



Welcome to today's webinar:

***Get Active with Multiple Sclerosis –
Exercise during COVID-19***

Your Presenter is Caitlin Ireland
Your Facilitator is Andrea Salmon

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Acknowledgement




We acknowledge and pay respect to the traditional custodians past and present on whose lands we meet today.

We acknowledge the deep feelings of attachment and the relationship of Aboriginal people to country and respect the cultural authority of the elders in each community.

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Introduction to Presenter 

Caitlin has been working at MSL as an Exercise Physiologist for 3 years. She is based at the MS Lidcombe Gym in Sydney, where she designs and delivers exercise programs for people living with MS.

Caitlin enjoys working with her clients and appreciates the value that a well-prepared exercise program provides for them.

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**Get Active with Multiple Sclerosis –
Exercise during COVID-19**

CAITLIN IRELAND – APRIL 2020
MS EXERCISE PHYSIOLOGIST

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Program Outline

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- Benefits of exercise for people with MS
- Exercise guidelines
- Types of exercise
- Barriers to exercising and how to overcome them
- Motivation: How to get started and keep going
- Exercising during COVID-19
- Where to get help: Further information & Resources


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Introduction 

Physical Activity is defined as “bodily movement produced by skeletal muscles that requires energy expenditure.”

- Exercise: “planned, structured, and repetitive physical activity for the purpose of developing physical fitness.”
- Incidental Activity: unstructured activity taken during the day, such as walking for transport, housework and the performance of activities of daily living.



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Benefits of exercise for people with MS

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Exercise in MS is safe 😊 

Historically, suggestion that people with MS should avoid exercise

Exercise is safe and beneficial in managing symptoms and maintaining overall wellbeing in MS

- 26 studies – 1296 people with multiple sclerosis
- No increases in relapse
- No adverse events


Pilatti et al Journal of Neurosciences 2014

~ 78% of people with MS undertake no physical activity at all




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Poll One 

Which of these MS symptoms do I have?


- a) Fatigue
- b) Muscle weakness and spasticity
- c) Loss of mobility, balance and falls
- d) Pain and/or changes in sensation
- e) Cognition and mood changes




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Benefits of Exercise




- **Physical:**
 - Reduce secondary deconditioning due to inactivity
 - Improve muscle strength and cardiovascular fitness
 - Reduce fatigue
 - Improve flexibility
 - Correct posture, gait abnormalities
 - Improve balance
 - Improve sexual functioning
 - Maintain/improve bone density
 - Improve bladder/bowel function
- **Psychological benefits**
- **Social benefits**



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Quality of Life!





Exercise means I can:

- Live independently at home or with family
- Enjoy being in the community with family and friends
- Work
- Complete tasks with less assistance
- Complete more tasks before feeling fatigue


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Exercise Guidelines

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Poll Two

How much exercise am I currently doing each week?

- a) None
- b) Less than 1 hour
- c) 1-2 hours
- d) 3-5 hours
- e) More than 5 hours

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Australia's Physical Activity & Sedentary Behaviour Guidelines for Adults MS

Physical Activity Guidelines

- Doing any physical activity is better than doing none
- Be active on most, preferably all, days every week
- Accumulate **150 to 300 minutes** (2 ½ to 5 hours) of **moderate intensity** physical activity or **75 to 150 minutes** (1 ¼ to 2 ½ hours) of **vigorous intensity** physical activity, or an equivalent combination of both, each week
- Do muscle strengthening activities on at least 2 days each week

Sedentary Behaviour Guidelines

- Minimise the amount of time spent in prolonged sitting.
- Break up long periods of sitting as often as possible.

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Development of evidence-informed physical activity guidelines for adults with multiple sclerosis (2013) MS

LATIMER-CHEUNG ET AL

- A team of Canadian researchers undertook a thorough **review of the research literature** on exercise in multiple sclerosis. Results published in May 2013
- The researchers used the review to **determine what the minimal 'dose' of exercise** was, i.e. the frequency, intensity, type, and duration of exercise required to achieve desired benefits
- they then developed **evidence-based exercise guidelines** for people with multiple sclerosis

Target population:


- Adults (aged 18-64), with mild to moderate disability (EDSS 0-7: unable to walk more than 5m even with aid – mostly wheelchair user), relapsing remitting and progressive multiple sclerosis.

