Christmas 2025

Polio Regina Incorporated

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Season's Greetings

Message From the President

Diane Lemon

Greetings

What a great summer and fall! The weather has allowed those of us who like the sun to spend lots of time outdoors. I am writing this while hearing an advertisement for the Grey Cup, our National Football final game. Many of us with Post Polio Syndrome feel the fatigue which I am sure will be overtaking the players on Monday, the day after the game. What we need to remember is that by managing our fatigue and going at a slower rate than we used to we will be able to live a more comfortable and pleasurable life.

We were fortunate to be hosted by two lovely Independent Living Facilities in September and October. Those who could not join in person attended by Zoom. Following the meetings we had education then a delicious meal. Those who wished were given a tour of the facilities.

Ending our year will be the Christmas party at Nicky's which is always a great hit.

I wish everyone a Happy Christmas and a Great New Year.

Sincerely, Diane

At the Meetings

May 2025 – Nicky's Café and by Zoom - Accessible Taxi Rules. Every cab company in Regina now must have at least one accessible taxi license associated with their fleet, and at least one accessible cab on the road during their operating hours.

This was our Spring Picinic. We enjoyed a picnic style supper with hamburgers and all the fixings.

September 2025 – The Bently and by Zoom - World Polio Day – October 22nd. March of Dimes Canada will be hosting a Virtual Polio Conference. The theme is "Empowering Polio Survivors: Health, Advocacy, and Community".

Open Forum: Our guest speaker was Rayelle Ruecker from Regina Paratransit who gave a presentation on their services. A summary of her presentation is included later in this issue.

October 2025 – Queen Victoria Estates and Zoom - World Polio Day – October 22nd. March of Dimes Canada hosted a Virtual Polio Conference. Susan Schoenbeck did a talk on Jonas Salk and Polio Day. Dr. Lo did a presentation on General Symptoms of PPS. The talks are on the March of Dimes' YouTube channel.

Virtual Global Summit for Equity and Excellence in Inclusive Education was held on October 24–25, 2025.

Carole and Wilf Tiefenbach did a report on Polio Manitoba.

Open Forum: Our guest speaker Diane Lemon did a presentation on her health journey over the last year. A summary of her presentation is included later in this issue.

We enjoyed a delicious complimentary meal after the presentation.

Some members stayed for tour of the facility.

Being Independent in Own House to Completely Dependent in Level 4 Care

By Diane Lemon

September 21, 2024, I had pain in both calves of my legs. I hadn't slept for two days. I went to the General Hospital where after five days they discovered that a large lump had developed on my inner knee, which was full of puss that they drained, and it healed up. The lab tests were indecisive for the type of infection that I had. I got some physiotherapy.

Two weeks later, I was transferred to William Booth Special Care Home where the staff were very good, and I was able to walk with a walker. Then my blood pressure went down to Systolic 60. I was sent by ambulance to the General Hospital where I stayed in emergency for two days then was transferred to the Pasqua Hospital where I shared a room with a drug dealer and a prostitute. I was there for seven days. I got walking again and was sent back to William Booth where I received a warm welcome back.

In approximately two weeks on a Saturday morning, they couldn't wake me up. I was sent to the General Hospital Intensive Care where I was diagnosed with acute sepsis. I spent six days in ICU then I was transferred to a medical ward until February when I was sent the Wascana Rehabilitation Centre.

At Wascana Rehab I received physiotherapy once or twice a week if I was lucky. I was in a two-bed ward. I needed level 4 care which requires a lift to transfer. Nobody checked my skin and they did not notice that two small slits in the skin had joined together into a 9 by 4 centimetre wound.

I was transferred May 1st, 2025, to Victoria Park Personal Care Community for level 4 care. The wound had opened up so you could see the bone on my ankle. I was sent back to the Pasqua Hospital where they performed wound evacuation, for two weeks, then back to Victoria Park. After being at Victoria Park for two days it was determined that the wound infection had gotten worse, so I was transferred back to the Pasqua. I was treated with stronger antibiotics then sent back to Victoria Park.

At Victoria Park I am receiving home care for wound care and leg wrapping. I also receive private physiotherapy twice a week.

They never figured out what caused the infection.

Due to severe nerve pain, I have been prescribed various nerve pain medications such as Hydromorphone and Pregabalin.

I am hoping to sit on the side of the bed and get into a wheelchair without a lift. An occupational therapist has evaluated me for a power wheelchair.

It takes a while to adapt to schedules which are determined by the facility.

I have always had a positive attitude towards life which has allowed me to put up with all the setbacks that I have had during the last year. I am looking forward to healthier future.

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Regina Paratransit Service

Presented by Rayelle Ruecker

Paratransit Service History

In 1949, the SCCCA (Saskatchewan Council for Crippled Children and Adults) was responsible for providing specialized transportation to and from hospitals and the rehabilitation centre. This service was funded through charitable organizations.

In the early 1970's there was lobbying by groups like the Saskatchewan Voice of the Handicapped to move to a publicly funded transportation system.

City Council approved a provincial-municipal cost sharing arrangement on May 13, 1975, and the SCCCA started full public service and contract service on July 1, 1975. - The SCCCA would later become the Saskatchewan Abilities Council (SAC).

History

In the 1980's the paratransit service was consistently over budget. To rectify this problem, in Dec 1991, the City took over scheduling and dispatch functions.

Scheduling system was manual until 1992 when "Scooter," the first software program, was introduced. Trapeze replaced Scooter in 2001 and has been used ever since.

Paratransit Service Delivery

Management, registrations, scheduling, dispatching, budget and policy – City of Regina

Bus driving, cleaning, storage and maintenance – Contractor First Transit (Transdev)

Approximately 80 staff combined.

Communication occurs using mobile data computers and two-way radio

Funding

The Paratransit Service is jointly funded by the City and the Province of Saskatchewan, through their Transit Assistance for the People with Disabilities (TAPD) Program. Since 1975, the Province has had policies in place to fund up to 50% of the net operating cost of Paratransit and up to 75% of the capital costs.

In 2023, the budget contribution by the City was 79% of net operating expenditures and the Province's share was 21%. The provincial funding that the City receives is based on the number of trips that the service provides.

Registrations

To register, an application must be completed with a health professional reference in most cases. Eligibility is based on restriction in using regular transit because of a disability.

Some applications referred to a three-person committee who meets with the applicant face to face. Also, an appeal process.

Registrations can be under the following categories; unconditional, conditional, temporary, visitor.

All registrations (except visitor) expire after 18 months if they have not been used.

Passenger Statistics

The RPS has 50-60 new registrations per month approximately the same amount are discontinued.

The number of registered passengers – 2,600

Of these registrants 59% are ambulatory and 41% used wheelchairs or scooters.

64% of passengers are over age 65.

Booking Trips

Trips are booked by calling a reservation number, email and voice message.

Trips can be booked 7 days in advance.

No limit on number of trips in a day

Different types of bookings – same day, advance, subscription, group, charter

Maximum 60-minute travel time

Groups Utilizing the Service

Adult Day Programs

School Service

Day Programs for people with cognitive disabilities

Dialysis

Statistics

700 trips per weekday. In 2023, 178,209 trips.

6,500 hours of service per month.

90,000-100,000 km per month.

