

Emerging Wellness Research: Key Takeaways & Ideas for You



DECEMBER PROGRAMS

WEBINAR – Jan 5 How to Eat Well with MS (And Actually Enjoy It!)

> JUMPSTART – Jan 13 Get Started With New Habits

YOUR QUESITONS ANSWERED – Jan 18 Diet & Nutrition

SPECIAL WEBINAR - Jan 19 COVID-19: An Update on the Current Landscape

> COACHING 4-WEEK SERIES, PT 1 – Jan 19 Making Diet Changes that Stick

CanDo-MS.org

Multiple

Sclerosis

How to Ask Questions During the Webinar

Type in your questions using the **Questions/Chat** box



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Learning Objectives

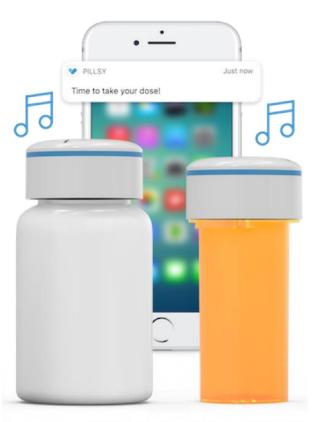
Participants and support partners will be able to:

- Summarize recent findings on diet, pain, and tools for everyday life
- List at least 3 pandemic growth tips for people with MS
- Describe the way that depression and vascular health conditions interact
- Describe the benefits of exercise, including high intensity interval training, for people with MS



Tools and Gadgets

- Electronic Pill Bottle & Cap Non-invasive monitoring and helps improve adherence to oral DMTs
 - Pillsy[™] Smart Bottle and Pill Cap
- Light Therapy Safe, feasible, and welltolerated in people with MS associated fatigue





Tools and Gadgets

• Augmented Cane – Self-navigating smart cane





https://www.sciencetimes.com/articles/33943/20211014/stanford-university-develops-white-cane-equipped-advanced-sensors-lidar-technology.htm

Tools and Gadgets

• Walking Bike Without Pedals – The Alinker





Pain and MS

- 50-60% of people with MS experience pain
- Pain can come from MS and other sources
- Chronic pain usually requires a multi-modal approach
- Rehabilitation and other behavioral interventions can help treat pain and improve function.
 - Relaxation
 - Cognitive Behavioral Therapy
 - Mindfulness Training





Diet and Nutrition

- Increasing evidence suggests that lifestyle factors such as diet and exercise impact the risk and course of MS.
- There are no diets that have been studied well enough to prove that they improve traditional MS outcomes (relapses, MRI outcomes, etc.).
- It is known that eating a healthy diet will minimize comorbidities.
- Stay informed.
 - <u>https://www.nationalmssociety.org/Living</u> <u>-Well-With-MS/Diet-Exercise-Healthy-</u> <u>Behaviors/Diet-Nutrition/Dietary-Studies-</u> <u>in-MS</u>



Diet & Nutrition Research

Swank & Wahls Diets – 2021 Update

- People on **BOTH** diets had:
 - Less fatigue compared to before the trial
 - Improvements in quality of life, information processing speed, and walking distance



"If you can't control the wind, adjust your sails"

Tips for post-pandemic benefit finding from young adults (18-45) living with MS





EXISTENTIAL GROWTH

- Learn the art of patience and small, caring gestures
- Slowing down allows for unexpected discoveries
- Let go of control and embrace vulnerability to discover some new positives
- Freedom = choosing responsibly your own life and wellness



RELATIONSHIP GROWTH

- Receiving but also giving support helps us move forward
- Don't forget or take for granted the affection of those around you



PERSONAL GROWTH

- Take care of yourself body and mind
- You have the right to express and satisfy your needs
- Pursue your goals with determination
- Recognize and nurture your strengths; value yourself
- Do not fear silence and solitude; self-knowledge can emerge and grow
- Do not regret what you do not have; in its absence you can rediscover the value of what you have left or can recover [or discover for the first time]



Depression and Vascular Conditions

- Depression is a common symptom of MS
- Depression increases the risk of vascular conditions (high blood pressure and cholesterol, and diabetes) and contributes to a shortened lifespan
- Vascular conditions can hasten disease progression and shorten the lifespan for people with MS
- Key take-aways
 - Diagnosing and treating depression can reduce your risk of vascular conditions
 - Diagnosing and treating vascular conditions can prolong your life and slow disease progression
 - Depression and vascular conditions are *highly manageable*





