

# The Alliance Update

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Fall 2023 Edition

Alliance Chiropractic &  
Wellness Clinic  
Chiropractic-Massage-  
Naturopathic Medicine

**Health  
Newsletter**

## Canadians Are Not Meeting The National Physical Activity Recommendations

Source: Canadian Chiropractic Association (<https://chiropractic.ca/world-spine-day/>); <http://csepguidelines.ca/>



Inactivity is costing Canadians:

- \$2.4 billion in direct costs
- \$4.4 billion in indirect costs
- \$6.8 billion in total health-care costs

The Canadian physical activity recommendations are as follows for ages 18 to 64:

- Moderate to vigorous aerobic physical activities such that there is an accumulation of at least 150 minutes per week
- Muscle strengthening activities using major muscle groups at least twice a week

- Several hours of light physical activities, including standing
- Limiting sedentary time to 8 hours or less per day
- No more than 3 hours of recreational screen time per day
- Breaking up long periods of sitting as often as possible
- Getting 7 to 9 hours of good-quality sleep on a regular basis, with consistent bed and wake-up times.

Following the 24-Hour Movement Guidelines is associated with these health benefits:

- A lower risk of mortality, cardiovascular disease, hypertension, type 2 diabetes, specific types of cancer, anxiety, depression, dementia, weight gain, and adverse blood lipid profile.
- Improved bone health, cognition, quality of life, and physical function.

The benefits of following these Guidelines far exceed potential harms. Following these Guidelines may be challenging at times; however, progressing towards any of the guideline targets will result in some health benefits.

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## Night Owls Have Higher Risk of Developing Type 2 Diabetes

Source: Medscape; Lori Youmshajekian, September 11, 2023



"Night owls" have an increased risk for developing type 2 diabetes and are more likely to smoke more, exercise less, and have poor sleep habits compared with their "early bird" counterparts, according to a new study, published today in the *Annals of Internal Medicine*.

The work focused on participants' self-assessed chronotype — an individual's circadian preference, or natural preference to sleep and wake up earlier or later, commonly known as being an early bird or a night owl.

Analyzing the self-reported lifestyle behaviours and sleeping habits of more than 60,000 middle-aged female nurses, researchers from Brigham and Women's Hospital and Harvard Medical School found that those with a preference for waking up later had a 72% higher risk for diabetes and were 54% more likely to engage in unhealthy lifestyle behaviors compared with participants who tended to wake up earlier.

After adjustment for six lifestyle factors — diet, alcohol use, body mass index (BMI), physical activity, smoking status, and sleep duration — the association between diabetes risk and evening chronotype weakened to a 19% higher risk of developing type 2 diabetes.

## Unexpected Vaginal Bleeding Rises After COVID Vaccination

Source: Medscape; Jay Croft, September 27, 2023



Non-menstruating women were more likely to experience unexpected vaginal bleeding after receiving COVID-19 vaccinations, according to a new study.

Researchers suggested it could have been connected to the SARS-CoV-2 spike protein in the vaccines. The study was published in Science Advances.

After vaccinations became widely available, many women reported heavier menstrual bleeding than normal. Researchers at the Norwegian Institute of Public Health in Oslo examined the data, particularly among women who do not have periods, such as those who have been through menopause or are taking contraceptives.

The researchers used an ongoing population health survey called the Norwegian Mother, Father, and Child Cohort Study, Nature reported. They examined more than 21,000 responses from postmenopausal, perimenopausal and non-menstruating premenopausal women. Some were on long-term hormonal contraceptives.

They learned that 252 postmenopausal women, 1,008 perimenopausal women and 924 premenopausal women reported having unexpected vaginal bleeding.

About half said the bleeding occurred within four weeks of the first or second shot or both. The risk of bleeding was up three to five times for premenopausal and perimenopausal women, and two to three times for postmenopausal women, the researchers found.

Postmenopausal bleeding is usually serious and can be a sign of cancer, Nature wrote. "Knowing a patient's vaccination status could put their bleeding incidence into context," said Kate Clancy, a biological anthropologist at the University of Illinois Urbana-Champaign.

