

# WEBINAR & TELELEARNING SERIES



## Yoga and Non-Cardio Exercise: Allies in Managing MS Symptoms and Improving Overall Health

**April 11, 2017**



Genentech | Teva Pharmaceuticals | Acorda Therapeutics

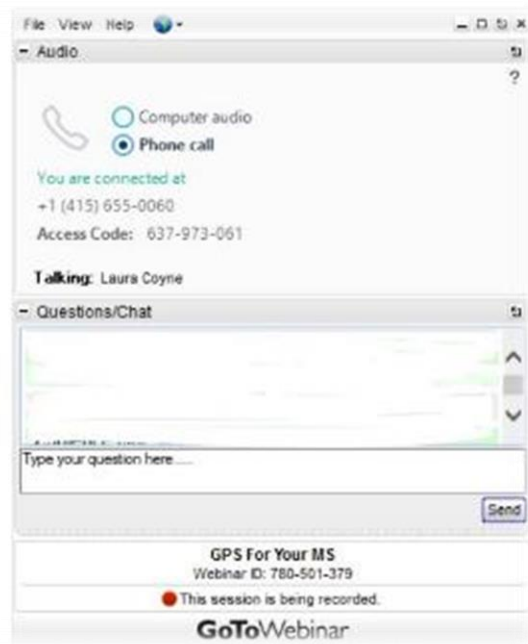


**National  
Multiple Sclerosis  
Society**



# How to Ask Questions During the Webinar:

- Type in your questions using the **Questions/Chat** box
- If box is closed, click **+** to expand



**Go-To-Webinar Attendee Support Line:  
(877) 582-7011**

# Sue Kushner PT, MS



**Physical Therapist / Clinical Education Coordinator  
Slippery Rock University  
Pittsburgh, Pennsylvania**

# Lynn Stazzone, RN, NP



**MS Nurse Practitioner  
Partners MS Center  
Boston, Massachusetts**

# WEBINAR & TELELEARNING SERIES



## Yoga and Non-Cardio Exercise: Allies in Managing MS Symptoms and Improving Overall Health

**April 11, 2017**



Genentech | Teva Pharmaceuticals | Acorda Therapeutics

# What, no **CARDIO?!?!**

- Cardiac exercises **ARE** important components of an exercise program and overall wellness.
- **BUT** other factors are equally important!
- You may not be able to participate in cardiac activities for a number of reasons.
- Whether you can or cannot, your wellness program **must include** areas that are commonly emphasized with MS.

# Aspects of an exercise program (non cardio):

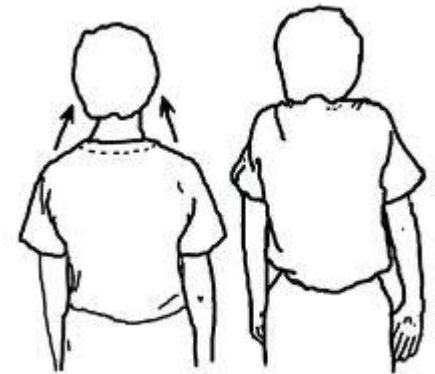
- Keep in mind you have probably heard these before. **ALL are important!**
  - Strength training
  - Flexibility (stretching, range of motion)
  - Balance and Coordination
  - Stress reducers