Recommendations

150 minutes moderate intensity exercise/physical activity per week... OR

75 minutes of vigorous intensity exercise/physical activity per week...OR

Combination of both

Barriers

Time Fatigue **Motivation Changing Clothes** Equipment **Heat Sensitivity Schedule**



Periodic exercise may be just as effective as continuous exercise







Exercise Snacks vs High Intensity Interval Training

Exercise Snacks

Variety of exercise completed intermittently throughout the day

Examples: Neck stretch, mini squats, walking lap around the house, seated rows

Can Do MS Exercise Snacks

HIIT

Short bouts of very high intensity exercise, repeated with a series of lighter moments of movement

Focused on cardiovascular and respiratory fitness



HIIT to be FIT: Current Knowledge

- Animal models of MS, 6 weeks of HIIT, indicated improved biomarkers for maintaining myelination
- Reduced relapse rate over 24-week period and beyond
- Effectiveness in inpatient and outpatient settings
- Improved cardiovascular (HR, VO2) fitness, glucose and insulin sensitivity
- Minimal adverse reactions (pain)



HIIT to be FIT: Unanswered Questions

- Appropriateness for all abilities and stages of MS?
- Cardiovascular effects?
- Extent of impact on symptoms?
- Neuroprotective or anti-inflammatory effects?
- Adherence?
- Modes?
- Injury risk?
- Intensity?



10	Max Effort Activity Feels almost impossible to keep going. Completely out of breath, unable to talk. Cannot maintain for more than a very short time.
9	Very Hard Activity Very difficult to maintain exercise intensity. Can barely breathe and speak only a few words.
7-8	Vigorous Activity Borderline uncomfortable. Short of breath, can speak a sentence.
4-6	Moderate Activity Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.
4-6 2-3	Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming

Tips to Starting HIIT with MS



Talk with your healthcare provider(s)

Become comfortable with RPE scale and find an accessible mode of exercise Avoid HIIT on

consecutive days



Sample HIIT Routine

- Warm Up: 2-3 minutes; 2-3/10
- **HIIT**: 20-second interval; 8-10/10
- **Shift down**: 2-3-minutes; 3-4/10
- HIIT: 20-second interval;8-10/10
- **Shift down**: 2-3-minutes; 3-4/10
- HIIT: 20-second interval 8-10/10
- Cool Down: 2-3 minutes; 2-3/10
- **Pre/post cooling!

RATE OF PERCEIVED EXERTION	
10	Max Effort Activity Feels almost impossible to keep going. Completely out of breath, unable to talk. Cannot maintain for more than a very short time.
9	Very Hard Activity Very difficult to maintain exercise intensity. Can barely breathe and speak only a few words.
7-8	Vigorous Activity Borderline uncomfortable. Short of breath, can speak a sentence.
4-6	Moderate Activity Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.
2-3	Light Activity Feels like you can maintain for hours. Easy to breathe and carry a conversation.
1	Very Light Activity Hardly any exertion, but more than sleeping, watching TV, etc





Remember:

Research is ongoing in many areas of MS health and wellness



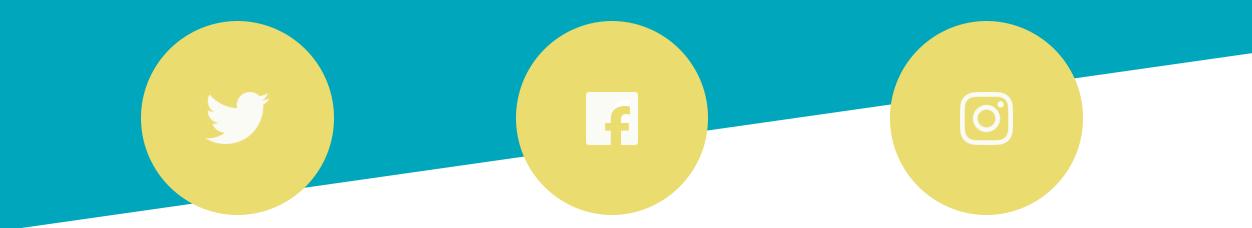








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