

FINDING HOPE WITH OMS

Webinar series

**Movement and Breathing Better
whilst Living Well with MS**

Tuesday, September 28th at 8pm BST

Hosted by



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OVERCOMING
MULTIPLE
SCLEROSIS

Welcome

Overview



Breathing

Why & how we should breathe

How MS affects breathing

How to breathe better



Movement

Why is movement & activity important

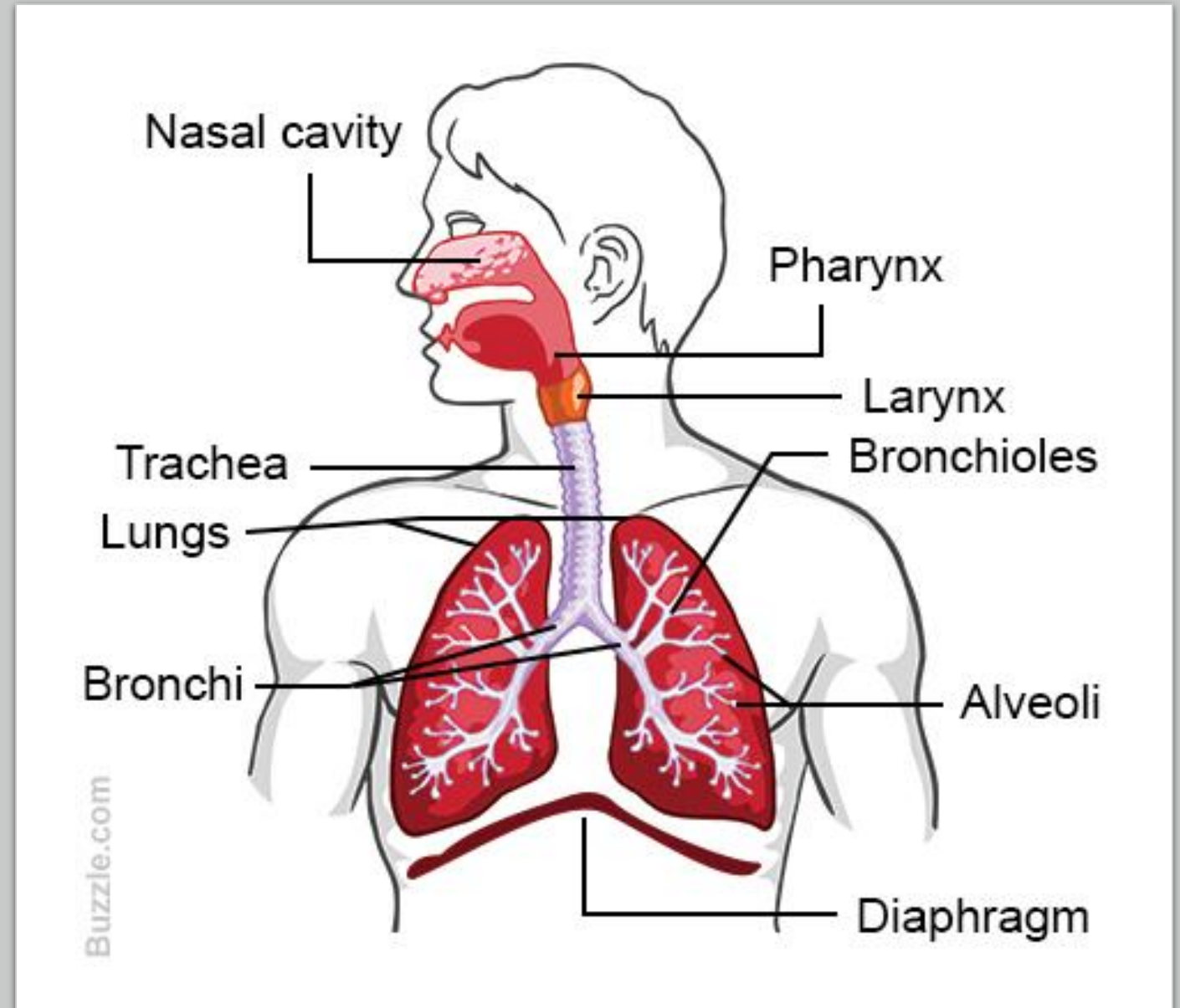
How our body responds to activity

Types of activity to explore

Why & how we should breathe

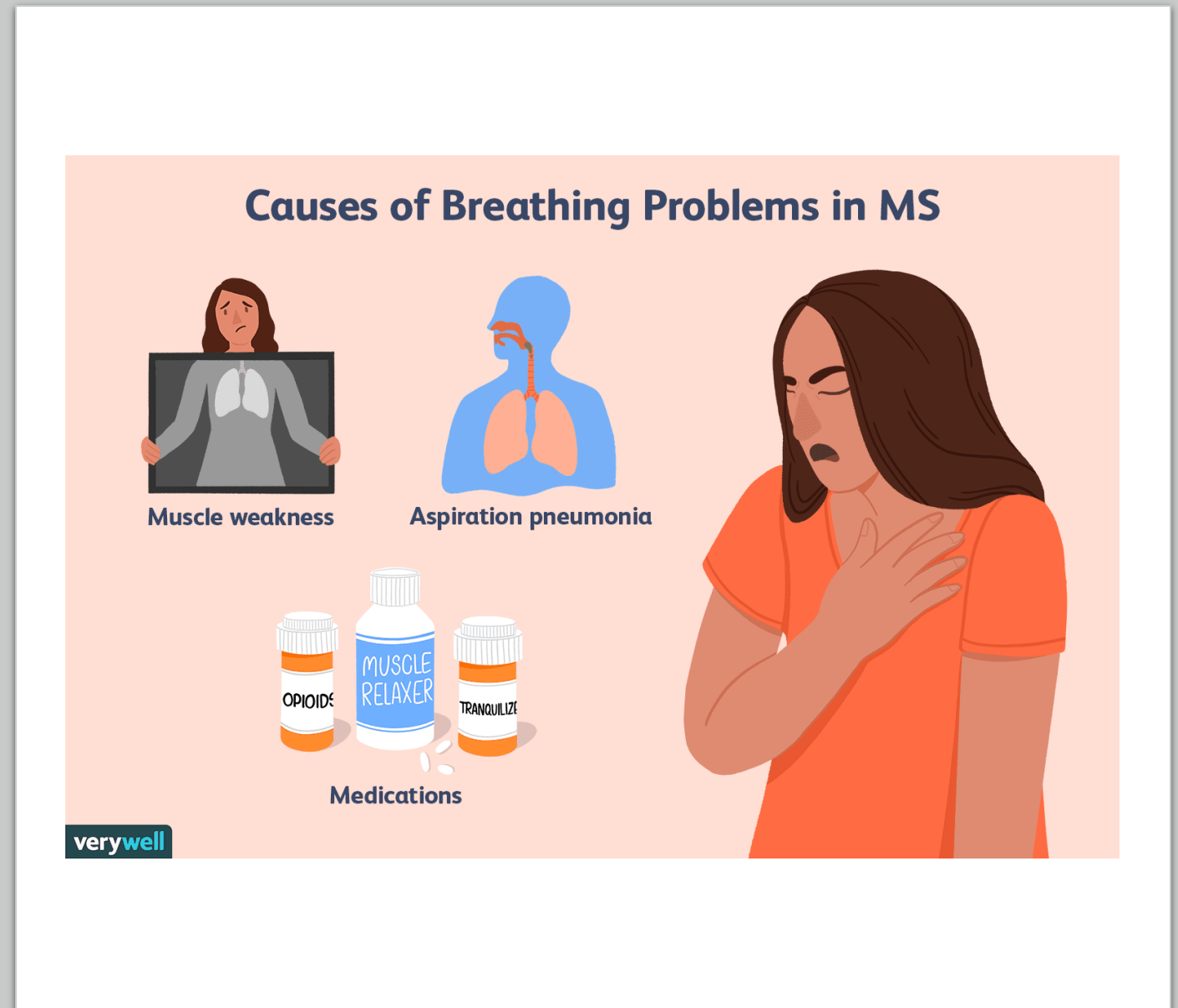
- Oxygen intake
- Carbon dioxide dispersal

- Diaphragm contracts
- Air moves in
- Intercostals assist rib movement
- Gas exchange occurs
- Diaphragm / intercostals relax
- Air moves out



How does MS affect breathing?

- Reduced muscle strength (primary & secondary)
 - Diaphragm
 - Intercostals
 - Abdominals
 - Facial muscles
 - Neck muscles
- Respiratory centre may be affected
- Consider medications



Signs of ineffective breathing

- Increased fatigue
- Increased neck muscle activity
- Need to take more breaths while talking
- Reduced volume of voice
- Reduced cough strength
- Pursed lip breathing
- Tingling of extremities
- Frequent sighing, sniffing, yawning
- Chest infections
- Dental problems
