

The graphic is set against a teal background. On the left, an orange box contains the text 'FINDING HOPE WITH OMS' in large white letters, followed by 'Webinar series' and 'An introduction to the OMS program' in smaller white text. Below this is a yellow arrow pointing right with the text 'Handout for Webinar'. To the right, a white notepad-style card is pinned to the background. It has a blue tab at the top that says 'Hosted by'. Below the tab is a photo of Dr. Jonathan White, a man with a beard wearing a blue blazer. Underneath the photo is the text 'Dr Jonathan White'. To the right of the photo, the text reads 'Wednesday, June 30th at 8PM BST'. At the bottom of the card is a logo consisting of three stylized leaves in green, blue, and yellow.

## **About Overcoming MS, the charity**

### **Why we exist**

Multiple sclerosis (MS) is an autoimmune condition where the immune system attacks and damages the central nervous system (the brain, spinal cord and optic nerves).

It is estimated that 2.8 million people worldwide have an MS diagnosis and someone in the world is diagnosed with MS every five minutes. More and more people receive an MS diagnosis every year. It is a diagnosis that has a huge impact across families and communities.

There are different types of MS, but whichever form it takes, it can seriously impact health and quality of life. Although there is no known cure, people with MS often feel alone facing a future with increasing levels of disability. But there is a realistic hope of living a full life after a diagnosis of MS.

### **Who we are**

Overcoming MS is the world's leading multiple sclerosis healthy lifestyle charity.

We focus on sharing the evidence behind the OMS program so people can make choices about practical everyday lifestyle changes that can help improve their health.

### **Our vision**

Our vision is that people with MS feels empowered to take control of their health, are making informed lifestyle choices and living a full and healthy life.

### **Our aims**

Helping people with MS to find hope, take control and make informed choices about the management of their MS is at the heart of what we do. We aim to inform, support and empower people with MS to lead a full and healthy life..

### **What we do**

We provide expert information including a podcast, support, and a global community. We campaign and fund open access to research into how lifestyle influences MS.

## An Introduction to the OMS Program

### About the Overcoming MS program

The Overcoming MS program focuses on the everyday choices that people can make as part of a healthy lifestyle such as diet, exercise, vitamin D and stress management.

It draws upon the growing scientific evidence showing that lifestyle changes can improve health outcomes. We are here to support you to make the best decisions you can to lead a full and healthy life.

**Multiple sclerosis:** inflammatory, demyelinating disease of brain and spinal cord (central nervous system). Immune system mistakenly attacks myelin sheaths, coating nerve cells.

When myelin is damaged, nerve impulses aren't transmitted correctly – causing fatigue, pins and needles, numbness, weakness, loss of balance, visual disturbance, slurred speech, bowel and bladder issues.

- Most common disabling neurological disorder of young adults
- Most people diagnosed in their 20s and 30s.
- 3x more common in women than men
- Although there is no known cure for MS, Overcoming MS helps to show that there is real hope of leading a full and healthy life with MS.

Approximately 1 in 600 people in U.K. (130,000) have MS.

- Incidence is 1 in 1000 worldwide (~3 million people affected)
- Rate increases with distance north or south of the Equator.
- Becoming more common, due to increasingly unhealthy lifestyles - "Western Diet"

**Blood Brain Barrier:** brain's security system, highly selective barrier lining brain's blood vessels. It stops many substances from passing through to brain, including white blood cells.

- In MS, the blood brain barrier becomes "leaky".

**Th1 and Th2 Immune Responses:** see-saw balance of immune system:

- **Th1** promote inflammation to protect against attack (**MS is an imbalance towards Th1**)
- **Th2** are anti-inflammatory and promote repair.

Cause is unknown, but multi-factorial. Likely that some have a genetic susceptibility, compounded by environmental factors such as diet, low vitamin D, stress and smoking.

### 4 Main Types of MS:

- Relapsing Remitting MS: 65-70%, episodes with variable recovery – medical treatments
- Secondary Progressive MS: up to 66% of RRMS after 25 years, slowly worsening disability

- Primary Progressive MS: 10-15%, progressive disability from outset
- Relapsing Progressive MS: 5%, relapses, but with disability progression

## **The OMS Program:**

### **1. DIET**

Evidence from 34-year study by Dr R Swank, with further work by Prof Jelinek and continuing worldwide research.

Plant-based, wholefood diet, plus seafood – low in saturated fat (<16g daily).

