

A top-down view of a variety of fresh foods arranged on a dark surface. The items include several red tomatoes, a bunch of green spinach, a head of green lettuce, a large head of broccoli, a halved avocado showing its green flesh and brown pit, a sliced grapefruit revealing its red segments, a bowl of blueberries, a bowl of orange lentils, a bowl of green lentils, a small bowl of flax seeds, a bunch of green herbs, a red chili pepper, a head of purple garlic, and a piece of ginger root.

# Eating for Energy

Managing MS Symptoms  
Through Nutrition

Ashley Carter, MS, RD, LDN  
Co-Founder EatWell Exchange



# Introduction: Ashley Carter, MS, RD, LDN

International  
Speaker

Published  
Author

Registered  
Dietitian

Non-Profit  
Co-Founder

Nutrition  
Professor

Masters in  
nutrition



# About EatWell Exchange



- 501(c)3 nonprofit organization
- Nutrition education with a focus on culture
- Creating sustainable change in lower socioeconomic communities
- Teach professionals how to make small obtainable changes for clients and themselves
- Taught over 72,000 people since 2017



## FOOD ACCESS

# OUR PROGRAMS



- Partnerships with food pantry and fridges
- Gardening classes
- Recipes and Demos
- Free Farmers Markets
- Family Gardening Program





# OUR PROGRAMS



## NUTRITION EDUCATION

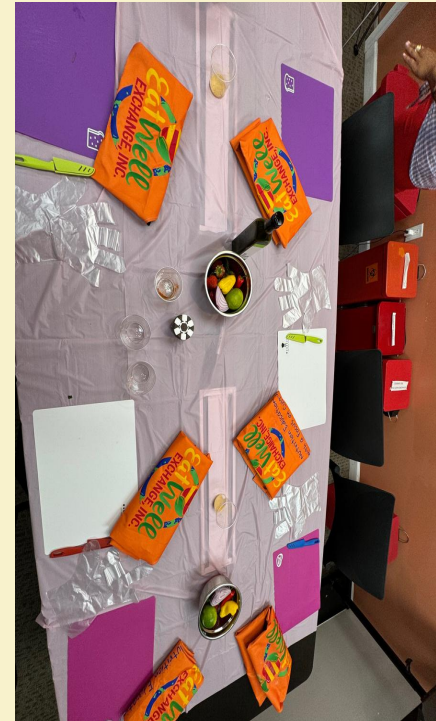
- Interactive classes in the community
- Company training for Cultural competency
- Engaging tabling events
- Teach healthcare professionals & chefs
- Employee Wellness