- Memory problems
- Headaches
- Dry mouth
- Night time urination

How do YOU breathe?

- Notice your breath
 - Deep / shallow?
 - Fast / slow?
 - Chest movement / belly movement?
 - Open / closed mouth
 - Posture?



Test yourself

- Body Oxygen Level Test (BOLT) score
 - Take a normal breath through your nose
 - Allow a normal breath out through your nose
 - Hold your nose closed with your fingers
 - Count how many secs until you feel the distinct desire to breathe in
- **NOT** a test of how long you can hold your breath!
- **HOW MANY SECONDS?**

How to Breathe Better

Posture

- Supported sitting, check shoulders & chin

Close

- Close your mouth, breathe through your nose

Practise

- Light
- Slow
- Deep breathing

Try

- Try holding your breath IN and OUT

How to Breathe Better

Exhale

- Breathe out fully, pulling in your belly

Try

- Tape your mouth

Try

- Respiratory training devices

Consider

- Wim Hof method

Importance of Movement / Activity

- Joint movement
- Muscle length
- Muscle strength
- Circulation
- Bladder / bowel function
- Pain management
- Fatigue management
- Stress management
- Weight management
- Improved sleep
- Social benefits
- Achievement
- Mental well being
- Bone health
- Improved memory / cognition
- Better breathing