Fats make up cell membranes – if diet is mainly unsaturated fats (plants), then membranes are soft, flexible, less “sticky” and resist degeneration/ inflammation (including myelin). Avoid meat and dairy – both are high in saturated fat, which is pro-inflammatory and prone to degeneration.

Fats also build immune system messengers, flaxseed oil (20-40ml daily) is high in omega-3 fats - make anti-inflammatory signals that protect nerve cells.

### **2. SUNLIGHT AND VITAMIN D**

Crucial role in immune system regulation. Made in skin on exposure to UVB rays.

- 75% of MS cases may be prevented with vitamin D level >100 nmol/L.
- 50nmol/L increase = 57% less relapses and 57% less new lesions
- Higher vitamin D levels also lead to less disability progression over time.
- Aim for blood vitamin D level 150-225 nmol/L.
- 5000 - 10000 IU of vitamin D daily or 15 mins sun (UV index 7) 3-5 times/ week

### **3. EXERCISE / MOVEMENT**

Recommended to get 30 minutes, 3-5 times per week. Start low and go slow, consider working with a qualified trainer. Some find resistance training (weights) less symptom provoking than endurance training (walking, running, cycling). Options for almost any ability – e.g. swimming, Pilates, seated yoga or online resources (e.g. MS Gym).

Exercise stimulates nerve cells and strengthens connections between them. It reduces brain shrinkage and appears to slow disease progression. It also improves cognitive performance and reduces risk of depression.

#### 4. MINDFULNESS

Slows the brain down, increases brain grey and white matter on MRI. It promotes neuroplasticity and new neural networks. It improves quality of life and protects against depression in MS. By reducing body's response to stress, shifts immune system to an anti-inflammatory balance. The OMS program recommends 30 minutes mindfulness daily.

#### 5. MEDICATION

Work with you Doctor and MS team. Early treatment of MS reduces relapses and can slow disability accumulation but must weigh up benefits with potential risks.

#### 6. PREVENT FAMILY MEMBERS FROM GETTING MS

- Genetics accounts for 25% of a person's risk – we can't change that, but 75% of risk is modifiable.
- Stop Smoking – almost doubles someone's risk of MS, passive smoking doubles a child's MS risk. 4x more likely to develop progressive MS, and 8 years earlier than non-smoker.
- Vitamin D: low dose frequent sun exposure, or in winter 5,000IU supplement daily (aim blood level >100 nmol/L). Vitamin D for babies should start during pregnancy.
- Diet: Low in saturated fat, supplemented with 20ml flaxseed oil

#### 7. CHANGE YOUR LIFE, FOR LIFE

You may not see results straight away, but evidence shows you will feel better with time. It's never too late to start, but the earlier the better.

Find the support you need from friends and family members, and the OMS community – there's lots of ways to connect.

#### The evidence based OMS Program:

**HOLISM Study:** has generated over 15 research papers.

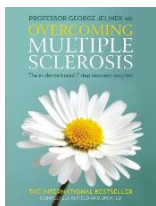
- Over 2500 people in 57 countries. A mix of people with MS living healthy lifestyles and those that were not.
- Showed that those following the Overcoming MS program had improved health outcomes – less relapses, less disability, better quality of life and less incidence of depression and fatigue.
- Disability and relapse rates were lower for those using medication.

## **STOP MS Study:**

- Over 400 people that attended a 5-day OMS Retreat
- 12% increase in quality of life at 1 year
- 20% increase in quality of life at 5 years
- **People with MS can improve their health over time, not decline!**

## **Useful Resources to Start Your Journey with OMS**

### **The OMS book:**



The OMS book which describes the evidence-based Overcoming MS program by Professor Jelinek and can be provided to you free of charge thanks to the generosity of a key supporter. If you reside in the UK and Ireland. If you're interested, in receiving the free book, please complete our online web form [here](#).

"I felt powerless with my MS diagnosis for almost three years, and then I found Overcoming MS and ordered the book. I'd have to stop reading every few pages to tell my husband some new fact that was blowing my mind. OMS was the hand that reached out to pull me up, and now, I have somewhere to turn." Ashley, OMSer.

**OMS Website:** [overcomingms.org](http://overcomingms.org)

The website houses helpful resources to start you and keep you motivated on your OMS journey. Some examples are:

- [OMS friendly recipes](#)
- [Online Circles](#) (support groups)
- [Free downloads](#)
- [Mental Health Hub](#)
- [Guided exercises](#)
- [Guided meditations](#)

### **OMS social media:**

- [Facebook](#)
- [Instagram](#)
- [Twitter](#)

### **Monthly e-newsletter**

- [Sign up here](#)