PD POWER LUNCH #2

EXERCISE AS MEDICINE:

BUILDING SUSTAINABLE EXERCISE HABITS FOR INDIVIDUALS WITH PARKINSON'S

INCLUDING A PET TRACER STUDY UPDATE AND GUTID MICROBIOME STUDY OVERVIEW

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DR. DAVID RUSSELL

MICHELLE HESPELER

Yale SCHOOL OF MEDICINE

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Please Read: Important Disclaimer

This webinar is intended for general informational and discussion purposes only and does not constitute medical advice, diagnosis, or treatment. The information shared may not be appropriate for every individual.

Individual Appropriateness

The information shared may not be suitable for every individual's unique situation.

Professional Medical Advice

Always seek advice from your physician or a qualified healthcare professional regarding any medical conditions, symptoms, medications, or exercise programs.

Do Not Delay Care

Do not disregard or delay seeking professional medical advice because of any content discussed in this webinar.

Educational Opinions

Any opinions expressed are offered for discussion and education purposes only.

Consult Your Clinician

Please consult your clinician before making any health-related decisions or taking action.

Q&A Information

Thank you for your enthusiastic engagement and the excellent questions you've submitted. While our speakers are keen to address every query, we face both time constraints and institutional rules that prevent us from answering all questions live. To ensure our Q&A session is as beneficial as possible for everyone, we will be prioritizing questions that are general and relevant to today's topics.

No Personalized Medical Advice

Our speakers cannot provide personalized medical advice or recommendations for an individual's specific situation.

Expertise Boundaries

We may not be able to address questions that fall outside a speaker's area of expertise.

Personal Questions

If your question is personal or highly specific, we encourage you to discuss it with your own clinician.

At CureNow, We're Impatient for Change.

We want to do everything we can to drive research forward; while at the same time, being collaborative, cooperative, and respectful of the thousands of individuals who work so tirelessly in research and advocacy. As Steve and Michelle have so frequently stated over the years, **bringing people together is what we do best.**

Our Recent Work

CureNow partnered with the **International Parkinson and Movement Disorder Society** to survey clinicians about recruiting in Parkinson's research. We're getting ready to publish those results very soon—something we hope will spur improvement in research.

Materials Download

Many materials are available for download either in the chat, or at curenowpd.org

Today’s Agenda

12:15–12:17 — 1: Welcome + Framing

(Kelly Kearney,CNPD)

Brief welcome + housekeeping • Q&A: general, on-topic only (no individualized advice)

12:17–12:32 — 2: Motivation, Inspiration & Habit Building

(15 min)

Michelle Hespeler (with Elena Panzeri) • Includes brief Gut Study update

12:32–12:47 — 3: Exercise Benefits + Practical Recommendations

(15 min)

Dr. Sule Tinaz • Benefits • What "moderate/high intensity" means • Practical guidance

12:47–12:57 — 4: PET Tracer Study Update + Recruitment Status

(10 min)

Dr. David Russell

12:57–1:07 — 5: Q&A

(10 min)

Speaker-aligned questions only • No personal medical advice • Off-topic questions may not be addressed

1:07–1:08 — 6: Save the Date: Lunch & Learn #3 (Wed, March 4)

(1 min)

- Dr. Joy A. deMarcaida (HHC): Non-motor symptoms + integrative care
- Dr. David Russell: PET update

1:08–1:15 — 7: Final Thoughts & Close

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Motivation, Inspiration, and Habit Building for Parkinson's Disease

A comprehensive guide to overcoming the unique challenges of motivation and movement in Parkinson's Disease through science-backed strategies.

Michelle’s Item 1:
Motivation

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Why You Don't Feel Like Moving (It's Not You!)

The Problem

Parkinson's lowers dopamine. Dopamine is the chemical that says, "Go!"

The Reality

Waiting to "feel like it" won't work because your "starter motor" is broken.

The Details

This is biological. In Parkinson’s, the brain’s signal system doesn’t always connect smoothly the way you want it to. The mes sage from your brain through the nervous system to your muscles can be slower, weaker, or inconsistent.

