The Alliance Update

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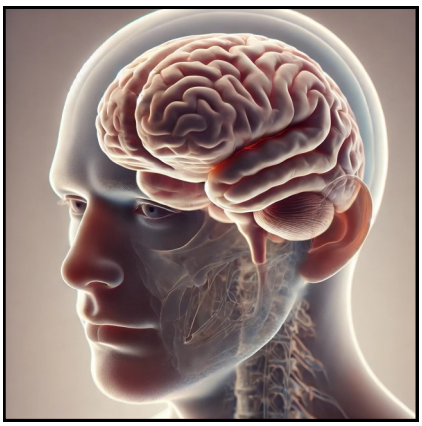
Winter 2025 Edition

Alliance Chiropractic & Wellness Clinic
Chiropractic-Massage-Naturopathic Medicine

Health Newsletter

Microplastics Have Been Found in the Human Brain. Now What?

Source: Medscape; Deborah Brauser, November 27, 2024



Microplastics have been found in the lungs, liver, blood, and heart. Now, researchers report they have evidence for the first time finding these substances in human brains.

In a recent case series study that examined olfactory bulb tissue from deceased individuals, 8 of the 15 brains showed the presence of microplastics, most commonly polypropylene, a plastic typically used in food packaging and water bottles.

Measuring less than 5 mm in size, microplastics are formed over time as plastic materials break down but don't biodegrade. Exposure to these substances can come in a variety of ways via food, water, air, and skin absorption.

While scientists are learning more about how these substances are absorbed by the body, questions remain about how much exposure is safe, and what effect — if any — microplastics could have on brain function.

What Are the Major Health Concerns?

The Plastic Health Council estimates that more than 500 million metric tons of plastic are produced worldwide each year. In addition, it reports that plastic products can contain more than 16,000 chemicals, about a quarter of which have been found to be hazardous to human health and the environment. Microplastics and nanoplastics can enter the body through the air, water, food, or absorption through the skin.

As previously reported by Medscape Medical News, a study published in March showed that patients with carotid plaques containing microplastics and nanoplastics were at an increased risk for death or major cardiovascular events.

Other studies have shown a link between these substances and placental inflammation and preterm births, reduced male fertility, and endocrine disruption — as well as accelerated spread of cancer cells in the gut.

There is also evidence suggesting that microplastics may facilitate the development of antibiotic resistance in bacteria and could contribute to the rise in food allergies.

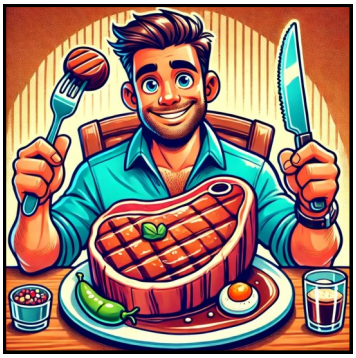
What can you do to reduce exposure to microplastics

Don't drink out of plastic water bottles	Get a filter on your tap drinking water (reverse osmosis is the best)	Avoid heating foods in plastic containers
Avoid to go coffee cups	Limit handling cash register receipts (they are lined with BPA)	Limit eating and drinking out of cans (they are lined with plastics)

Inside This Issue:

Eating More Red Meat Could Increase Type 2 Diabetes Risk

Source: Marilynn Larkin; November 27, 2024



Eating too much red meat has been linked to health problems like type 2 diabetes (T2D), heart disease, cancer, and even a shorter lifespan. Experts say this is partly because red meat contains high amounts of saturated fat, cholesterol, and heme iron. Processed red meat such as bacon and sausages, can make these risks even worse.

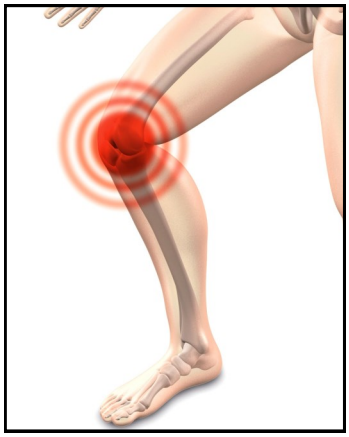
A study involving nearly two million people from 20 countries found that eating red and processed meats increased the risk of T2D. For example, each additional 50 grams of processed meat consumed a day — equivalent to two slices of ham or bacon, or one small sausage — was associated with a 15% higher risk of developing T2D in the next 10 years. The impact of unprocessed red meat was less; each additional 100 grams of unprocessed red meat a day was associated with a 10% higher risk of T2D in the next 10 years. Even eating large amounts of poultry, like chicken or turkey, was found to increase the risk of T2D.

