naturopathic practitioners worldwide. Naturopathy is practised in at least 98 countries but remains underrepresented in health data. Across regions, the proportion of people consulting a naturopath within a 12-month period ranges from approximately 1% in the Americas to up to 6% in Europe and the Western Pacific, with even higher rates reported in some countries.

The study highlights significant regional variation driven by factors such as regulation, accessibility, and public awareness, while emphasizing that current figures likely underestimate true use due to inconsistent reporting. Overall, the findings point to room for continued growth for the global presence of naturopathic medicine and the need for better data to support its integration into health-care systems.¹⁹

19. Steel A, Redmond R, Schloss J, Cramer H, Goldenberg J, Leach MJ, Harnett JE, Van de Venter C, McLintock A, Bradley R, Hawrelak J, Cooley K, Leung B, Adams J, Wardle J. International prevalence of consultation with a naturopathic practitioner: a systematic review and meta-analysis. *BMJ Open*. 2022 Jul 25;12(7):e056075. doi: 10.1136/bmjopen-2021-056075. PMID: 35879017; PMCID: PMC9328102.

98

countries practice naturopathy, yet it remains underrepresented in health data.



Evidence-based Practice

A growing body of Canadian research highlights both the strong interest in – and ongoing challenges of – integrating evidence-based practice (EBP) into naturopathic care.

A national cross-sectional study published in the *Journal of Integrative and Complementary Medicine* found that most naturopathic doctors hold positive attitudes toward EBP, though barriers such as limited time and gaps in available evidence persist.²⁰

Building on this, a more recent study in PLOS One evaluated a targeted continuing education program designed to strengthen EBP skills, demonstrating high practitioner satisfaction and significant improvements in knowledge and confidence, but more modest changes in real-world application.²¹

Together, these findings highlight a profession that is engaged and motivated to advance evidence-informed care, while underscoring the need for continued education, practical training, and naturopathic-based intervention research.

20. Leach MJ, Aucoin M, Cooley K. Canadian Naturopathic Doctor Engagement, Preparedness, and Perceptions of Evidence-Based Practice: A National Cross-Sectional Study. *J Integr Complement Med*. 2022 Dec;28(12):955-964. doi: 10.1089/jicm.2022.0637. Epub 2022 Sep 9. PMID: 36083287.

21. Aucoin M, Newton G, Leach M, Cooley K. Evaluation of an evidence-based practice continuing education course for Canadian Naturopathic Doctors. *PLoS One*. 2025 Jun 3;20(6):e0324452. doi: 10.1371/journal.pone.0324452. PMID: 40460335; PMCID: PMC12133167.

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Canadian NDs participated in the survey between February and May 2020 for the *Journal of Integrative and Complementary Medicine*²⁰



Naturopathic Medicine Research

A study published in the *Journal of Alternative and Complementary Medicine* explores how research methods in naturopathic medicine are evolving to better reflect its whole-person, patient-centred approach.²² The authors highlight that conventional randomized controlled trials may not fully capture the complexity of naturopathic care, and instead point to emerging methodologies – such as whole-system research, pragmatic trials, and patient-centred models – as more suitable for evaluating its effectiveness. The study emphasizes that advancing naturopathic research will require both innovation in study design and greater engagement from practitioners in building and applying an evidence base, ultimately supporting more rigorous and relevant evaluation of naturopathic medicine.

22. Schloss J, McIntyre E, Steel A, et al. Lessons from Outside and Within: Exploring Advancements in Methodology for Naturopathic Medicine Clinical Research. *J Altern Complement Med*. 2019;25(2):135-140. doi:10.1089/acm.2018.0403

Ongoing research suggests that evidence-based practice results in better clinical outcomes and resource use. It may also help facilitate consistency within and between professions and support interprofessional communication.





Impactful Tools

Mental illness affects millions, yet conventional treatments are not always effective, accessible, or well tolerated. Emerging research highlights the powerful role of diet in mental well-being, showing that simple dietary changes can make a real difference. Despite this, dietary counselling remains underutilized in mental health care, including naturopathic practice. A new clinical tool has been developed to guide dietary counselling for mental health²³, offering naturopathic doctors a practical way to support patients through nutrition and lead the integration of diet-focused interventions in mental health treatment.

23. Aucoin M, Barbaro D. The Critical Role of Diet in the Prevention and Treatment of Mental Disorders: An Opportunity for the Naturopathic Profession to Positively Impact the Burden of Illness Using a Recently Developed Clinical Tool. *CANDJ*. 2023; 30 (3):5-16. <https://doi.org/10.54434/candj.148>.

1 in 3

Canadians are affected by mental illness in their lifetime.²³



Advancing Health Equity in Research

Health equity ensures everyone has the opportunity to achieve optimal health, yet disparities in access, outcomes, and care quality persist. This study introduces a comprehensive health equity checklist developed by the RAND REACH Center²⁴ to guide researchers in integrating equity at every stage of health-related research. Drawing on literature review and stakeholder consultation, the checklist emphasizes inclusive study design, community engagement, equitable funding, diverse participation, and culturally relevant data collection and dissemination. By using this tool, researchers can create studies that not only advance scientific knowledge but also actively promote social justice and fair health outcomes, fostering a sustainable culture of equity in research.

24. Malika N, Salsbury S, Coulter I, Cooley K, Chesney M, Prenguber M, Tippens K, Maier M. Health equity checklist for research, *Ethics, Medicine and Public Health*, Volume 33, 2025, 101064, ISSN 2352-5525, <https://doi.org/10.1016/j.jemep.2025.101064>.