# OUR PROGRAMS

## CULINARY PROGRAMS

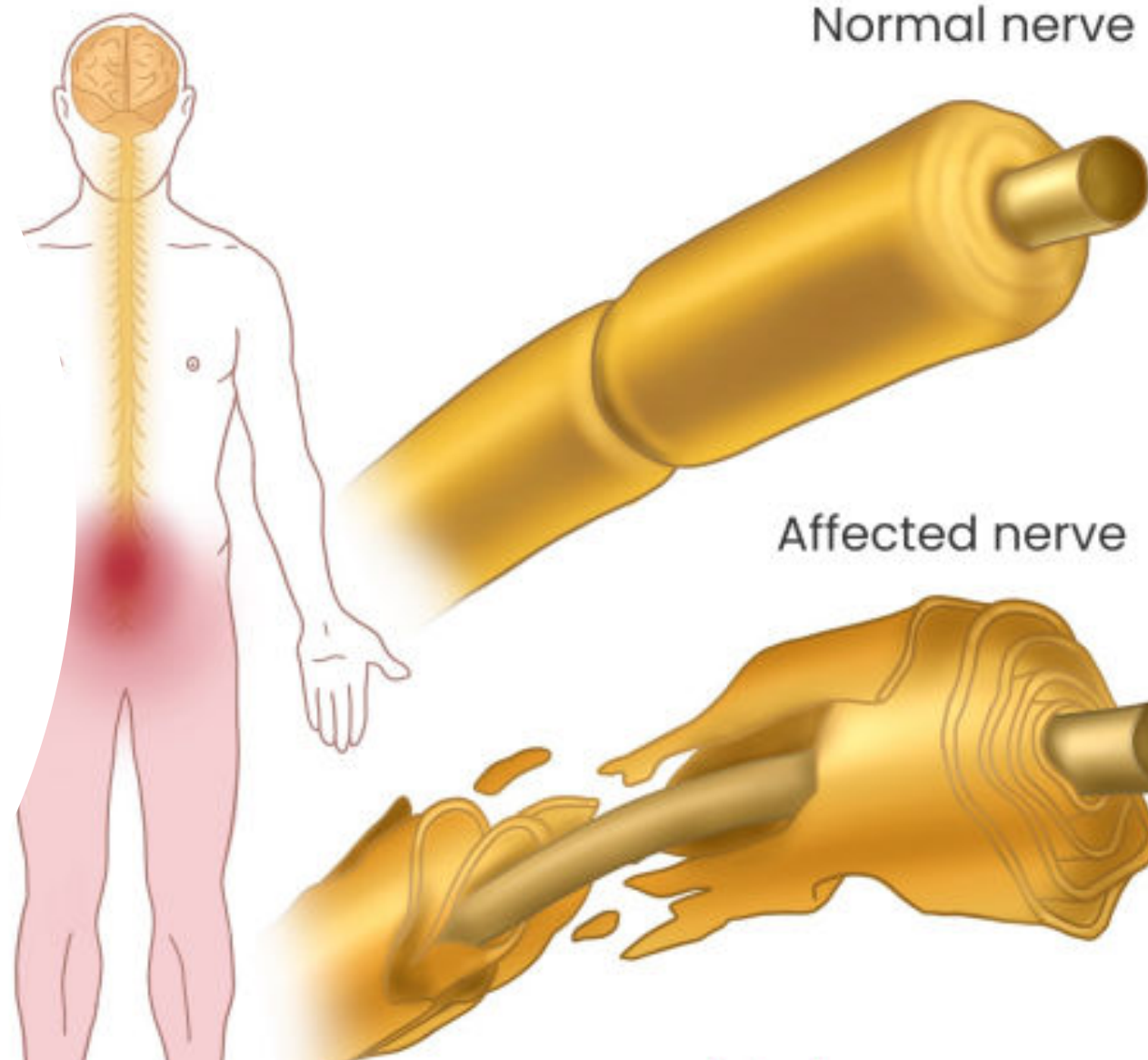


- Kids Culinary academies
- Cooking Demonstrations
- Family Programs
- Prevent diabetes culinary program
- Bilingual Programs (Spanish & Kreyòl)
- Men's Health nutrition
- Seniors Culinary Class



# What is Multiple Sclerosis (MS)

- MS is an autoimmune disease that damages the protective covering of nerves in the brain and spinal cord.
- This damage disrupts communication between the brain and the rest of the body.
- While there is no cure, effective disease-modifying therapies and comprehensive symptom management strategies are available.
  - Combined with regular exercise and a healthy diet, these approaches can help slow disease progression, maintain independence, and improve quality of life





# Lets Talk About Fatigue

- Fatigue affects up to 80% of people with the condition.
  - It's different from "being tired" after a busy day, many people describe it as an overwhelming lack of physical and mental energy that isn't fully relieved by rest.
- **Damaged nerves work less efficiently**
  - MS damages myelin, so the brain uses more energy to send signals throughout the body.
- **Inflammation**
  - The immune system releases inflammatory chemicals that can cause fatigue and brain fog.
- **Poor sleep**
  - Pain, muscle spasms, bladder symptoms, and sleep disorders can reduce sleep quality.
- **Increased physical effort**
  - Everyday activities require more energy when muscles receive weaker nerve signals.
- **Heat sensitivity** – Even a small increase in body temperature can temporarily worsen fatigue and other MS symptoms.



# How Foods Support Energy

## **Whole Grains (Carbohydrates)**

- Provide steady energy and fuel for the body

## **Lean Protein**

- Supports muscle repair and helps maintain energy.

## **Healthy Fats**

- Provide long-lasting fuel and support brain health.