Switching to plant-based proteins such as nuts, beans, and soy, may help reduce these risks. Studies show that replacing one daily serving of red meat with plant-based proteins can lower the risk of T2D by up to 41%. Eating less meat overall, aiming for no more than one serving of red meat per week, and adding more plant-based foods to your diet can lead to better health.

More research is needed, but the evidence suggests that reducing meat consumption and choosing healthier plant-based options is a smart choice for long-term health.

Lumbopelvic Manipulation for Pain Reduction in Patellofemoral Pain Syndrome

Source: Life 2024; 14(7):831



Patellofemoral pain syndrome (PFPS) is a common knee condition affecting about 22-25% of people annually. It causes pain around or behind the kneecap, worsened by activities like running, climbing stairs, or prolonged sitting. Risk factors include weak quadriceps, abnormal knee alignment (Q angle), and excessive inward rotation of the thigh bone. Strengthening the quadriceps and gluteal muscles helps correct improper knee mechanics.

This review examined whether lumbopelvic manipulation (LPM), a type of manual therapy targeting the lower back and pelvis, can reduce PFPS pain. Eleven studies with 346 participants were analyzed. Results showed LPM significantly reduced pain in most cases, particularly when combined with other physical therapies like knee exercises or lower-body manipulation. LPM alone had a smaller effect, and longer treatment durations improved outcomes. No side effects were reported.

The study supports using LPM alongside other therapies to manage PFPS. Effective treatment also involves strengthening exercises, addressing hip and ankle function, and focusing on the entire kinetic chain. Combining pain relief with rehabilitation allows patients to regain mobility and prevent future issues.

At Alliance Chiropractic & Wellness Clinic we address the entire kinetic chain when treating PFPS, including looking at pelvic girdle and lumbar alignment.

Health Humour

- Why did the doctor bring a ladder to work?
  Because they were taking their practice to a whole new level!
- Why did the nurse carry a red pen?
  In case she needed to draw blood!
- Doctor: What's the condition of the boy who swallowed the quarter?
  Nurse: No change yet.

Living a 'Clean' Life in a 'Forever Chemical' World

Source: By Susan Koswan, Nov. 20, 2024, KW Record

Since the introduction of "Better Living through Chemistry" by Dupont in 1935, chemical advancements have improved our lives but also created challenges. Synthetic fertilizers and plastics have boosted crop yields and provided cheap packaging but also contributed to water pollution and fossil fuel dependency.

Among the thousands of synthetic chemicals in use, perfluoroalkyl and polyfluoroalkyl substances (PFAS), have raised serious concerns. Known as "forever chemicals," PFAS are found in products like non-stick pans, food containers, clothing, and cosmetics. They resist water, stains, and heat but don't break down easily in the environment. Exposure to PFAS has been linked to health problems such as cancer, immune dysfunction, fertility issues, and developmental delays in children.

Reducing exposure to harmful chemicals can be challenging. Apps like Clearya and Yuka help identify safer products, but even items from health food stores may contain harmful substances. Tools like the Environmental Working Group's Healthy Living app can help shoppers make informed choices.

Canada is taking steps to address these risks. In 2023, Bill S-5 was passed to strengthen protections against toxic substances. Educational organizations like Beyond Benign are also promoting green chemistry, aiming to design safer chemical products. While finding non-toxic alternatives isn't always easy, informed choices and policy changes can lead to healthier and more sustainable living

High Milk Intake Linked to Increased Heart Disease Risk in Women

Source: Medscape UK; Ute Eppinger, 02 December 2024

A Swedish study found that women who drink large amounts of milk daily may face a higher risk of heart disease. The research followed over 100,000 men and women for 33 years, tracking their health, lifestyle habits, and milk consumption. Women who consumed more than 300 mL of milk per day had an increased risk of ischaemic heart disease. The risk increased by 5% at 400 mL daily, rising to 12% at 600 mL and 21% at 800 mL. A similar pattern was observed for the risk of acute heart attacks. This pattern was not seen in men or with fermented dairy products like yogurt.