“Achieving health equity in research is a critical imperative that requires a comprehensive and systematic approach, including reflexive assessment at individual, institutional, and community levels. Without an equity-informed evidence base, research could be detrimental, perpetuating the very disparities it aims to resolve.”²⁵

25. Ibid.



Collaboration at the Centre of CCNM Research

CCNM has collaborated with many major medical research institutions, including McMaster University, The Hospital for Sick Children, Sunnybrook Research Institute, Ottawa Hospital Research Institute, University of Toronto, University of British Columbia, Guelph University, Dalhousie University, Centre for Addiction and Mental Health, the Chronic Pain Centre of Excellence for Canadian Veterans and RAND REACH Centre.

In keeping with the 5P Framework – Partnership, more specifically – CCNM has collaborated with many major institutions and populations that are developing capacity for research, bringing together collective wisdom, and helping to build bridges for evidence-based practices as well as expanding the network of research-based institutions in integrative medicine.

Research conducted with these institutions contributes to the overall best-in-class approach that CCNM applies when deciding which research projects to undertake.

Disseminating CCNM's research through various activities ensures the results of our work are shared across the naturopathic and integrative communities, and that clinical care is supported by the most up-to-date evidence in the field.

By fostering this culture of collaborative research, CCNM is exploring the strength of naturopathic medicine, testing therapies, and influencing health policy across an expanding range of diseases and conditions. In doing so, CCNM and the outcomes from its research projects support care and treatment approaches, and lead to healthier outcomes for patients and their families.

For further information on CCNM's research projects or to find out how you can support naturopathic research at CCNM, please contact:

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(non-clinical),
Director of Research
kcooley@ccnm.edu

You can also read more about our research at:

ccnm.edu/research

CCNM has collaborated with the following research institutions:



THE UNIVERSITY
OF BRITISH COLUMBIA



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UNIVERSITY



UNIVERSITY OF
GUELPH



McGill



The Ottawa
Hospital
Research Institute

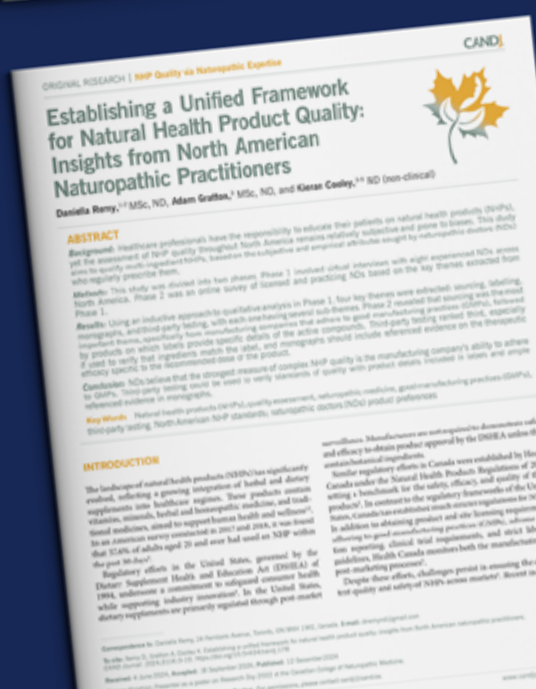
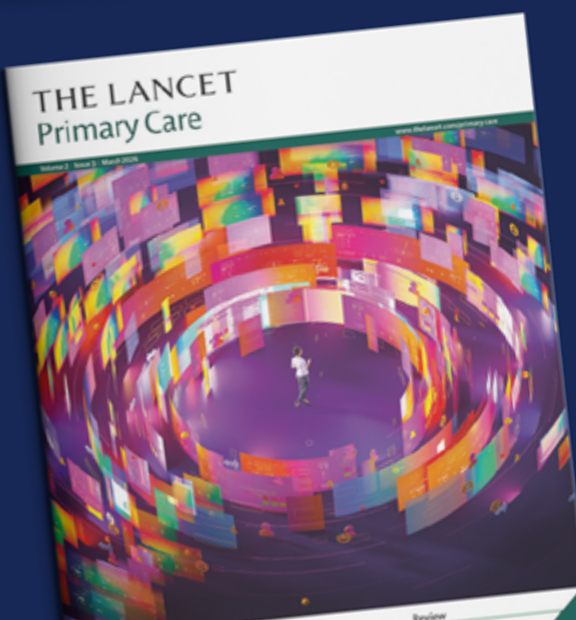
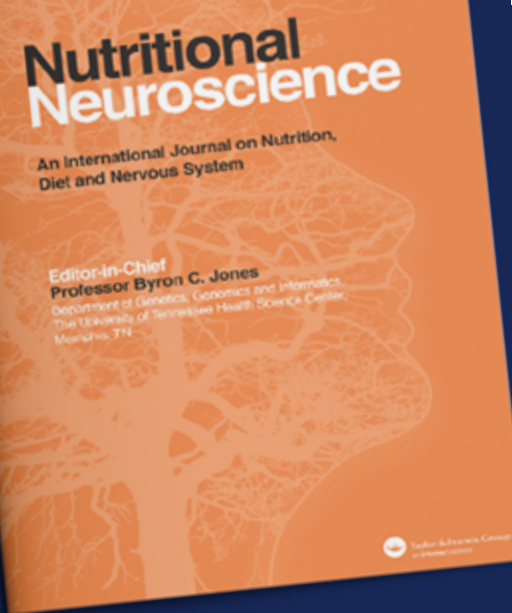
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CCNM's department of research is a leader in advancing our understanding of complementary and naturopathic medicine as a contributor to a sustainable health-care system.

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