## 7 Amazing Reasons to Start Doing Tai Chi Today

Source: [healthbeat@mail.health.harvard.edu](mailto:healthbeat@mail.health.harvard.edu)



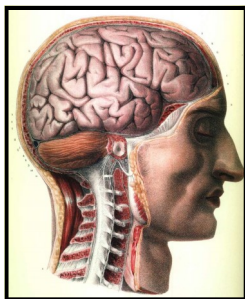
The ancient Chinese practice of tai chi is becoming widely recognized as one of the most powerful ways to improve both physical and mental health.

- **Better Balance:** Studies show older adults participated in tai chi one to three times a week were **43% less likely to fall**, and *cut their risk of injury in half*
- **Pain Relief:** Tai chi offers significant relief from back, neck, arthritic, and fibromyalgia pain
- **A Sharper Mind:** It's shown to help reduce age-related cognitive decline ... and even slow dementia
- **Better Heart Health:** Tai chi may reduce your chances of developing heart disease — even if you have risk factors
- **Improved Mood:** In 82% of studies, tai chi greatly improved mood and lowered anxiety. It's also an effective treatment for depression
- **Less Stress:** Learn the secret to taking deep, calming breaths and reduce anxiety and depression

In your 20s and 30s, tai chi can boost athletic skills by improving focus. (In fact, Tom Brady uses it!) In your 40s and 50s, it can reduce stress caused by work and hectic schedules. And in your 60s, 70, 80s and beyond, tai chi's restorative powers can help you age more gracefully and function at a higher level than those who don't practice it.

## Abdominal Fat Linked to Lower Brain Volume in Midlife

Source: Medscape; Megan Brooks, September 05, 2023



New research provides strong evidence of an association between abdominal fat and reduced brain volumes, particularly those involved with cognitive function.

In a large study of healthy middle-aged adults, greater visceral and subcutaneous abdominal fat on abdominal MRI predicted brain atrophy on imaging, especially in women.

"The study shows that excess fat is bad for the brain and worse in women, including in Alzheimer's disease risk regions," lead author Cyrus Raji, MD, PhD, with the Mallinckrodt Institute of Radiology, Washington University, told Medscape Medical News.

Multiple studies have suggested a connection between body fat accumulation and increased dementia risk. However, few have examined the relationship between types of fat (visceral and subcutaneous) and brain volume.

For this study, 10,000 healthy adults aged 20-80 years (mean age, 52.9 years; 53% men) underwent a short whole-body MRI protocol. Regression analyses of abdominal fat types and normalized brain volumes were evaluated, controlling for age and sex.

The research team found that higher amounts of both visceral and subcutaneous abdominal fat predicted lower total gray and white matter volume, as well as lower volume in the hippocampus, frontal cortex, and temporal, parietal, and occipital lobes.

"The findings are quite dramatic," Raji told Medscape Medical News. "Overall, we found that both subcutaneous and visceral fat has similar levels of negative relationships with brain volumes."

The analysis also did not account for other lifestyle factors such as physical activity, diet, and genetic variables.

## The Prevention of Alzheimer's Disease Probably Won't Come in a Pill Bottle

Source: Medscape; Michael Merzenich, PhD; September 19, 2022

Many exceptional scientists have dedicated their professional lives to understanding Alzheimer's disease. Numerous theories and research threads have been pursued, at great expense, on the path to an estimated 150-300 failed drug interventions. Our triumph over Alzheimer's will come in the next decade, but likely not from a pill bottle.

This often-occurring, natural, programmed self-destruction of the brain that we call Alzheimer's disease is a result of broadly deteriorating organic brain health, and that's probably why drug development has been so hard. Treating just one piece of this multifaceted brain health deterioration is inadequate to arrest or reverse the decline.

But what about those people who have many biomarkers of brain health decline, yet don't express the behavioral symptoms of Alzheimer's? What's their secret?