In 2023, cost - $35.00 per one way trip.

This is a low cost compared to most other centres. (Fixed-route $6.00 per trip)

Service Hours

Monday to Friday 6:00am-11:15pm

Saturday 7:00am-12 midnight

Sunday and Holidays 8:00am-7:00pm

Paratransit operates 365 days per year and operates slightly different operating hours than conventional transit.

Catching a Ride

Passengers have a 20 minute time window in which they can be picked-up. Vehicles can arrive 10 minutes before or after a scheduled pick-up time.

Operators will come to the first accessible door to pick the passenger up. Escorting mandatory.

Operators will wait five minutes before going on to the next pick-up.

Fleet

35 lift-equipped buses owned by the City of Regina

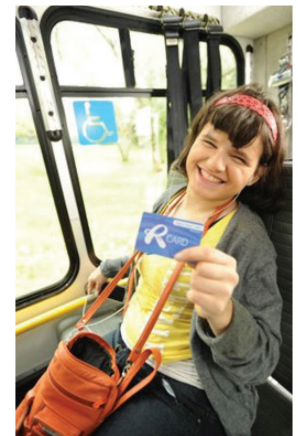
First Transit is responsible for repairs and maintenance of the lift-equipped buses

5-6 new buses each year

Cameras, Mobile Data Computers, Back-up Cameras, Child Safety Seats, Safety system on buses

Taxis used to provide some trips (3,500 in 2023)

Fares



Same as fixed-route transit.

Paratransit has the same automated fare collection system as fixed-route transit.

Umo card can be used on both paratransit and fixed-route transit.

The Challenge

The demand for Regina Paratransit Service currently exceeds existing service levels. Goal is 1% denial rate for advance trips.

There is also direction for Regina to move toward integrated service delivery between conventional and paratransit.

The Solution

Move some paratransit customers to conventional transit where there is capacity.

Training Program

Partnership with COR (Creative Options Regina) and U of Regina 4to40 Program to hire persons experiencing disabilities to train their peers how to use conventional transit (trainers being paid). Program is free for trainees.

U of R practicum students are assisting to oversee the program. They create training materials, do outreach to organizations and supervise the trainers.

Benefits for Trainees

Increased independence and confidence (necessary employment readiness skills)

Increased access to community involvement

Increased flexibility – Don't need to rely on paratransit's restrictive pick-up and drop-off times or needing to book trips in advance

Benefits for Paratransit

Ability to dedicate resources to those who need it the most

Increased ability to manage demand

Ability to manage budgetary resources more effectively

Future

Public Transit

Customers with disabilities will have a range of accessible transit options with different vehicles and service providers

Technology will become more sophisticated and important for Transit

Interprovincial travel agreements to provide transit services outside of City limits

More consistency and comingling between fixed-route and paratransit including On Request Transit

Provincial standards for accessible transit

THANK YOU

The "Types" of Polio

RichardLBrunoBruno BytesEncyclopedia
04-05-2023
Written By Polio Network

Question: Can you get multiple "types" of Polio?

Dr. Bruno's Response: Yes, you can be infected at the same time with more than one type of poliovirus.

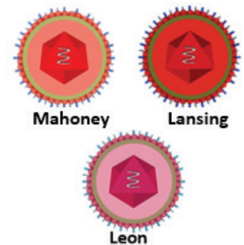
But, polio survivors should be very careful about their belief, often without evidence or as part of family lore, regarding the "types" of polio they had. This is especially important now that poliovirus from the oral vaccine has been found in wastewater in Canada, Israel, the UK and US, and you may be deciding if you need polio vaccination.

During the polio epidemics, and still today, there is confusion with there being three types of poliovirus and three types of clinical polio:

Three Types of Polioviruses

You could have been infected by one (or very rarely more than one) polioviruses:

- Type I (Mahoney, the epidemic strain that caused most cases of polio),
- Type II (Lansing) or
- Type III (Leon).



Statistically, polio survivors were infected only with the Type I poliovirus. Each of the three types of poliovirus is genetically different and therefore each requires its own unique polio vaccine to get the body to generate the specific antibodies needed to counteract each type of virus. Unfortunately, the three different polioviruses get confused with the "three types of clinical polio":

Three Types of Clinical Polio

- **Bulbar Polio**: Indicates the virus affected your brain stem and would cause trouble swallowing and breathing;
- **Spinal Polio**: Indicates the virus primarily affected your spinal cord and would cause limb paralysis;

- **Bulbar-Spinal Polio**: Indicates the virus affected both your brain stem and your spinal cord, which would cause limb paralysis and trouble swallowing and breathing.

Some polio survivors were told that the body areas affected were determined by infection with specific types of poliovirus. So, someone who had bulbar polio might have been told that they had one type of poliovirus, while someone with bulbar-spinal polio might have been told that they had two types of poliovirus. *Any* of the three polioviruses could have caused spinal, bulbar or bulbar-spinal symptoms.

The symptoms that you experienced were not predetermined by the type of poliovirus that got into your body. When you talk to your doctor about the need for polio vaccination, don't depend on your original polio symptoms or family memory to decide the type of poliovirus you had and type of vaccine you may need now.

Talk To Your Doctor About The Need For Vaccination.

Adults who are unvaccinated or are unsure if they have been fully immunized (including polio survivors, who likely had only one type of polio) would need a total of 3 vaccine doses.

Adults who only have had 1 or 2 doses of the polio vaccine would need to get all 3 doses.

Adults who are at increased risk of exposure to poliovirus and who have previously completed a routine series of polio vaccine can consult with a health care provider and receive one lifetime "booster" dose of Injectable polio vaccine.

Which "Type" of Polio We Had

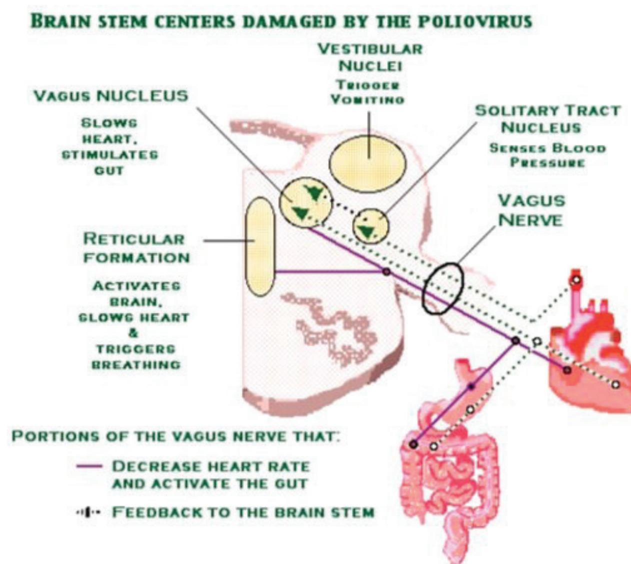
Bruno BytesEncyclopediaRichardLBruno
12-30-2020
Written By Richard L. Bruno, HD, PhD

Original Post: How can I know what type of polio I had? (Type 1, 2 or 3 . . .)?

Dr. Bruno's Response: If you were vaccinated you probably can't find out the type of polio you had in terms of the viruses. It's important to note that every polio survivor had some degree of bulbar polio and if your limbs were affected you had what was termed as "spinal polio".