# Let's practice!!

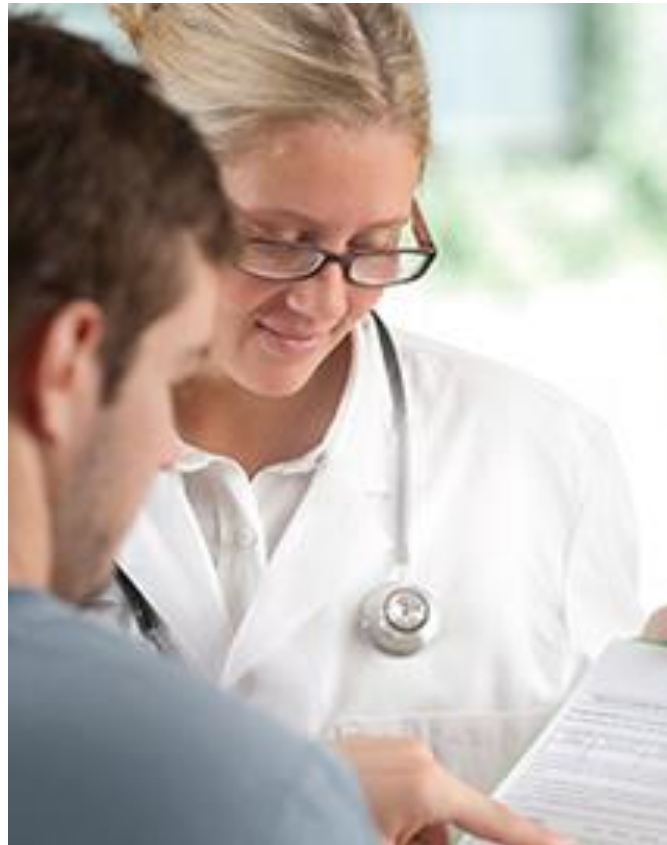
## Right here, right now

- Pelvic tilt
- Ear to shoulder
- Unweighting each SIT bone
- Shoulder rolls/shrugs
- Quad sets/glut sets
- Ankle pumps



©COAST Rehab

# How do you feel now?



# Barriers to Exercise... especially with MS

- Fatigue
- Depression
- Sleep
- Altered sensation
- Pain
- Spasticity/Weakness
- Stress
- Previously sedentary/priorities
- Endurance
- Mobility/Transport
- Accessibility
- Fear
- Heat
- Denial
- Self Image/Peer Pressure
- Cognitive changes

# Why Choose to Exercise When You Have Multiple Sclerosis?

- Exercise and Brain Health: Exercise may have a **neuroprotective effect**
- Insulin-like growth factor-1 appears to act as a **neuroprotective agent** and studies indicate that exercise could promote this factor in MS
- Brain-derived neurotrophic factor (BDNF) increases in the hippocampus with physical activity, which may help **lessen the decline** in cognitive function in MS
- Cardiac risk factors** lowered with yoga

White, LJ, Castellano V,  
“Exercise and Brain Health implications for MS”  
Part 1-neuroal growth factors” 2008

# Symptom Management

- Another way to control MS beyond disease-modifying treatments
- Activities in your individual exercise program should address symptoms:
  - **Spasticity/Ataxia/Tremors**
  - **Fatigue**
  - **Weakness**
  - **Balance and coordination deficits**
  - **Pain**
  - **Depression**

# Symptom Management - Exercising

- **Fatigue**

- Increases stamina & endurance

- **Pain**

- Posture
- Contractures

- **Depression**

- Decreases stress
- Social interaction



© Bodi Empowerment

# Symptom Management - Exercising

- **Weakness**
  - Improves posture
- **Bladder**
  - Pelvic floor strengthening
- **Bowels**
  - Encourages bowel peristalsis or movement



© wikiHow

# Symptom Management - Medications

- **Fatigue**

- Amantadine Provigil

- **Pain**

- Neuroleptics

- **Depression**

- SSRI's
- Counseling



# Symptom Management - Medications

- **Weakness**

- Amapyra

- **Bladder**

- Anticholengics

- **Bowels**

- Fiber
- Stool softner

# Exercise and Activity

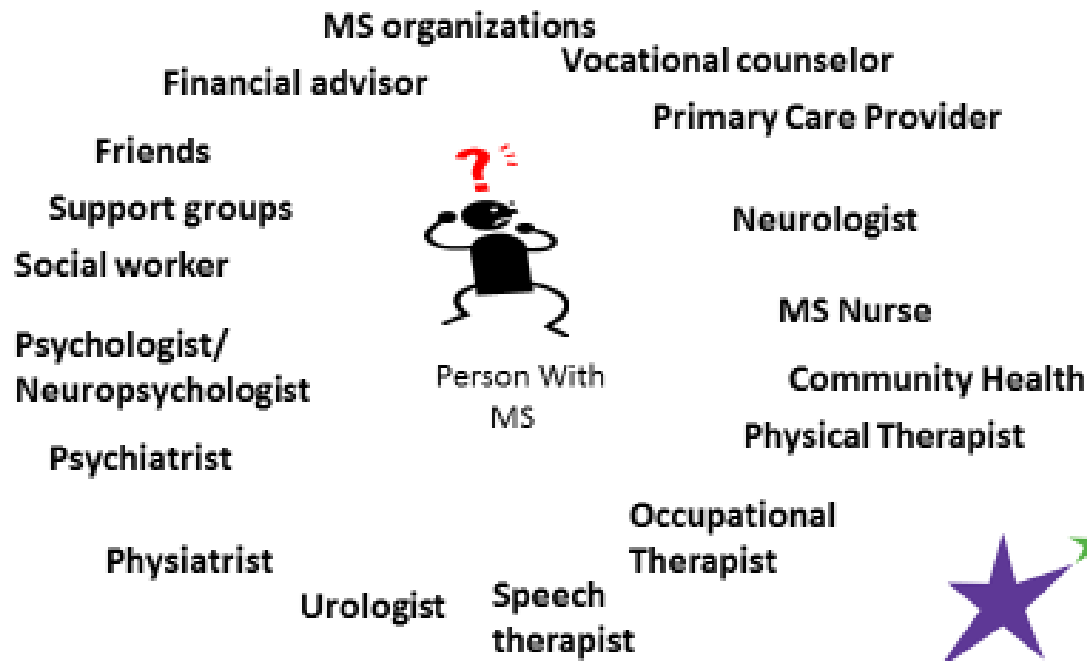
## WE ARE MADE TO MOVE!!