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Canadian Physical Activity Guidelines for adults with MS

LATIMER-CHEUNG ET AL



At Least:

- 30 minutes of moderate intensity aerobic activity 2 times per week

AND


- Strength training exercises for major muscle groups 2 times per week

- *Aerobic & strength training activities can be done on the same day*
- *Rest your muscles for at least one day between strength training sessions*
- *Try to do 10-15 reps each exercise, working up to 2 sets*
- *Activities should be performed at moderate intensity (you can talk but not sing)*
- *Pick a resistance so that you can barely do the last set*
- *Rest for 1-2 minutes between each set of exercise*

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Example Exercise Plan



- It could look something like this:

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
30 mins aerobic					30 mins strength training	
	60 mins aerobic + strength training			30 mins aerobic		

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How do we measure intensity?

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HOW DO WE TEACH CLIENTS TO MEASURE INTENSITY?


Target Heart Rate:

- Take your pulse before the warm up. Take your pulse again when you've been exercising for about 5-10 minutes. Continue taking your pulse at regular intervals. Aim for 50-70% HRM
- $HRM = 220 - \text{Age}$
- Not always most effective way of measuring intensity for MS population



Talk Test:

- If you can talk and sing without puffing at all, you're exercising at a low level.
- If you can comfortably talk, but not sing, you're doing moderate-intensity activity.
- If you can't say more than a few words without gasping for breath, this is vigorous-intensity.



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Tai Chi, Yoga, Pilates and stretching are great activities to do **in addition** to the physical activities you do to meet the guidelines. They can build flexibility, balance, and body awareness.

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Types of Exercise
EXERCISE VS. "BEING ACTIVE"

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Being Active	Strength Training	Cardio / Aerobic
<ul style="list-style-type: none"> • Housework • Gardening • Mowing the lawn • Walking to shops • Taking the stairs • Playing with kids • Shopping 	<ul style="list-style-type: none"> • Body weight exercises • TheraBand • Weights machines and free weights • Group strength class 	<ul style="list-style-type: none"> • Walking, running or propelling • Cycling/boxing • Swimming / water aerobics • Sports • Dancing • Cardio Gym equipment • Group classes

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Practical Applications of Exercise

- Symptoms vary from person to person, over time and therefore requires an individual plan.
- Goal specific
- Within your limitations
- Quality not quantity - Little and often
- To be effective exercise needs to be performed regularly at a suitable intensity.
- Choose activities that are enjoyable, match your physical needs, and can be scheduled into a weekly routine.
- As tolerated and gradual progression, start low and monitor
- Safe environment

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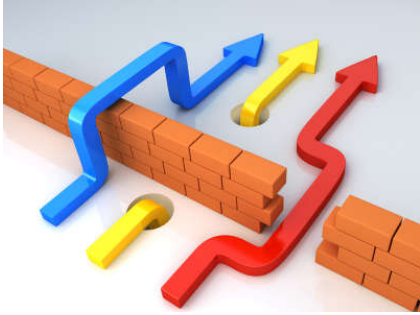
Barriers for people with MS and how to overcome them

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Symptoms & Challenges Effecting Ability to Exercise




- Temperature Sensitivity
- Fatigue
- Weakness / reduced mobility
- Pain
- Exacerbations – what to do



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Heat sensitivity



- Exercise in a cool environment e.g. earlier in the day during Summer, not exercising under direct sunlight, fans, A/C, pool
- Pre- and post-exercise cooling e.g. cool showers
- Cooling during exercise e.g. icy water, loose light clothing, wet towel, cooling scarf, spray bottle of water
- Take breaks
- Strengthening programs may be tolerated better than cardiovascular (fitness) training due to a lesser heating effect on core body temperature
- If symptoms persist for more than 2 hours after exercise, consider reducing the intensity and duration of the next session.

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Fatigue

Fatigue is the most commonly reported symptom in multiple sclerosis: 75 - 95% of people with multiple sclerosis experience fatigue

50 - 60% report fatigue as one of their worst symptoms

- Primary Fatigue
- Secondary Fatigue
- Neuromuscular fatigue
- Exercise CAN significantly reduce fatigue



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Tips to manage fatigue

- Scheduling less fatigued times
- Avoid exercising on days with a lot of social activities, or rest between
- Beginning with exercise sessions of short duration (<20 mins), low intensity, low repetitions, low weights and gradually increasing as tolerated, shorter and more frequent sessions
- Work at own pace and have regular rests
- Mixing vigorous exercises with lighter exercises to avoid long periods of exercise at high heart rates
- Alternating muscle groups to rest one muscle group while exercising another
- Rest after exercise and if fatigue persists for more than 2 hours or if fatigue starts to cause physical problems, consider reducing the duration, intensity, repetitions or weights
- Not exercising if unwell

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Weakness in Legs and Reduced Mobility



- Upper Body exercises – strength and cardio
- Wheelchair based exercises, machines or sports
- Water-based exercise & swimming
- Therapist / assistance / MS group



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Pain




- Ask a health professional if it is safe to start or to continue exercising
- Try different activities and types of equipment; find what works for you based on where you are feeling pain



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What to do during an exacerbation? 