"Bulbar" Polio

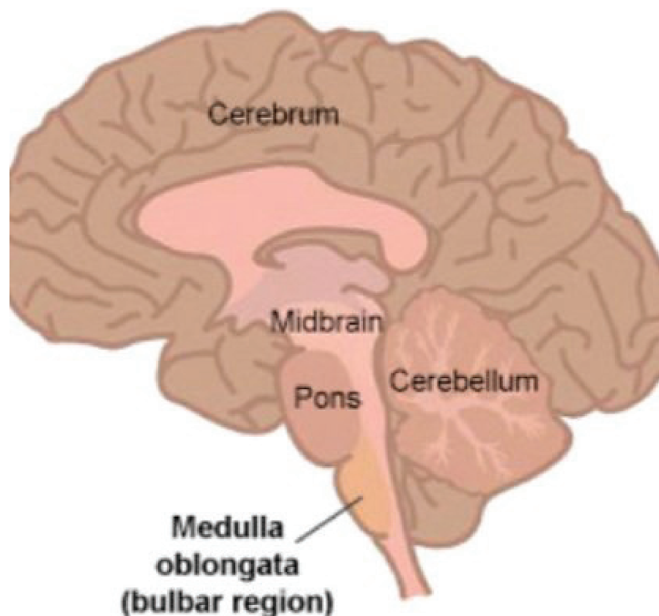
Bruno BytesEncyclopediaRichardLBruno
06-29-2019
Written By Richard L. Bruno, HD, PhD



Original Post: For people who have not read the "*The Polio Paradox*," there are two very important facts to understand about this nasty virus:

- POLIOVIRUSES affected our WHOLE body. You might have had one limb paralyzed – or no paralysis or muscle weakness at all -- but had damage throughout your whole spinal cord.
- POLIOVIRUSES always affected the ***bulbar*** part of our brain, therefore we *all* had bulbar polio.

It took me awhile to understand this. But once I did I was able to grasp what is happening with PPS.



Dr. Bruno's Response: The bulbar part of the brain stem controls many automatic functions (e.g., swallowing, intestinal movement, blood pressure, heart rate).

Polio survivors having abnormalities with these functions are showing poliovirus-damage to the "bulb" of the brain.

Damage to the Bulb of the Brain vs Clinical Bulbar Polio

RichardLBrunoBruno BytesEncyclopedia
06-29-2021
Written By Richard L. Bruno, HD, PhD

Question: I seem to remember you saying that every survivor has some degree of bulbar polio. What does this mean for polio survivors and PPS?"

Dr. Bruno's Response: Every polio survivor having some degree of "bulbar polio" is what Dr. David Bodian found performing scores of autopsies on people who had had polio. But here again is the important distinction that people seem never to appreciate: *Damage to the bulb of the brain as seen on autopsy is not the same as clinically diagnosed "bulbar polio".*

All polio survivors had damage to the bulb of the brain, but not all polio survivors had damage severe or widespread enough to cause symptoms - difficulty breathing swallowing and controlling blood pressure - that would *clinically* be diagnosed as "bulbar polio."

This article "Abnormal Eye Movements and PPS" has more information about damage to the brain stem seen on autopsy vs clinically diagnosed "bulbar polio."

"Spinal" and "Bulbar" Polio

Bruno BytesEncyclopediaRichardLBruno
12-30-2016
Written By Richard L. Bruno, HD, PhD

Original Post: I had polio in 1954, was told I had spinal & bulbar. I have had so much trouble with my spine & legs for 18 yrs. I have so much pain. Is this coming from the spinal polio? What does Bulbar polio do?

Dr. Bruno's Response: Bulbar polio refers to poliovirus damage to the brain stem that is clinically apparent at the time of the infection, causing difficulty breathing, swallowing and even death due to cardiovascular collapse. (Cardiovascular collapse was the most common cause of death in polio survivors, not difficulty breathing).

In point of fact, everybody who had spinal polio had some degree of bulbar damage. That's one of the reasons polio survivors have slow intestines and difficulty swallowing.

Bulbar Polio Causing Death

Bruno BytesEncyclopediaRichardLBruno
12-31-2022
Written By Polio Network

Question: According to the WHO and CDC, most polio deaths stemmed from paralytic breathing difficulty/ suffocation. Is that right?

Dr. Bruno's Response: No. The frightening image of the iron lung causes people who aren›t familiar with the physiology and history of bulbar polio to assume breathing failure was "the killer". While the numbers varied from outbreak to outbreak, about

70% of those who were in an iron lung died. But those with breathing problems could have had the two other bulbar symptoms: impaired swallowing and cardiovascular dysfunction. Just over 50% with bulbar polio had trouble swallowing, 5% of whom died. Almost 10% had trouble controlling their heart rate and blood pressure, more than 80% of whom died. Since polioviruses always affected the bulbar part of the brain, (the brain stem), everyone had bulbar polio whether there were symptoms or not.

The brain stem controls many automatic functions (e.g., breathing, swallowing, intestinal movement, blood pressure, heart rate). So, polio survivors having abnormalities with these functions today are showing evidence of poliovirus-damage to the "bulb" of the brain from the acute polio attack.

Abnormal Eye Movements and PPS

EncyclopediaLiving with PPSRichardLBruno
06-20-2021
Written By Richard L. Bruno, HD, PhD

In the nearly 40 years I have been studying and treating polio survivors, I have never seen a patient with abnormal vision that could be explained by having had polio. And I wasn't surprised. In the 1940's, polio savant David Bodian performed scores of human autopsies on those who died after having had polio. He stated, "All available evidence shows conclusively that every case of polio exhibits damage in the brain." However, as part of his research into how the poliovirus found its way into and damaged the brain and spinal cord, he injected poliovirus directly into monkeys' vision neurons at the back of the brain and absolutely nothing happened; the vision neurons were not infected with the poliovirus and just kept working! The poliovirus' lack of interest in other than motor neurons prevented polio survivors from having any vision impairment.

But, Bodian did make clear that poliovirus could severely damage motor neurons in the brain stem swallowing, breathing and blood pressure control neurons and cause what was clinically diagnosed as "bulbar" polio. Although the numbers vary from year to year, epidemic to epidemic, approximately 15% of patients had clinical bulbar polio. But if the poliovirus could kill the above-mentioned motor neurons, could it attack other brainstem motor neurons, for example those controlling eye movements? The answer: sometimes.

Abnormal Eye Movements and Polio

Going back to my well-thumbed copy of the 1948 proceedings of the First International Poliomyelitis Conference, I could find only two sentences buried in the discussion section on bulbar polio that mentioned eye movements. It referred to polio expert A. B. Baker's description of one of the largest polio outbreaks, the 1946 Minnesota epidemic, during which 23% of children had clinically diagnosed bulbar polio: 90% had damage to the vagus nerve, causing problems with breathing and swallowing, while 6% had cardiovascular collapse, 83% of whom died. But among these bulbar polio patients 12% were found to have loss of eye muscle control and even eye muscle paralysis.