It’s like trying to grow a lawn when the fertilizer is missing.

That “fertilizer” is dopamine. Dopamine is involved in reward, drive, and getting started. When dopamine is low, it can feel muc h harder to initiate movement or follow through —even when you want to.

So if you’re struggling to start, it’s not a character flaw. It’s the wiring —and the chemistry —making “just push through” a lot harder.

Michelle's Item 1:
Motivation

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01 Motivation is the brain's "go" signal.
It's the inner push that helps you start and follow through—especially when it's not exciting.
In Parkinson's, that "go" signal can be weaker or inconsistent because the dopamine system that supports reward, drive, and initiating action is affected.

02 Help Your Motivation:
Get The Time of Day Right.
What time of day do you feel the best/most agile? The most "awake"?
When are your meds at their best level?
For me, late morning-early afternoon; my body feels better, my mind is more focused, I have gotten my chores done.
Because my mind and body are more away, I can actually exercise at a high intensity and get a better workout.

03 Take that First Step.
Make it as easy as possible.
Tell yourself it just has to be 5 minutes.
Just to "get you started".
Then you will feel better and want more.

Michelle's Item 1:
Motivation

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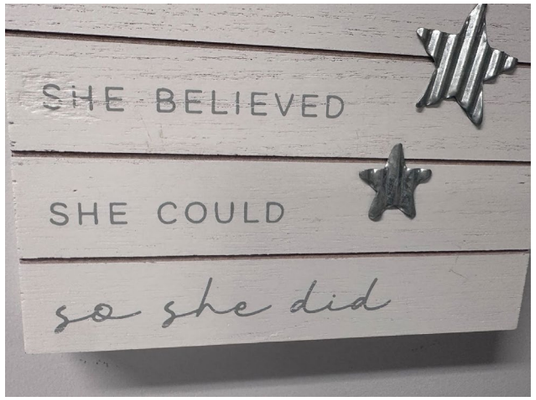
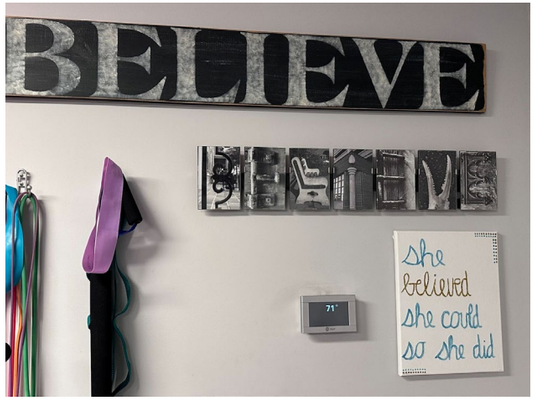
04 Master the Magic of Starting
Optimize your environment
Loop other people in
Use the 5 minute idea
Keep it simple – no need for a huge ambitious plan
Get started each time you do it





05 Be Ready. Be Organized.
Have your workout clothes and sneakers ready
Have your workout equipment available and visible-you shouldn't have to set the up each day.
Create a space in your home to do it on your own or take a virtual class.
This is your "happy space" with pictures or quotes surrounding you

Michelle's Item 2: Inspiration

Finding Your "Why" (Reframing)

The Obstacles

Hard Work

I don't have time

I am not good at these exercises

Why me?

The Shift

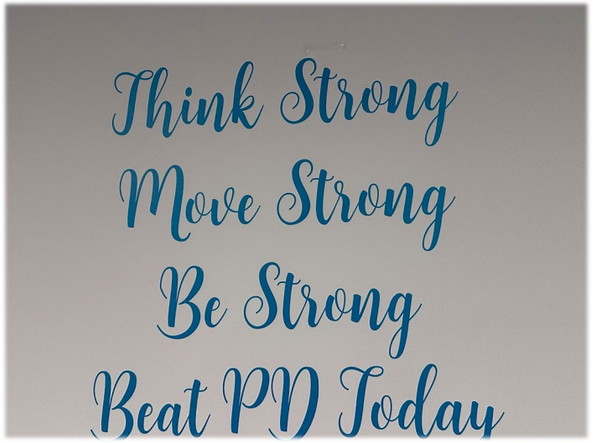
Everyone gets something

This I can deal with

I want to play with my grandkids

I want to go on trips, be independent

I must stay healthy



My Mantra

Think Strong : think positive about yourself, your body, how you move, visualize yourself moving with strength and confidence.