Pathologists have a term for this mysterious factor that forestalls the development of Alzheimer's disease in some: They call it "cognitive reserve." I call it "organic brain health."

Growing your cognitive reserve and actively managing your organic brain health should be high on the list of Alzheimer's prevention strategies. How can you do that?

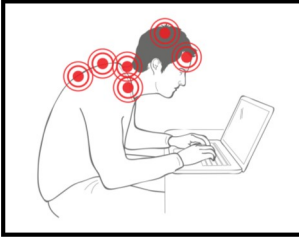
The most popular approaches aim to prevent this brain disease much as we now try to prevent heart disease — with a multimodal approach focused on modifiable behavioral risks. In the case of Alzheimer's disease research, those interventions tend to include brain training, physical exercise, and nutrition.

The Lancet Commission estimates that 40% of dementia cases could be prevented or delayed by addressing 12 known lifestyle risk factors. These include: low education levels, hypertension, hearing impairment, smoking, obesity, depression, physical inactivity, diabetes, low social contact, excessive alcohol consumption, traumatic brain injury, and air pollution.

It's an exciting time now in Alzheimer's research. Finally, there is a growing appreciation that there will not be a single silver bullet. It will take an integrated approach to actively manage our brain health with evidence-based interventions, and the faster we get there, the better.

## Prolonged Slumped Sitting Causes Neck Pain and Shoulder Pain

Source: Applied Ergonomics 2023; 104020; Christensen S, Palsson T, Krebs H, et al



This study set out to understand the immediate effect of different sitting postures during a standardized computer task on perceived pain in healthy participants. It was hypothesized that an upright sitting posture with forearm support would cause the least amount of pain, area of pain, and change in pain sensitivity when compared to sitting in a slumped posture without forearm support.

There were 13 women and 12 men included with an average age of 27.4 years.

All the tasks that participants completed caused an increase in neck pain compared to baseline. The task of sitting slumped forward without forearm support caused the greatest peak increase in neck pain scores. Furthermore, compared to sitting upright with forearm supports, the pain pressure thresholds were 18% greater for the slumped position without forearm supports. As well, the slumped forward position without forearm supports was rated as significantly more difficult compared to the other tasks. The neck and shoulder were the most commonly identified areas of pain by participants, especially when sitting in a slumped forward position without forearm supports.

It was not surprising to see that sitting slumped without forearm supports caused the greatest change in pain ratings, but it was surprising to observe that sitting upright without forearm supports caused lower pain intensities than sitting upright with forearm supports. This finding is in contrast to previous literature which found that forearm supports reduce discomfort. A potential explanation for less pain experienced when sitting upright without forearm supports is that it may mimic to a closer degree, the participants' habitual posture during their daily computer work.

### Clinic Services

1. Chiropractic Care
2. Laser Therapy
3. Electrical Therapy
4. Sports Injury Care
5. Custom Foot Orthotics
6. Massage Therapy<sup>1</sup>
7. Naturopathic Medicine
8. Acupuncture
9. Kinesiology Services

#### Clinic Hours

Monday	8:00am— 12:00pm	3:30pm - 7:30pm
Tuesday	8:00am— 12:00pm	
Wednesday	8:00am— 12:00pm	3:30pm –7:30pm
Thursday		3:30pm –7:30pm
Friday	8:00am – 12:00pm	

Please note:

1. Massage therapy is available outside core office hours.

### Announcements

- Check out our WEBSITE at [www.alliancechiroandwellness.com](http://www.alliancechiroandwellness.com). You can find archived issues of our newsletter as well as other clinic information. Please note appointment requests should be made by calling the office at 905-648-0661. We do not accept appointment cancellations, bookings, or reschedules via our web site. These should be done by calling the office directly.
- Dr. Morphet will be away from the office from Dec 25th to Jan 1.
- Like us on Facebook! To see the latest in health news, research, updates, and announcements, check us out at [www.facebook.com/AllianceChiropracticandWellnessClinic](https://www.facebook.com/AllianceChiropracticandWellnessClinic)

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