It turns out that Baker's finding of eye movement abnormalities in bulbar polio patients actually was 41 years old. Ivan Wickmann, in his famous 1907 paper on Heine-Medin's disease (the original name for what in 1840 Heine himself called "infantile spinal paralysis") mentioned cases of bulbar polio where there was damage to the brain stem's sixth cranial nerve that controls the muscles that move your eyes outward, away from your nose, causing "crossed eye(s)". But Baker added to Wickmann's finding, reporting that the most common eye movement abnormality in bulbar polio wasn't crossed eyes but nystagmus, the back-and-forth or up-and-down "twitching" movement of the eyes.

But if eye movement abnormalities had been seen with bulbar polio as far back as 1907, why have they been given such short shrift in the medical literature? In a paper describing the extensive polio epidemics in Israel from 1949 to 1954, the authors explained why abnormal eye movements in bulbar polio survivors were so infrequently documented. Eye movement abnormalities might indeed occur more frequently

than was reported, “but being often transient (would) hardly be included in clinical statistics. Since most of the cases involving the muscles of the eye are accompanied by other serious, often dangerous symptoms…the eyes tended to frequently be overlooked.”

A 1952 paper documented that cranial nerve damage causing abnormal eye movements fortunately was transient. The authors reexamined 59 Swiss polio survivors, all of whom had had symptoms of cranial nerve damage, 2 to 18 years after their acute polio. At follow-up 39 patients (66%) had no cranial nerve damage symptoms, 18 (31%) of patients had minor symptoms and 2 patients (3%) -- one having the sixth and another the seventh cranial nerve affected -- had more severe symptoms. However, none of the symptoms in any of the bulbar polio survivors “affected the life of the patients.”

Could Abnormal Eye Movements be PPS?

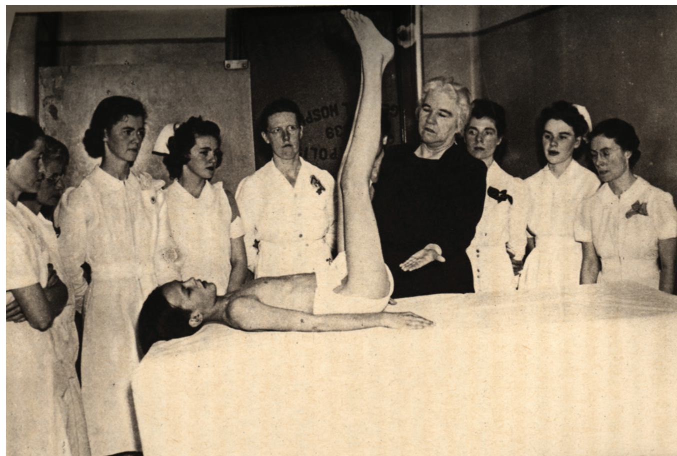
Yes, abnormal eye movements could be PPS. If someone had clinically-diagnosed bulbar polio, the remaining, poliovirus-damaged brain stem neurons that control eye movements could be “browning out” and causing eye movement abnormalities. But, although small muscles are constantly moving our eyes, it takes about 10,000 times more force to walk on a level surface than it does to move the eyes. Muscles moving small “weights” (the eyes, eyelids, facial muscles) are less likely to experience “overuse abuse” than are muscles used to lift bags of groceries or to walk, which is probably why we’ve never seen abnormal eye movements in polio survivors. Based on the Minnesota and Swiss data, abnormal movements of the eyes would be very rare, seen in less than 2% of bulbar polio survivors. But seen they could be.

However, as with all PPS, other causes of eye movement abnormalities must be ruled out before PPS is accepted as the culprit. What’s more, any abnormal eye movements must be evaluated without delay since they may be symptoms, not of PPS, but of a neurological disease that requires immediate treatment.

More information by Richard L. Bruno, HD, PhD is in The Encyclopedia of Polio and Post-Polio Sequelae on our website. It contains all of Dr. Richard Bruno’s newly published and updated articles, monographs, commentaries, videos and his series of Q&A articles - “Bruno Bytes”.

The Sister Kenny Method

By Susan L. Schoenbeck, MSN, RN



In 1940, Elizabeth Kenny (1880-1952) arrived in American from Australia with what was described as a “controversial” approach to polio patient care. Whereas treatment in the United States focused on immobilization, splinting, and bracing of affected limbs, nurse Kenny targeted reducing muscle spasms and increasing muscle strength.

Sister Kenny demonstrated that the application of warm, wet, wool compresses, stretching, and massage eased painful muscle spasms. In addition, she advised passive movement of polio-affected limbs to regain muscle strength.

Kenny was not a trained nurse. She served as a “Sister,” a title given to a chief nurse in the Australian military for her service nursing soldiers during World War I. She developed her treatment for polio survivors from her experience treating soldiers with meningitis.

When she came to the United States, doctors in New York and Chicago refused to accept her methods. They questioned her theories and lack of formal medical training. However, in Minnesota, Kenny

found that The Mayo Clinic, the University of Minnesota, and Minnesota General Hospital were interested in her work.

In 1942, The Elizabeth Kenny Clinic in Minneapolis began providing treatments that Sister Kenny advocated for polio patients. These therapies helped begin a new field of medicine called rehabilitation medicine.

During the early 1940s, many physicians and parents adopted The Kenny Method or variations of it. Most physicians did not agree with Kenny's theory that polio was a muscle not a nerve disease, but doctors used her treatment methods because they recognized that they brought about improvements in patients.

Children being treated with The Kenny Method cried out in pain as paralyzed muscles were moved and stretched. But their parents continued asking that the method be used because they felt it helped recover their child's functioning. Sister Kenny treatment centers were opened throughout the United States.

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Carve the Turkey, Not Your Hand: Keep Your Holiday Injury-Free

As families prepare to gather around the table this reminds home chefs to keep safety top of mind while carving the turkey. Each year, emergency departments treat hundreds of thousands of knife-related injuries, many of which occur during home meal preparation1. A few simple safety tips can help keep your hands out of harm's way and your holiday full of cheer.

Follow these safety tips to ensure a safe holiday feast:

- **Keep the cutting area stable.** Ensure the carving board is secure and won't slip.
- **Cut away from yourself.** Always direct the knife blade away from your body.
- **Use the right tools.** Choose a sharp carving knife and know how to handle it safely.
- **Use utensils, not your hand, to hold the bird.** Protect your fingers by using a fork or carving tool to steady the turkey.
- **Take your time and minimize distractions.** Step away from the football game or the phone for a few minutes. Focus on the task, your hands will thank you.

Lacerations sustained while carving turkeys and other holiday fare can be quite serious from cut nerves, arteries and tendons. These simple tips will help you enjoy the holiday season without a hand injury.

The Polio Regina executive would like to wish all our members and their families a Merry Christmas and a Healthy and Happy New Year!

How to Avoid Adding Holiday Pounds

A Hackensack Meridian Health expert weighs in
by ***Hackensack Meridian Health***

Credit: vecteezy.com

Manahawkin, NJ - We're faced with it every holiday season: delectable treats we "can't resist" for one reason or another, thus we overindulge. An American Heart Association survey found that 69 percent of respondents had trouble prioritizing healthy eating during this time of year. Throw in traveling, shopping, decorating and visiting, and you can see why. And for those dealing with chronic illness like diabetes or high blood pressure, the holiday period can be especially challenging. **Robert Hildebrandt, MBA, RDN, CDCES**, from the Diabetes Management Center at Hackensack Meridian Health Southern Ocean Medical Center has some tips on how to enjoy the festivities without putting your health at risk.