Move Strong : move with intention, strength, power.

Be Strong + Believe: that you will overcome these challenges

Michelle's Item 2: Inspiration

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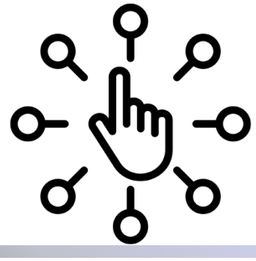
WHAT TO DO: Bring Variety, Challenges to Exercise

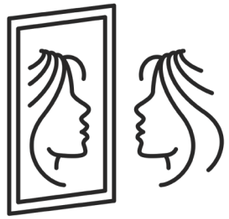


Vary Your Exercise

Some days with groups, like BPD
Some days Walk, Bike, etc
Intensity With High Heart Rate!

Mini Challenges & Games

Walk to count red cars. Walk to inspect your garden.
Don't stop until the timer says 0
Monthly goals
Take a walk but do a certain distance in less time than usual
Walk or run to the beat of a song-keep the pace
Keep your brain guessing what's next



The Mirror Trick

The brain has "mirror neurons" that fire when you watch others:
Join a group class, (PwP's or not)

Michelle's Item 2:
Inspiration

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WHAT TO DO: The "Mirror" Trick/Joining a Group Class

The Secret Weapon

Watching other people move helps you move.

Action Step

Join a group class or find a workout buddy.

Why It Works

Your brain has "Mirror Neurons" that fire when you watch others. It's like a jump start for your system.

Michelle's Item 3:
Habits

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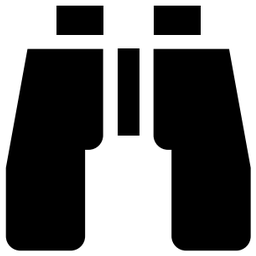
The More Rewarding a Habit is.....
The More Likely It Will Stick.

4 Tools to Help Start Up and Keep a Habit Going




Michelle's Item 3:
Habits

Make it Obvious/Use Visual Cues

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Michelle's Item 3:

Habits

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Make it More Attractive: Fun & Appealing

Michelle's Item 3:

Habits

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Make it Easy: Convenient, Frictionless

Michelle's Item 3:

Habits

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Make it More Satisfying: Pleasure, Reward

Michelle's Item 3:
Habits

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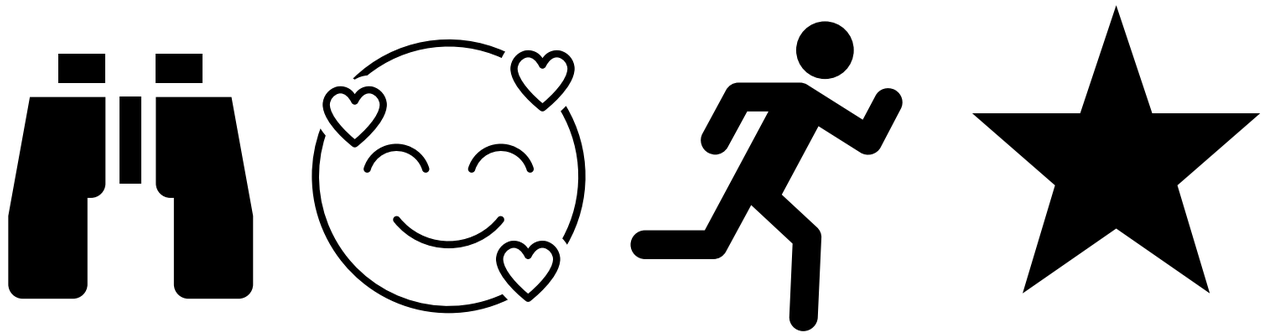
The More Rewarding a Habit is
The More Likely It Will Stick:

4 Tools:

- More Obvious
- More Attractive
- Easier
- More Satisfying



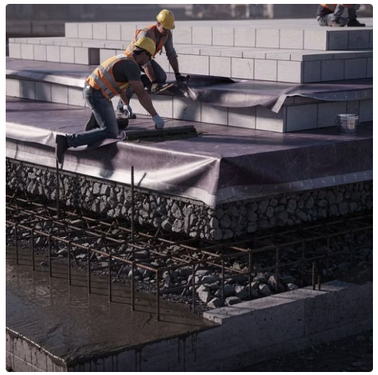
Brain Changes: Plasticity Importance

Neuroplasticity is the brain's remarkable ability to continuously reorganize itself by forming new neural connections throughout life. This i sn't just a biological curiosity—it's a powerful mechanism that offers real hope for people living with Parkinson's disease.

Because Parkinson's is fundamentally a brain disease, understanding that PD progression can be influenced by actively changin g our brain's plasticity opens new doors for intervention. By intentionally engaging in specific strategies, we can work with our brain's natural capacity to adapt and po tentially slow disease progression.

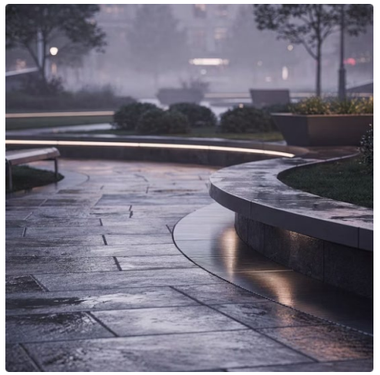
Chunking

Break improvement into small, manageable steps. Habit formation requires many tiny changes implemented gradually over time, not all at once. Focus on one piece at a time to build sustainable progress without overwhelm.



Stacking

Learn the evidence-based approaches, then layer them together. Neuroscience shows that instructional, adaptive, self-directed plasticity requires proper learning. Master multiple effective strategies, then stack them to create meaningful change.



Continuous Practice

Embrace the "never miss twice" principle. Everyone makes mistakes—the key is course-correcting quickly. Build resilience and flexibility by developing your ability to rebound rapidly when setbacks occur.

Summary Slide: Your "Toolkit" for Consistency

- It’s not laziness: Parkinson’s can reduce dopamine, which makes starting and following through harder—your “go” signal may be weaker.
- Don’t wait to “feel like it”: Use strategies that help you start even when motivation is low.
- Work with your best time of day: Plan movement/exercise when you feel most “on” (often when medications are working best).
- Start tiny to get moving: Commit to just 5 minutes—starting is often the hardest part.
- Set up your environment for success: Keep it simple, be prepared, and make exercise easier to begin (clothes/shoes ready, equipment visible, dedicated space).
- Reconnect with your “why”: Focus on what movement protects (independence, energy, confidence, time with family, doing what you love).
- Make exercise more engaging: Add variety, fun “mini-challenges,” and (when appropriate) higher-intensity work that fits your ability and safety.
- Use people as a boost: Group classes or a workout buddy can help—being around others who are moving can support you, too.
- Build habits that stick: Make the habit more obvious, more attractive, easier, and more satisfying (rewarding).
- Keep momentum after slip-ups: Use small steps (chunking), stack helpful routines (stacking), and aim for “never miss twice.”

DEEP DIVE 1

The Neuroscience of Motivation

The "Cost-Benefit" Glitch in Parkinson's

The Science of "Wanting" vs. "Liking"

Apathy in Parkinson's is not a character flaw; it is a disruption in the mesolimbic dopamine pathway. This system controls "Incentive Salience"—the feeling of wanting to do something. Research shows that while PD patients often retain the ability to enjoy a reward ("Liking"), they lose the chemical signal required to initiate the effort to get it ("Wanting").