- If normal patterns of movement are compromised, modifications must be made.
- Everyone can do something.
- Incorporate your choices into your daily life.
- Be creative!
- Have fun!
- Be social!



# Your Care Team

## MS Team



I AM. I CAN. I WILL.

***Coordination between all members is vitally important***

# WHAT to do? Who can help me?!?!

- **VERY** important to find excellent team members for your healthy program.
- **YOU** are the driver and must instruct the others what you want out of your program & what works for **you**.
- You may need to **explore options** that are totally new to you and outside of your wheelhouse and **comfort zone**.
- Look at this as an **OPPORTUNITY!!!**
- **Find support** - groups/programs through NMSS/ churches/ gyms/YMCA/YWCA, community centers
- IF you don't find what you like or need, **YOU** can be the catalyst to start something in your area!!

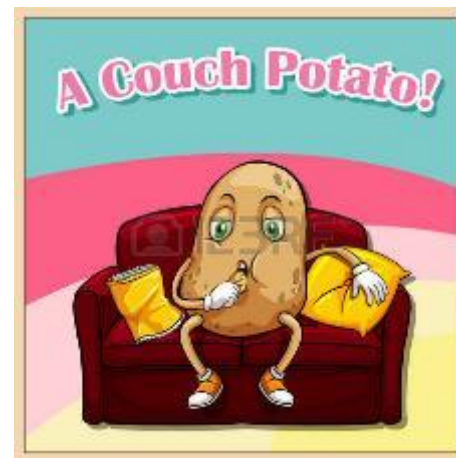
# WHAT to do? (con't.)

- Some activities may incorporate all or some of the areas previously mentioned (strengthening, balance and coordination, flexibility)
  - **Strengthening**
  - **Yoga**
  - **Tai Chi**
  - **Pilates**
  - **Aquatic exercises**



# Weakness

- We lose **strength and muscle** mass as we age.
- **Inactivity** = greater loss of strength + muscle atrophy
- May be due to decreased **neurotransmission**
- May be secondary to fatigue or spasticity
- Identify cause



© 123RF

# Strengthening

- VERY important part of your program, even if you had never done any before!!
- May improve areas of weakness & muscle imbalances.
- Can even improve posture, gait, respiratory function, & balance.
- The best part: **MUSCLE BURNS MORE CALORIES AT REST!!!!**

# Types of Strengthening:

- Free weights - excellent but be careful – **keep safety in mind!**
- Ankle/wrist weights
- Theraband/exercise bands
- Swiss Ball
- Aquatic exercises-water acts as resistance!  
**YOU DO NOT NEED TO BE A SWIMMER** to gain benefits of aquatics and enjoy it!  
(be aware of water temperature)
- Weight machines
  - Kettle balls/weighted balls



# More on Strengthening:

- Progression should be monitored
- Emphasize areas that are identified as weak, but you need an overall strengthening program:  
**Upper extremities, lower extremities, trunk (core)**
- Vary activities to prevent overuse injuries
- LISTEN to your body!
- In general, 2-3x/week



# Flexibility (stretching, range of motion-ROM)

- Lack of ROM can cause pain/discomfort and possibly eventual permanent loss of full range (contractures)
- Lack of ROM can lead to secondary problems such as orthopedic problems, gait deviations, frozen shoulder, kyphosis, plantar fasciitis, bed sores



# Flexibility (stretching, range of motion-ROM)

- **VERY** important part of a program
- Direct link to **balance and coordination**
- Can help fight **spasticity** when done properly
- Like all exercise, **safety first**