Don't drink your calories: Your best friend may make that incredible, seasonal cocktail that everyone enjoys. Ask yourself if you really need it. Alcoholic beverages, egg nog and specialty coffee drinks are loaded with calories and added sugar. Having just one or two of those drinks can add up to that of a meal or more. What to do? Swap the alcohol for seltzer or plain water with seasonal fruit like apple slices or berries mixed in - or enjoy a cup of tea with chai herbs or a cinnamon stick. Alcohol can also lower your inhibitions, resulting in overeating.

Don't linger: Most people tend to gather around a buffet table, appetizer tray or charcuterie board upon arrival to a party. Even if you're not hungry, such delicious looking treats can tempt you to graze and overeat without thinking. This becomes even more challenging when a main course is served. You're already full, but you don't want to offend your host - so you eat more. Avoid this scenario by skipping the appetizers and instead take the time to move around and talk to family and friends. If you can't resist, look for healthier options such as shrimp cocktail and other meats (not fried) and vegetables. Be aware of pre-packaged, frozen appetizers which tend to be ultraprocessed and have a high salt intake. And skip or limit the sauces - this way, you'll be ready for something else you're **really** looking forward to.

Bring your own: There's always that one gathering that is over the top when it comes to food - leaving you no choice but to eat something you know you shouldn't. If you're stuck in this situation, moderation is always key. Look for leaner proteins and skip special sauces, bread and rolls. Even asking your host in advance if a small salad can be set aside for you is a reasonable request that won't put anyone out - or bring your own. Feel free to bring a dish or two of something on the healthier side. By doing this, you are assuring that there is a healthy alternative for you – your host will definitely thank you, and others in the same boat as you will as well.

A holiday treat: Desserts and treats should be just that – an occasional treat, not an everyday indulgence. Especially if you have a chronic condition or are trying to maintain a healthy weight, don't put yourself in a tempting position. Fruit is always a good selection (and also easy to bring). If you decide to enjoy, take a small portion of your favorite sweet treat, and resist 'seconds.' And watch those cookies - they may be small, but the calories, sugar and fat from too many of them can add up to be more than a piece of cake or pie.

Don't Turn the Holidays Into a Week-Long Feast: It's easy to let the festivities stretch beyond a single day. Leftovers, pies, cookies, and other indulgent treats often linger for days after the holiday, turning what could be a one-day celebration into a week-long feast. This habit can lead to consuming far more calories, sugar, and fat than intended.

To avoid this, be mindful of portion sizes when serving yourself leftovers. Freeze extra holiday

dishes in individual portions for future meals instead of keeping them in plain sight. If you're hosting, encourage guests to take home some of the food. If you're attending an event, politely decline when offered a plate of sweets to-go. By keeping the indulgences limited to the holiday itself, you'll prevent overindulgence from becoming a daily occurrence and set yourself up for a healthier, more balanced week. If you think it's just you that faces this seasonal challenge, know you're not alone. An Ohio State University survey found that two-thirds of respondents said they overindulge in food during this period. But with a little planning, you can make steps toward healthier choices.

What to do: Get creative! Small food and drink swaps will go a long way, especially during this period of endless festivities. Enlist a buddy: ask your friends and loved ones to support you during this time and to not sabotage your efforts or get upset with you if you don't take part in the usual traditions. And mix it up - it's not all about eating and drinking. Holiday party fun can come in the form of playing games, going for a walk, looking at old photos, and conversing and connecting. When the season is over and you don't feel sluggish and are ready to start a new year feeling great, you'll be glad you made these small adjustments.

Honoring John Robbins

Polio Survivor, Leader, Philosopher

By Susan L. Schoenbeck, Polio Survivor

John Robbins, the author of Diet for a New America and The Food Revolution and Reclaiming Our Health, died of complications from post-polio syndrome. He passed away surrounded by a loving family, peacefully at his home, June 2025, due to complications from post-polio syndrome.

Robbins inspired people to eat healthier by revealing health, environmental, and ethical costs of industrialized animal agriculture. He supported a vegetarian diet.

In 1952, at age 5 years old, he contracted what was deemed a "relatively mild" case of polio. He was told he would never walk again and at first, he was wheelchair bound. He endured left leg weakness and walked with a painful limp, requiring him to wear shoe supports.

He told his son: *"In school, when sports teams were being chosen, nobody wanted me on their team because I had so much trouble walking. The pictures we have of me from my youth that show me standing always show me putting very little weight on my left leg. Sometimes I would lean on a bigger kid just in order to stand.*

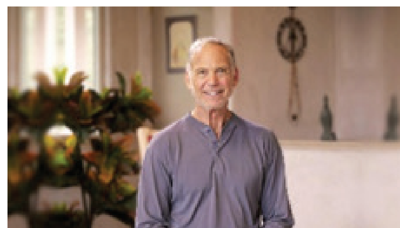
https://foodrevolution.org/john-robbins-health-sharing-transcript/

When I was 18, I still couldn't put much weight on my left leg, and I needed to have three-inch lifts put in all of my left shoes in order to walk at all. At that time, doctors told me that I would never walk normally.

I walked with a painful limp. It was a tough way to grow up, but a lot of children who got polio had it worse."

Defying medical expectations, he eventually ran the equivalent distance of a marathon and completed unofficial triathlons. He also practiced yoga, despite not being able to do standing poses.

When he developed post-polio syndrome, he lost much use of his legs and experienced brain fatigue. He found himself unable to do what he was used to doing but, at the same time, gaining an understanding of life and the messages he learned through his experience with polio. The quotations below come from an interview John Robbins had with his son, Ocean Robbins.



https://foodrevolution.org/john-robbins-health-sharing-transcript/

For me, working out and clean eating and cultivating an attitude of gratitude are examples of how I'm trying to change the things that I can. But each of us is living in a vulnerable human body. And many of us are facing the inevitable aging process. So, while it can be very difficult, sometimes we all really do need to find the serenity to accept the things that we cannot change.

I don't think our joys arise because our lives are free from grief. I think our joys often arise from how we care for ourselves and each other in the midst of the things that break our hearts.

Maybe we're here not just to change the world, but also to love the world. Not just to change ourselves, but also to love ourselves — with all of our goodness and all that's shattered, with all of our coherence and all our contradictions, with all our beauty and all our brokenness.

I've come to see that happiness and joy are the result of how we care for each other and ourselves in and through the heartbreaks and the grief we will all know in our lives.

And we all live now with the growing reality of climate chaos, with the breakdown of social trust, and with the realities of war and mass migrations. We have an economy that favors the ultrarich while siphoning money away from nearly everyone else. And each of us has experienced traumas in our personal lives that have taken a toll. For some of us, that toll has been devastating.

My experience with post-polio syndrome is showing me two things. One is how hugely important it is for us to do everything we can to live healthy lives. And the other is how hugely important it is to have compassion for the things we can't heal. In every life, there will be pain we can't avoid, and that we must seek the serenity to accept.

If we can still contribute in some way to the happiness and to the well-being of others — well, to me that's a form of grace.

May all be fed. May all be healed. May all be loved.