- Take a **break from exercising**
- Reduce intensity and or duration
- Try gentler form of exercise
- Restart at a **reduced intensity and gradually build up**
- Review appropriateness of current program
- Check in with your therapist

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**Motivation:
How to get started
and keep going**

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Getting and Staying Motivated:




- Doing something is better than doing nothing
- Ensure it is enjoyable, combine with fresh air, socialising
- Join an adapted sports team or walking group in your community
- Exercise with someone else
- Schedule it into your week in advance
- Set up a nudge!
- Set specific, realistic goals and reward yourself
- Keep a record of what you have done and your improvements
- Follow a structured program, or a supervised group
- Variety is good.



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What about during COVID-19?

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Poll Three




How is the Coronavirus affecting your ability to exercise?

- a) Not at all – I am doing the same as usual
- b) I am still able to exercise but not as much as usual
- c) I am doing a lot less exercise than normal
- d) I have stopped all regular exercise



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Exercising during Coronavirus



- Walking or propelling outside
- Exercises inside or outside
 - Modifying current program into home program
 - Asking usual therapist for home exercise program
 - Virtual online classes
 - Free online resources
- Telehealth Services



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Exercising safely at home



- Find adequate space
- Remove hazards
- Ensure the space is cool
- Perform dynamic (moving) balance exercises along the hallway where you have safety barriers on either side to reduce risk of falls
- Perform static (still) balance exercises near a chair, kitchen bench or even walker/aid to reduce risk of falls
- Make sure there is enough lighting in the room
- Wear appropriate clothing and shoes
- Have a water bottle and chair close by, making sure you have appropriate rests

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Free online resources



<https://www.mstrust.org.uk/life-ms/exercise/build-your-own-exercise-routine>

<https://exerciseright.com.au/homeworkouts/>

Please note these programs will not be suitable for everyone. Please only complete exercises that are safe and appropriate for you. If you have any concerns about the exercise you are completing, please stop the exercise

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Build your own exercise routine

[HTTPS://WWW.MSTRUST.ORG.UK](https://www.mstrust.org.uk)



Stretching exercises Find out more	Strength exercises Find out more	Standing exercises Find out more
Sitting exercises Find out more	Posture exercises Find out more	Pelvic control exercises Find out more
Lying exercises Find out more	Kneeling exercises Find out more	Core stability Find out more
Breathing exercises Find out more	Balance exercises Find out more	Arm and hand exercises Find out more



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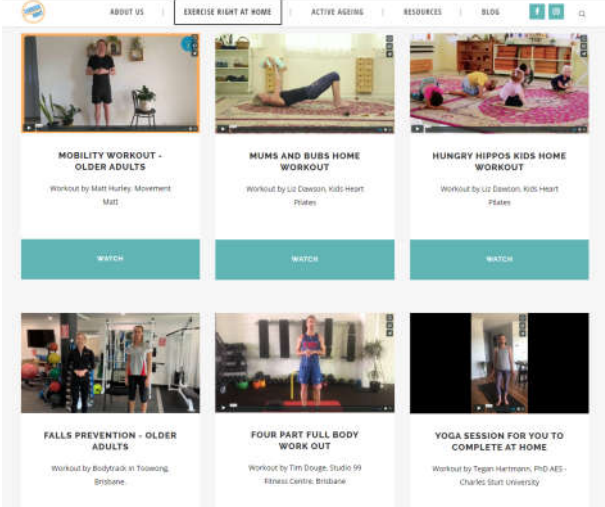

Sit to stand
Exercise 32

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Home workouts

[HTTPS://EXERCISERIGHT.COM.AU/HOMEWORKOUTS/](https://exerciseright.com.au/homeworkouts/)



ABOUT US | EXERCISE RIGHT AT HOME | ACTIVE AGING | RESOURCES | BLOG

- MOBILITY WORKOUT - OLDER ADULTS**
Workout by Matt Hurley, Movement Matt
- MUMS AND BUBS HOME WORKOUT**
Workout by Liz Dawson, Kids Heart Plates
- HUNGRY HIPPOS KIDS HOME WORKOUT**
Workout by Liz Dawson, Kids Heart Plates
- FALLS PREVENTION - OLDER ADULTS**
Workout by Bodytrack at Toowong, Brisbane
- FOUR PART FULL BODY WORK OUT**
Workout by Tim Douge, Studio 99 Fitness Centre, Brisbane
- YOGA SESSION FOR YOU TO COMPLETE AT HOME**
Workout by Tegan Hartmann, PhD A&E - Charles Sturt University

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What is Telehealth?