# Types of Flexibility exercises:

- Yoga
- Tai Chi
- Pilates
- Daily stretches that incorporate all of the body
- Swiss Ball
- Use of bands



**ALL ACTIVITIES  
CAN BE  
MODIFIED  
AS NEEDED!!**



# More on Flexibility:

- Can be done at any functional level
- May need help of a support partner, PT, OT, etc
- Can be done in seated, supine, prone, standing, etc.
- Should be one daily
- Make sure you are getting all areas of the body-DAILY!
- Look for classes.....NMSS, etc that will do the modifications for you.
- Keep safety in mind!!
- Are any braces, supports needed? Professional assessment!

# Medications

## •Spasms

- Baclofen
- Benzodiazepine
- Acupuncture
- Cold or hot packs
- TENS
- Yoga



# Balance and Coordination (B and C)

- Strength and ROM contribute to B and C!!! (along with other factors, i.e. fatigue, spasticity, pain, etc.)
- VERY important to be properly assessed for B and C. Safety is paramount!!!
- Assistive devices or braces
- Can be done on land, in water, on Swiss Ball, etc.
- Be aware of dizziness, vertigo, visual deficits, decreased sensation in feet and legs...  
*“where things are in space”*
- Like most symptoms related to MS, may vary daily

# Types of Balance and Coordination Activities

- Aquatics: classes, walking/marching forwards, backwards, and sideways
- Harnessed walking: find a PT clinic that offers this- excellent for balance and confidence!
- Swiss Ball- numerous B and C activities on the ball. May use a “peanut shape” for increased balance. May need a spotter or support partner, PT for safety on ball. Can be very fun!!
- Use kitchen counter, variety of floor surfaces, or outdoors (again SAFETY IS PARAMOUNT!)
- Caution with shoes, carpets, throw rugs, slopes, weather, pets, toys, uneven surfaces, transitions



# Yoga

- **Extremely beneficial!** Works on all areas covered...and **reduces stress!**
- MANY types of yoga. Something for everyone
- Flow, mat only, wheelchair, mix of poses/positions
- Can be rigorous or very light
- Try various types and instructors till you find what is best for you
- DVDs, TV programs, MS-focused classes, NMSS sponsored classes

# Tai Chi

- Works on **balance, mindfulness, concentration, positioning of body in space**
- Can be done at all levels
- Look for classes, DVDs, TV shows
- Positions can be modified
- Again, safety 1<sup>st</sup>!!!
- Cool environment



<http://www.nationalmssociety.org/Living-Well-With-MS/Health-Wellness/Exercise/Adaptive-Tai-Chi>

# Pilates

- Large variety of Pilates exercises. Work on lengthening of muscles versus building “bulk.”
- Increase in strength and flexibility are noted
- Mat exercises-strengthening, stretching, B and C
- Reformer tables-more expensive
- Look for classes, DVDs, TV shows
- Seek classes that may target persons with MS

# So let's take control...

- Stay on medications that control the disease
- Symptom Management
- Exercise - We can all do 1% better
- **Be kind to yourself and hope for the future**

# Other beneficial areas that are **NON-CARDIO:**

- **Stress reduction!!!**
- **Relaxation!!!**
- **Mindful meditation!!!**
- **Activities that are FUN!!!**
- **Be social!!!**



# Questions/Comments



**Sue Kushner PT, MS**



**Lynn Stazzone, RN, NP**

If you are enjoying tonight's presentation, please consider donating to our programs:

Text to donate: 970-626-6232

<https://www.mscando.org/get-involved>

# Can Do MS Resources

e|NEWS  
your best life update

Q&A

Can Do Library

Find these resources at [www.MSCanDo.org](http://www.MSCanDo.org).

# National MS Society Resources



[Stretching for People with MS](#)

## [Exercise as Part of Everyday Life](#)



[Exercise & Physical Activity with MS](#)



[Yoga & MS](#)  
[Tai Chi & MS](#)



[Yoga and Tai Chi for MS](#)



[Exercise – or not – in Water](#)



[Yoga Programming for People with MS](#)

Click on these links and access more resources at [nationalMSSociety.org](http://nationalMSSociety.org)



# WEBINAR & TELELEARNING SERIES



## Keeping an Eye on MS

### May 9, 2017



Genentech | Teva Pharmaceuticals | Acorda Therapeutics