Family stated: "John met life's challenges with resilience and with love. Even in the face of pain, he never stopped growing, learning, or seeking to make a difference in the lives of others. His presence and his purpose continue to guide and inspire us every day."

https://www.businesswire.com/news/home/20250614828462/en/Bestselling-Author-and-Food-Revolution-Network-President-John-Robbins-Has-Passed-Away;

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https://www.nytimes.com/2025/06/27/health/john-robbins-dead.html

Comparison: An Obituary and a Death Certificate

By Marny Eulberg, MD and Susan L. Schoenbeck, MSN, RN

The obituary of John Robbins described his death as from "complications from post-polio syndrome." A number of polio survivors are questioning how this could happen because they have been told that post-polio syndrome is not a fatal condition.

Obituaries and death certificates have different purposes. This essay explains how death certificates differ from obituaries. First, death certificates and obituaries do not necessarily match. A death certificate is a legal document. An obituary is a notice of someone's death most often with some biographical information.

An obituary is often written by the dying or loved ones of the deceased. Sometimes, the funeral home composes the obituary. It is not a legal document. Hopefully, an obituary represents vividly the life of the deceased. Often an obituary may the reader a glimpse into the hopes, accomplishments, and philosophy of the person who died, while giving the community notice of a death and any funeral/celebratory arrangements.

A death certificate gives medical and legal information. Death reporting began in 1900. Most states use the U.S. Standard Death Certificate issued by the CDC's National Center for Health Statistics (NCHS). Some states use their own form. The CDC provides instructions about how to complete a death certificate.

- The cause of death is determined by a medical professional such as an attending physician, a non-attending physician, a medical examiner, a nurse practitioner, a forensic pathologist, or a coroner (medical examiner). States differ in their requirements for certifier.
- The certifier describes the immediate cause of death and also lists underlying causes of death over time. Underlying causes can be something that happened in the immediate hours before a person died of a chronic condition. Sometimes certifiers qualify causes by adding "probable" or "presumed."
- The National Center for Health Statistics (NCHS), a division of the CDC, compiles mortality data which can be used to direct funding for purposes such as disease prevention policies.

Resources

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https://www.cdc.gov/nchs/data/dvs/death11-03final-acc.pdf.

Footnote: Susan L. Schoenbeck, MSN, RN
In Canada, death certificates are issued by the provinces and territories. Each jurisdiction has its own unique form for reporting details.
A Canadian death certificate generally includes the deceased's full name, date and place of death, sex, and other demographic information. It also includes the registration number and may include information about the cause of death, depending on the province or territory.

Facial Expressions of Pain Can Be Predicted from Brain Activity

by **Universite de Montreal**

Stubbing your toe on a table leg or fracturing your wrist will probably make you wince in pain (and possibly curse). It's a natural reaction; facial expressions play an important role in communicating the unpleasant sensory and emotional experience of pain. Among other things, they signal to others that we are hurt and may need help.

The neural processes associated with this form of nonverbal expression have received little attention although they are known to play an important role in the experience of pain. Marie-Eve Picard, a doctoral student in the laboratory of Pierre Rainville, a professor in the Faculty of Dentistry at Université de Montréal and a researcher at the Montreal University Institute of Geriatrics Research Centre, decided to investigate.

In a new study, Picard and Rainville show that facial expressions triggered by painful stimuli can be predicted from brain activity. Their findings reveal that the neural mechanisms underlying these expressions are largely distinct from those associated with other manifestations of pain, such as subjective verbal reports of perceived intensity.

Analyzing facial muscles

Picard and her colleagues developed a neurobiological model that predicts facial expressions elicited by painful stimuli. Using machine-learning algorithms trained on magnetic resonance brain imaging data, they created a Facial Expression Pain Signature.

Healthy volunteers underwent painful thermal stimulation and their facial expressions were measured using the Facial Action Coding System, a standardized tool that analyzes facial movements based on the activity of several groups of facial muscles.

Activation of each muscle group causes a specific change in facial expression. For example, pain-related expressions often include furrowed brows, elevated cheeks, squinting, wrinkled nose and raised upper lip.

Towards more precise assessments

In clinical settings, accurately assessing a patient's pain is important for appropriate pain management.

"The importance of facial expression in pain assessment receives less attention than the role it plays in social interactions," said Picard. "However, our results suggest that this behavioural indicator of pain can be a valuable complement to verbal reports of perceived intensity."

The study was informed by an understanding of pain as multidimensional, meaning that considering its various manifestations can improve assessments of its severity.

Picard's work shows the existence of brain signatures, or patterns of brain activity, that are predictive of pain-related facial responses. While these results advance our understanding of the brain mechanisms behind pain and nonverbal communication, further research will be needed to test their generalizability and determine their applicability to conditions such as chronic pain.

It's a New Era for Knee Replacements and Other Joint Surgeries

2-Oct-2025 10:55 AM EDT, by **Mayo Clinic**

Newswise — MANKATO, Minnesota — Not so long ago, undergoing a total hip or knee replacement and recovery was a grueling and often painful ordeal. While these are still major surgeries, new techniques and technologies are redefining them — and improving people's outcomes, explains Dr. Brandon Bukowski, an orthopedic surgeon at the Mayo Clinic Health System in Mankato.

"Robotic-assisted joint replacement technology has revolutionized hip and knee surgeries," Dr. Bukowski says.

This technology allows the surgeon to:

- Perform enhanced, three-dimensional preoperative planning and modeling to ensure there's no impingement or pinching of tissues, and to refine implant sizing and positioning for a high degree of accuracy.
- Prepare the bone and insert the implants with an unprecedented level of precision.
- Produce personalized, patient-specific joint replacements.

"In addition, major advances have been made in anesthesia used for total joint replacement surgery in the past decade,» Dr. Bukowski adds. «With these advances, patients recover more quickly and get up and move sooner after surgery."

Another rapidly advancing technology in orthopedic surgery is 3D printing, which allows the designing and creation of custom implants to address challenging problems, including deformities, bone loss, and unusual hip or knee anatomy.

This promising technology needs more long-term data before it becomes widely used. Mayo Clinic is at the forefront of 3D printing and has been integral in advancing its clinical applications.

Hip replacements

"Any patient who is a candidate for a "conventional" total hip replacement is a candidate for a robotic-assisted total hip replacement," Dr. Bukowski says. "Hip replacements are no longer a one-technique-fits-all approach. With a "360 degree" approach, your surgeon can tailor the surgery to you, choosing from direct anterior, posterior or anterolateral approaches."

When it comes to recovery and rehabilitation:

- For most patients, total hip replacement surgery is either a same-day surgery or a one-night hospital stay.
- Patients can walk and navigate stairs right after surgery.
- The majority of patients will follow a self-directed physical therapy plan at home — no need to go to an outpatient physical therapy facility.

Knee replacements

"As with hip replacements, any patient who is a candidate for a conventional total knee replacement is a candidate for robotic-assisted total knee replacement," Dr. Bukowski says.

Like hip replacements, total knee replacements typically are same-day surgeries or may involve a one-night hospital stay, with patients walking and navigating stairs after surgery. For best results with strength and range of motion, patients work on daily exercises at home to supplement physical therapy sessions at an outpatient facility.