Telehealth sessions involve your therapist consulting either by phone or videocalls to discuss your goals, perform an assessment and provide you with strategies on how you can better manage your symptoms.



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MSL Telehealth Services

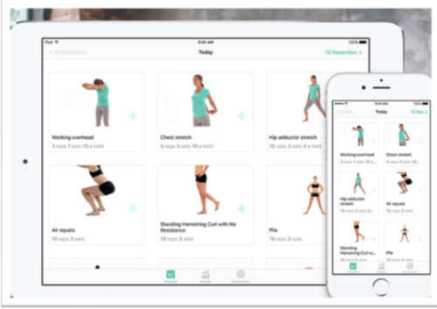

- Physiotherapy
- Occupational Therapy
- Continence
- Exercise Physiology

If you are interested – Call MS Connect!

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Exercise Physiology Telehealth Service



- Initial contact to explain service and book appointment
- Initial Consult - Videocall
- Delivery of Exercise program
- 1 week follow up
- Ongoing support as required

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Where to get help: Further information & Resources

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Getting Help & Advice with Getting Active 

MS Connect
1800 042 138
msconnect@ms.org.au

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Getting Help & Advice with Getting Active 

- Private physiotherapist with neurological or rehabilitation experience <https://australian.physio/> or in hospital outpatient settings
- Exercise physiologist <https://www.essa.org.au/>
- Fitness instructor
- GP for referral
- NDIS, My Aged Care, Medicare



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Getting Help & Advice with Getting Active 

MS Get Fit Tool Kit:
www.csep.ca/cmfiles/Guidelines/MSToolkitEnglish.pdf

<https://www.ms.org.au/living-well-with-multiple-sclerosis/health-wellness/exercise.aspx> NSW & VIC

<https://www.dancehealthalliance.org.au/> NSW & QLD

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Questions




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1800 042 138
msconnect@ms.org.au

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MS Connect



10 reasons to call us:

1. Up-to-date, evidence based information about multiple sclerosis
2. Expert advice on managing symptoms
3. Information about minimising the impact of multiple sclerosis
4. Support for people who are newly diagnosed
5. Information about treatment options
6. Education programs
7. Connections to other people living with multiple sclerosis
8. Referrals to appropriate services in your area
9. Extra support for you and your family
10. Respite options to give families short-term breaks




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Peer Support




- ❖ 1:1 Phone Support
- ❖ Face to Face groups - *(temporarily converted to Telegroups)*
 - 2 in the ACT
 - 11 in Tasmania
 - 17 in NSW
 - 42 in Vic
- ❖ Telegroups
 - Currently running 12 telegroups
- ❖ Facebook groups
 - 3 groups – for people living with MS
 - for carers
 - for young carers – up to 25 years of age



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Get Your Act Together



- Online Tool – designed to help you better manage your multiple sclerosis symptoms
- Focuses on some of the common symptoms of MS – emotions, fatigue, continence, cognition, pain and heat sensitivity
- Designed for people living in the ACT but includes useful information for all people living with MS
- Complete the tool to receive a personalized report (listing services, resources, tips etc)

Visit www.ms.org.au and search Get Your Act Together

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Employment Support Services



The MS Employment Support Service (ESS) is the only MS specialist employment service for people living with multiple sclerosis in Australia that can help you succeed at work, whether that is staying in your current job or finding new employment.

MS Connect PH 1800 042 138



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Registered NDIS Provider



MS is a registered NDIS provider in NSW, ACT, Vic and Tas and is approved to provide:
(Pls note: Face to face services/programs have been either converted to online programs or postponed)

- Assistance with 'Access Request Forms', Access rejections and pre-planning
- Support Coordination – assistance to help make your plan active
- Plan Management
- Short term accommodation (Vic)
- Group activities – yoga, dance for health, exercise (NSW)
- Exercise Physiology (NSW)
- Specialist Continence Assessment (Vic)
- Occupational Therapy (NSW and Vic)
- Physiotherapy (NSW)

Want to learn more?
Please call
MS Connect
1800 042 138

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My Aged Care 

My Aged Care is an Australian Government initiative, website and phone line to help you find about aged care services.

Available to people who are 65 years of age and over.

Why Contact My Aged Care?


- ✓ Information
- ✓ Assistance in mapping out your needs
- ✓ An assessment for further supports

Phone: 1800 200 422 Free call Australia wide

Website: <https://www.myagedcare.gov.au>

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Thank you 

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Please stay on after this webinar to complete a short survey.

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