The study suggests two enzymes, ACE2 and FGF21, might play a role in this link. These proteins regulate blood pressure and blood flow, but a direct cause-and-effect relationship was not proven.

Experts note that the findings mainly apply to very high milk consumption, common in Scandinavia but rare in countries like Germany, where average milk intake is much lower. As a result, no changes to dietary recommendations have been made. Most guidelines, such as the German Nutrition Society's advice to consume two servings of dairy daily, remain safe for general health.

Vulnerability to Emotional Contagion May Stress Older Adults

Source: Medscape; Marilynn Larkin, December 02, 2024

Older adults who are sensitive to others' distress may feel more anxious or depressed due to a process called "emotional contagion." This happens unconsciously when people mimic the emotions of those around them, much like catching a cold. A study of 170 older adults in Quebec found that those most affected by emotional contagion were 8.5 – 10 times more likely to experience anxiety or depression symptoms.

Most participants faced challenges like grief or conflicts, and researchers found that emotional contagion, along with factors like low social satisfaction and poor coping skills, were strongly linked to distress. People with less distress used better coping strategies such as planning or seeking support, than those with anxiety or depression.

The study suggests programs that improve social connections and teach emotional regulation could help older adults manage emotional contagion. Understanding and addressing the emotional state of one's social environment may also play a key role in reducing psychological distress. Teaching coping strategies could help individuals handle the emotions they "absorb" from others more effectively.

Pelvic Girdle Pain in Pregnancy

Source: Brazilian Journal of Physical Therapy 2023; 27: 100494.

Pelvic girdle pain (PGP) is a common condition affecting over half of pregnant women, often limiting movement and daily activities. It typically involves pain in the sacroiliac joints or pubic bone, sometimes radiating to the thighs. Symptoms can occur during pregnancy or shortly after delivery and often worsen with activities like walking or standing. While most women recover within two months postpartum, 20% experience pain beyond four months, and 10% still suffer more than 11 years later.

PGP has a profound impact on women's lives, affecting their work, social roles, and self-image as mothers. Many feel frustrated, exhausted, and dependent on others, leading to feelings of guilt and inadequacy. Physical discomfort disrupts sleep, lowers energy, and limits their ability to care for children or maintain relationships. Despite these struggles, women often delay seeking help until the pain becomes severe.

Women with PGP value expert guidance and individualized care. They seek knowledge about safe activities, strategies for managing pain, and ways to regain independence. While physical therapy is beneficial, the study emphasizes the need for person-centered care that considers each woman's unique situation. Clinicians should address both the physical and emotional challenges of PGP, helping women navigate their pregnancies with greater support and understanding.

Delivery is often viewed as a hopeful endpoint to PGP, with many women anticipating rebuilding their bodies postpartum. However, the study highlights the importance of early intervention to improve quality of life during pregnancy and reduce the long-term impact of PGP

At Alliance Chiropractic & Wellness Clinic we have a variety of effective strategies to manage pelvic girdle pain.

Clinic Services

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

Clinic Hours
Please note:

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	

1. Massage therapy is available outside core office hours.

Announcements

- Dr. Morphet will be away from the office Thursday Feb 13th, returning Tues Feb 18th at 8:00 am.
- Check us out at *www.alliancechiroandwellness.com*
- All appointment requests should be made by calling the clinic at 905-648-0661. We do not accept appointment cancellations, bookings, or reschedules via our web site. Please note we need to know what you are being seen for to book the appropriate duration of time.
- Like us on *Facebook*! To see the latest in health news, research, updates, and announcements, check us out at *www.facebook.com/AllianceChiropracticandWellnessClinic*
- If you want to see a topic covered in an upcoming newsletter, blog, or social media post - send an email to *info@alliancechiroandwellness.com*
- We have launched on Instagram! Give us a follow @alliance_chiropractic_

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