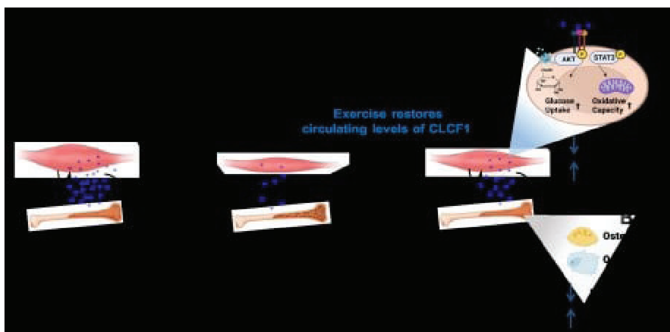
“The excellent news for total hip and knee replacement patients is that the techniques and technologies for these surgeries continue to evolve,” Dr. Bukowski says. “They have the primary goals of reducing pain, enhancing function, and getting patients back to their day-to-day activities and those they love to do.

It’s a New Era for Knee Replacements and Other Joint Surgeries | Newswise

Exercise-Induced Protein Revives Aging Muscles and Bones

Discovery and functional characterization of the myokine CLCF1, which decreases with aging but is secreted through exercise to prevent musculoskeletal aging

by **National Research Council of Science and Technology**



Credit: Korea Research Institute of Bioscience and Biotechnology (KRIBB)

An overview diagram of the study results : Exercise-Induced CLCF1 Reverses Age-Related Muscle and Bone Loss

Newswise — “Exercise is good for your health” is a well-known phrase, but few people can clearly explain how and why it benefits the human body.”

A joint research team, led by Dr. Yong Ryoul Yang of the Aging Convergence Research Group at the Korea Research Institute of Bioscience and Biotechnology (KRIBB, President: Seok-Yoon Kwon) and Professor Nak-Sung Kim of Chonnam National University, has discovered a key protein, CLCF1 (cardiotrophin-like cytokine factor 1), that plays a central role in mediating the health benefits of physical activity.

The team found that CLCF1 is secreted by muscles during exercise, where it helps strengthen both muscles and bones, thereby suppressing musculoskeletal aging.

To understand how CLCF1 changes in response to exercise and aging, the researchers divided participants into young and elderly groups and monitored changes in blood CLCF1 levels after exercise. Interestingly, CLCF1 levels increased markedly after a single exercise session in the younger group, whereas in older adults, the protein only increased after over 12 weeks of continuous exercise.

The team also conducted experiments on aged mice. When CLCF1 was administered to elderly mice, they showed improved muscle strength and increased bone density. In contrast, blocking the action of CLCF1 made exercise ineffective, confirming that this protein is essential for the beneficial effects of exercise.

Further analysis showed that CLCF1 enhances mitochondrial function in muscle cells, inhibits the formation of bone-resorbing osteoclasts, and promotes the differentiation of bone-forming osteoblasts. This is the first scientific evidence identifying changes in protein secretion as a major reason for the reduced efficacy of exercise in aging individuals.

Dr. Yong Ryoul Yang from KRIBB said, “This research provides a biological basis for why exercise becomes less effective with age, and it lays the groundwork for developing new therapeutic strategies for healthy aging. In particular, the findings offer new directions

for treating age-related sarcopenia and osteoporosis."

Korea Research Institute of Bioscience and Biotechnology (KRIBB) is a leading national research institute in South Korea dedicated to cutting-edge research in biotechnology and life sciences. Established in 1985, KRIBB focuses on advancing scientific knowledge in areas such as molecular biology, genomics, bioinformatics, synthetic biology, and aging-related studies. As a government-funded institute, KRIBB plays a pivotal role in driving innovation, supporting national R&D strategies, and collaborating with academic and industrial partners both domestically and internationally.

This research was supported by the National Research Foundation of Korea (NRF) Individual Basic Science Program, the Regional Science & Technology Innovation Project, the Convergence Research Program of NST, and KRIBB's core R&D program.

The study was published in the May 22, 2025 online edition of Nature Communications (IF 14.7), under the title: "Exercise-induced CLCF1 attenuates age-related muscle and bone decline in mice"

(Corresponding Authors: [KRIBB] Dr. Yong Ryoul Yang, Dr. Ki Sun Kwon, [Chungnam National University] Prof. Nack sung Kim

First Authors: [KRIBB] Dr. Jae Sook Kang, Min Ju Kim [UST], [Chungnam National University] Jung Ha Kim

Meditation Retreat Rapidly Reprograms Body and Mind

A one-week mind-body retreat triggered systematic brain and molecular changes linked to resilience, pain relief and stress recovery

6-Nov-2025 11:00 AM EST, by **University of California San Diego**

Credit: Encephalon Inc.

A participant is monitored during a meditation event.

Researchers at the University of California San Diego have found that an intensive retreat combining multiple mind-body techniques, including meditation and healing practices, produced rapid and wide-ranging changes in brain function and blood biology. The researchers found that the retreat engaged natural physiological pathways promoting neuroplasticity, metabolism, immunity and pain relief. The findings, published in Communications Biology, provide insights into how consciousness and psychological practices can enhance physical health.

Meditation and other mind-body practices have been utilized by cultures worldwide for thousands of years to promote health and wellness; however, the underlying biology of these approaches remains poorly understood. The new study, part of a multi-million-dollar research initiative supported by the InnerScience Research Fund, is the first to comprehensively quantify the biological effects of multiple mind-body techniques administered together over a short period.

"We've known for years that practices like meditation can influence health, but what's striking is that combining multiple mind-body practices into a single retreat produced changes across so many

biological systems that we could measure directly in the brain and blood," said senior study author Hemal H. Patel, Ph.D., professor of anesthesiology at UC San Diego School of Medicine and research career scientist at the Veterans Affairs San Diego Healthcare System. "This isn't about just stress relief or relaxation; this is about fundamentally changing how the brain engages with reality and quantifying these changes biologically."

As part of the study, 20 healthy adults attended a 7-day residential program led by neuroscience educator and author Joe Dispenza, D.C., featuring daily lecture sessions, approximately 33 hours of guided meditation and group healing practices. These practices used an "open-label placebo" approach, meaning participants knowingly took part in healing activities presented as placebos — procedures or treatments with no active medical ingredient, but which can still produce real benefits through the power of expectation, social connection and shared practices.

Before and after the retreat, participants had their brains scanned using functional magnetic resonance imaging (fMRI), an approach that measures brain activity in real time. The researchers also used blood testing to measure changes in metabolic activity, immune activation and other biological functions.

The researchers observed several major changes after the retreat:

- **Brain network changes**: Meditation during the retreat reduced activity in parts of the brain associated with mental chatter, making brain function more efficient overall.
- **Enhanced neuroplasticity**: When applied to laboratory-grown neurons, blood plasma from post-retreat participants made brain cells grow longer branches and form new connections.
- **Metabolic shifts**: Cells treated with post-retreat plasma showed an increase in glycolytic (sugar-burning) metabolism, indicating a more flexible and adaptive metabolic state.
- **Natural pain relief**: Blood levels of endogenous opioids – the body's natural painkillers – increased after the retreat, indicating that the body's natural pain-relief systems were activated.
- **Immune activation**: Meditation increased inflammatory and anti-inflammatory immune signals simultaneously, suggesting a complex, adaptive immune response rather than a simple suppression or activation.
- **Gene and molecular signaling changes**: Small RNA and gene activity in blood shifted after the retreat, particularly in pathways related to brain function.