Physiological Effects of Activity

- Immediate effects
 - Increased heart rate
 - Increased breathing rate
 - Sweat production
 - Increased mitochondrial activity
- Mid term effects
 - Serotonin / Noradrenaline release
 - Endorphine release
 - Activates your immune system
- Longer term effects
 - Increased stamina, fitness & strength
 - Increases size of muscle fibres
 - Strengthens your heart
 - Boosts HDL, lowers LDL
 - Reduces health risk of other conditions
 - Creates new neural pathways
 - Increase mitochondrial numbers

Types of Activity

- Anaerobic
 - Short, sharp, high intensity increases in heart rate for <2mins
- Aerobic
 - Increasing heart rate moderately for >2mins

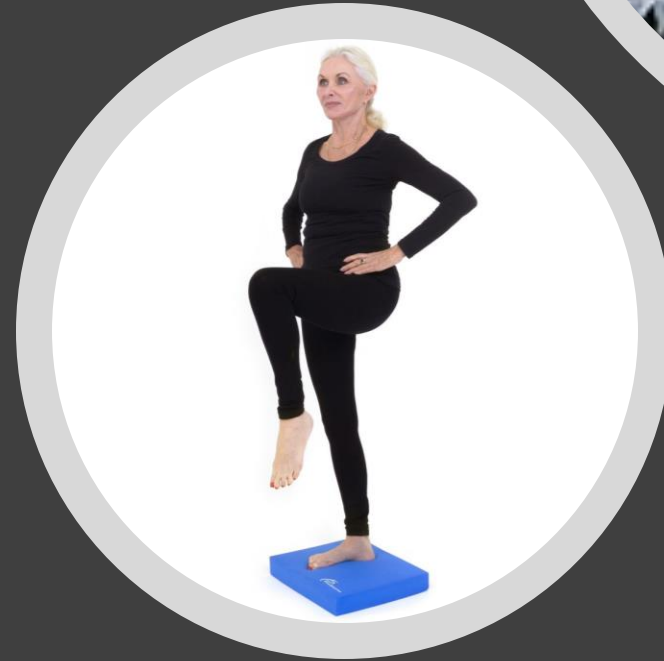
Borg Rating of Perceived Exertion	
0	Nothing At All
0.5	Very, Very Light (Just noticeable)
1	Very Light
2	Light (Weak)
3	Moderate
4	Somewhat Hard
5	Heavy (Strong)
6	
7	Very Heavy
8	
9	
10	Very, Very Heavy (Maximal)

Types of Activity:
Raising your heart rate



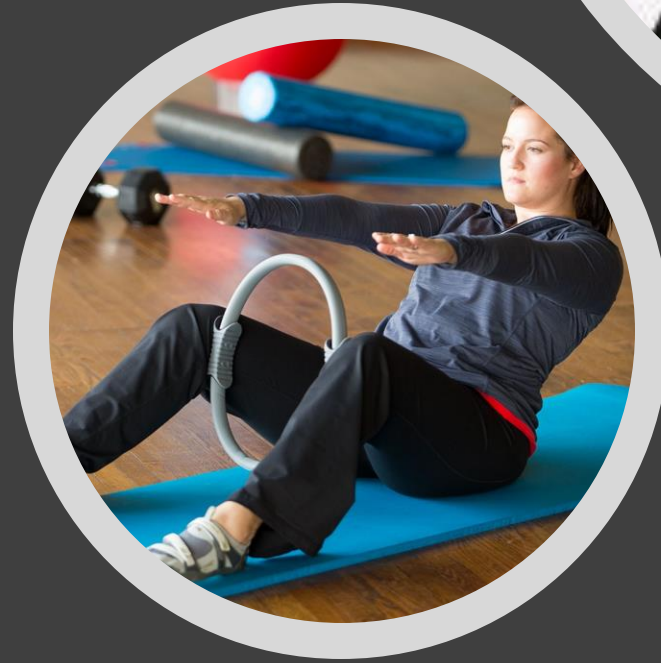
Types of Activity

- Resistance
 - Gravity, body weight, weights, resistance bands
- Stretching
 - Active, passive, assisted
- Balance
 - Tai chi, graded exercises, vestibular retraining



Types of Activity

- Core strength
 - Pilates, yoga, gymball
- Aqua-therapy
 - Combination
- Vibration plate
- Anti Gravity treadmill
- Visualisation / Virtual Reality



Using Breathing & Moving Together

Practise

- Practise your breathing techniques separately

Integrate

- Integrate progressively with exercise & activities

Notice

- Notice your breathing responses during activity

Challenge

- Gently challenge your boundaries

Monitor

- Monitor your progress
Retest your BOLT score

Thanks for listening!



Any questions?