The Broken Calculation

The brain constantly runs a "Cost-Benefit Analysis" before any action. In PD, low dopamine causes the brain to overestimate the "cost" (effort) and underestimate the "reward." This makes even simple tasks feel like climbing a mountain. We must artificially inflate the reward (using immediate treats/praise) or drastically lower the activation energy (using cues) to balance the equation.

Assessment Motivation

While the "drive to move" (locomotion motivation) is often impaired, the "drive to understand" (assessment motivation) remain s intact. This is why "curiosity -based" tasks (e.g., exploring a garden) can bypass the apathy block.

DEEP DIVE 2

The Psychology of Inspiration

Moving from "Willfulness" to "Willingness"

Acceptance and Commitment Therapy (ACT)

Traditional motivation often fails because it focuses on "fighting" the disease. ACT offers a different framework: "Psychological Flexibility." This involves **"Cognitive Defusion" —learning to observe a negative thought (e.g., "I am too tired") without obeying it** . You can acknowledge the thought and take the step simultaneously.

Radical Acceptance

Many patients fall into the trap of "Willfulness" —a refusal to accept the reality of their limitations, which drains mental energy. "Radical Acceptance" shifts this to "Willingness" —accepting the situation exactly as it is (e.g., "I need a walker today") so that **energy can be spent on movement rather than denial.**

Values-Based Goals

Motivation rooted in "symptom reduction" is fragile because symptoms fluctuate. **Inspiration rooted in "Values" (e.g., "being an active grandparent") is resilient. We move to connect with our values, not just to manage our tremors.**

DEEP DIVE 3

The Mechanics of Habit Formation

Repairing the "Broken Autopilot"

Goal-Directed vs. Automatic Control

Healthy brains move habits from the "Goal-Directed" system (Prefrontal Cortex) to the "Automatic" system (Basal Ganglia/Putamen). In PD, the Putamen is compromised, meaning actions rarely become fully automatic. You must rely on "Goal-Directed" focus, which is cognitively expensive.

The "Biologically Mandated" Anchor (Physical Stacking)

Standard habit advice says "stack a new habit on an old one." In PD, the "old habit" must be physically unavoidable (a biological mandate). Mental anchors (like "thinking about lunch") are too weak. **The Protocol: Anchor the new habit to a bodily function, such as waking up, using the toilet, or brushing teeth. These are the only "guaranteed" triggers in the day.**

External Cues Override Internal Deficits

Since the internal habit loop is broken, we must build a "prosthetic environment." Visual cues (tape on the floor, for exampl e) and auditory cues (alarms) bypass the damaged basal ganglia and recruit the visual cortex to initiate movement.

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Questions and Answers

SAVE THE DATE

CNPD Lunch & Learn #3: Integrative Care in Parkinson's Disease

Join us for an essential clinical education session focused on advancing patient care through a comprehensive, whole -person approach to Parkinson's disease management. This interactive program brings together leading expertise to explore often -overlooked aspects of PD care.

When

Wednesday, March 4, 2025

12:00–1:00 PM

Featured Speaker

Dr. Joy A. deMarcaida

Hartford HealthCare

Primary Focus

Non-Motor Symptoms in PD

Integrative care strategies

Session Highlights

Dr. deMarcaida will share practical, evidence-based insights on recognizing and managing the non-motor symptoms that significantly impact quality of life for Parkinson's patients. These symptoms—including sleep disturbances, cognitive changes, mood disorders, and autonomic dysfunction—are often underaddressed yet critically important to comprehensive care.

The session emphasizes actionable strategies for implementing an integrative, patient-centered approach that addresses the full spectrum of PD manifestations beyond movement disorders.

Bonus Information

PET Tracer Study Update

Dr. David Russell will provide a brief update on the latest developments in PET imaging research and its implications for Parkinson's diagnosis and monitoring.