Participants also completed the Mystical Experience Questionnaire (MEQ-30) to assess whether they had a "mystical" experience during meditation—characterized by profound feelings of unity, transcendence, and altered states of consciousness. Average MEQ scores increased significantly after the retreat, rising from 2.37 before the retreat to 3.02 afterwards. Higher scores on these surveys were also correlated with greater biological changes after the retreat, including greater integration of brain activity across different regions. In other words, the more connected the brain is, the greater the likelihood of a mystical experience.

The findings suggest that intensive meditation can trigger very similar brain activity to that which has been previously documented with psychedelic substances.

"We're seeing the same mystical experiences and neural connectivity patterns that typically require psilocybin, now achieved through meditation practice alone," added Patel. "Seeing both central nervous system changes in brain scans and systemic changes in blood chemistry underscores that these mind-body practices are acting on a whole-body scale."

The study results provide a biological framework for understanding how non-drug mind-body interventions can support health and well-being. By enhancing neuroplasticity and activating the immune system, these practices could help promote mental health, emotional regulation and stress resilience. Additionally, the activation of endogenous opioid pathways suggests that this combination of mind-body practices may also be useful for chronic pain management.

While the retreat's effects were measured in healthy adults, the researchers emphasize that controlled trials

in patient populations are still needed to determine specific clinical benefits and applications. They are particularly interested in whether mind-body retreats can benefit people with chronic pain, mood disorders or immune-related conditions.

Looking ahead, the research team plans to investigate how each individual component of the retreat — meditation, reconceptualization, and open-label placebo healing — works alone and in combination. Additionally, future studies will investigate the duration of these biological changes and whether repeated interventions can enhance or sustain their effects.

"This study shows that our minds and bodies are deeply interconnected — what we believe, how we focus our attention, and the practices we participate in can leave measurable fingerprints on our biology," said first author Alex Jinich-Diamant, a doctoral student in the Departments of Cognitive Science and Anesthesiology at UC San Diego. "It's an exciting step toward understanding how conscious experience and physical health are intertwined, and how we might harness that connection to promote well-being in new ways."

Link to full paper: https://www.doi.org/10.1038/s42003-025-09088-3

Additional coauthors of the study include Sierra Simpson, Juan P. Zuniga-Hertz, Ramamurthy Chitteti, Jan M. Schilling, Jacqueline A. Bonds, Laura Case, Andrei V. Chernov, Natalia Esther Amkie Stahl, Michael Licamele, Narin Fazlalipour and, Swetha Devulapalli, at UC San Diego; Joe Dispenza and Michelle A. Poirier at Metamorphosis LLC; Jacqueline Maree and Tobias Moeller-Bertram at VitaMed Research; and Leonardo Christov-Moore and Nicco Reggente at the Institute for Advanced Consciousness Studies.

This work was supported by the InnerScience Research Fund and a Veterans Administration Research Career Scientist Award (BX005229).

Disclosure: One co-author (Joe Dispenza) is employed by Encephalon, Inc., the company offering the retreat; all other authors declare no competing interests.

Split Blankets, Not Beds

Your body naturally regulates its temperature during the day and during most sleep stages. This is called thermoregulation. Basically, we shiver when we're cold and sweat when we're hot. These important body functions cease when we're in the rapid eye movement (REM) sleep stage. As a result, our bodies have trouble regulating our temperature during REM. If your partner likes it hot in the room and you get sweaty, then your body could shift you out of REM and into a lighter sleep stage, so that your body can start regulating your temperature again. This decreases the quality of your sleep. Since your body shifts you into a lighter sleep stage if you're too hot or too cold, you don't spend as much time in restorative REM.

It's crucial that your body stays at its optimal temperature for sleep (~68-72°), so consider investing in a separate comforter for yourself. If you're constantly hot while your partner is always cold, let them use a heavy blanket and get a lighter one for yourself. Keep in mind that women generally run a few degrees colder than men. A blanket that makes a man nice and cozy might not be enough for a woman, while a man might sweat under the heavy blanket that his sleeping partner loves.

Changing your blankets to suit your personal temperature needs can make a huge difference in the quality of your sleep. So break up with your shared comforter and enjoy better sleep with your partner.

Disclaimer

Information published in the Polio Postbox may not represent the opinion of Polio Regina. It is not to be regarded as Polio Regina's endorsement of treatment, products, or individuals. If you have or suspect you may have a health problem, please consult your health care professional.

You Are Invited

Polio Regina is inviting people who have had poliomyelitis and are now experiencing new symptoms such as fatigue, muscle weakness and cold intolerance, to join our self-help support group to learn how they can cope with post-polio syndrome. Spouses, partners, and family members are also welcome. Polio Regina Inc. was formed to help people from Saskatchewan.

Our Objectives:

- To develop, promote and increase awareness of Post Polio Syndrome.
- To disseminate information concerning research and treatment pertaining to Post Polio Syndrome.
- To provide support to survivors of polio, other than financial aid.

Where to Meet

Recently we have been conducting some of our meetings by Zoom, some in person and some hybrid in person-Zoom. There are no meetings in June, July, August, or December. We usually have our Spring Picnic in May and our Christmas party in November, at a restaurant. For more information on meetings phone 306 757-8051 or check out our website: http://nonprofits.accesscomm.ca/polio/ for more information on Polio Regina and links to other useful related information or you can just Google **Polio Regina.** Our email address is: ivan.jorgensen@sasktel.net

Polio Regina Alternate Methods of Payments

Bank e-transfer

We now can receive e-transfers to our e-mail address polioregina@outlook.com and the funds are directly deposited in the Polio Regina bank account.

Please confirm your contact information: address, phone number, email address in the comment area of the e-transfer. Then a receipt will be issued and mailed for the amount.

If you have questions about e-transfer, please contact treasurer David Cotcher at email cotcher@sasktel.net or phone 306-949-1796.

Canadahelps.org

There is the option to use Canadahelps.org website which has a Polio Regina page. This will deposit the membership/donation directly into the Polio Regina bank account.

1. Go to the website link https://www.canadahelps.org/en/charities/polio-regina-inc/

2. OR on the Canadahelps.org website enter Polio Regina Inc in the charity search.

3. Enter the amount, your name, address, email address and payment information.

4. Canadahelps issues a receipt directly to the donor by email. They take 4% administration fee and deposit the net amount directly in the Polio Regina bank account.

5. The Polio Regina treasurer, David Cotcher will be able to access the information and acknowledge the membership/donation.

MEMBERSHIP APPLICATION POLIO REGINA Inc.

Name____

Active ( ) if you had polio   Associate ( )   New ( )   Renewal ( )

Address ____

____

Postal Code____________________Phone: ________________

Annual membership fee: (Jan.- Dec.)   Membership Fees are due January 7, 2026

$10 Single; $15 family $__________

My donation to Polio Regina Inc.: $__________

Total $__________

Please make cheque payable to: **Polio Regina Inc.** and mail this application form and cheque to:
Polio Regina Inc., 78 Petersmeyer St., Regina, SK S4R 7P7 (Official receipt for income tax purposes will be mailed.)