## **Fruits**

- Provides quick energy and nutrients

## **Veggies**

- Supports energy production

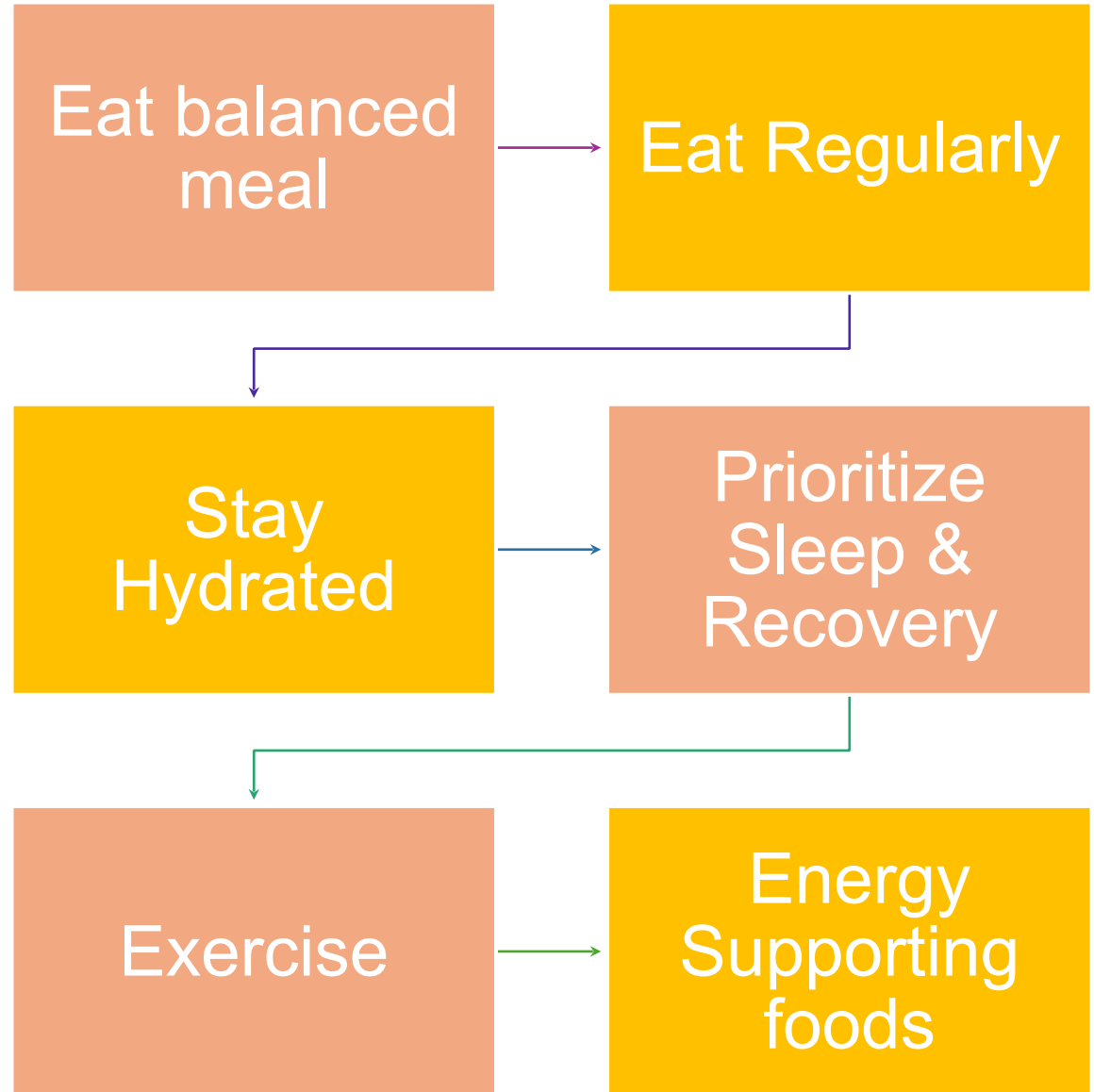








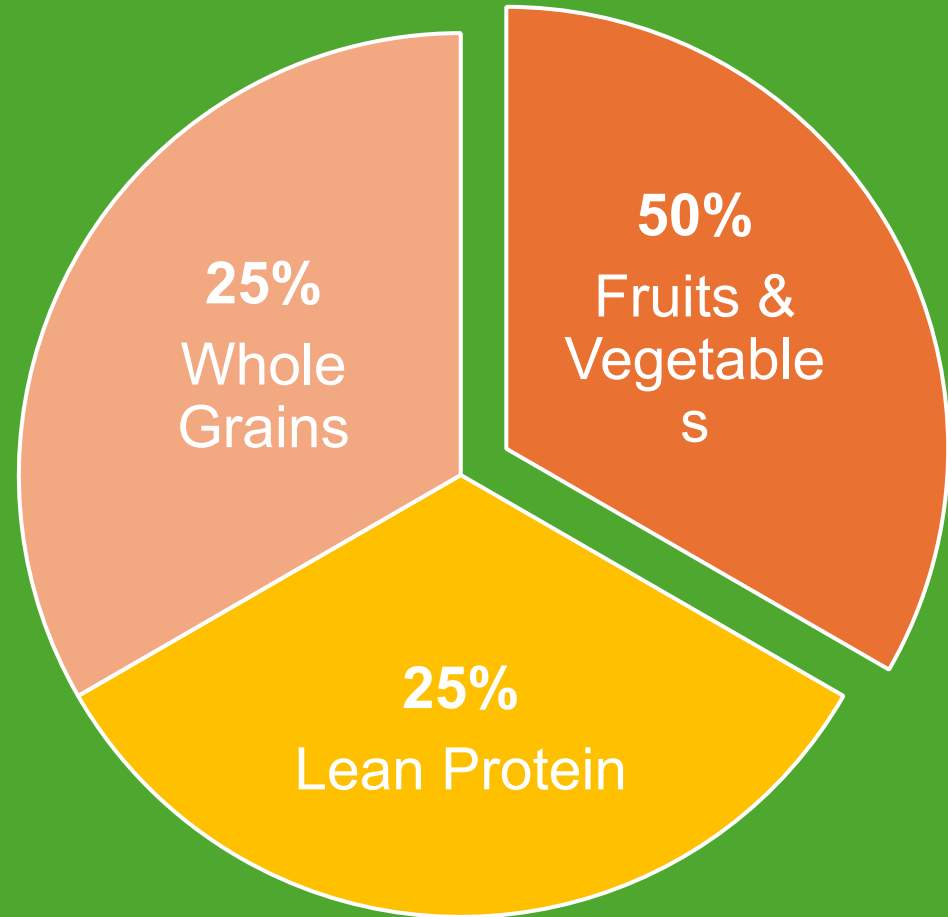
# Maintaining Energy



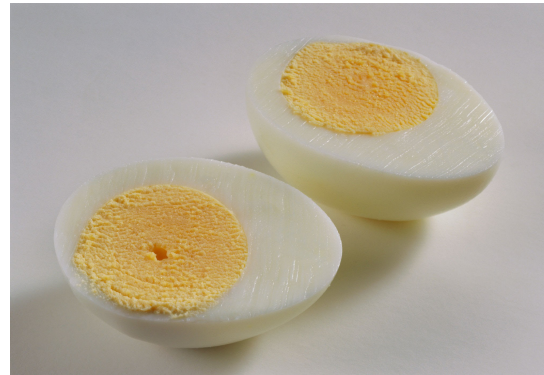
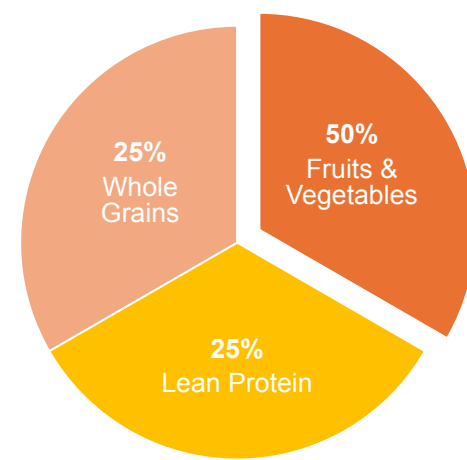


# Eat Balanced Meals

A standard meal plate should visually favor plant-based nutrition and lean, clean fuel to minimize systemic inflammation



# What category does each food fit into?





# Eat Regularly



SMALLER PLATES TO  
CONTROL PORTION  
SIZES



FREQUENT MEALS



AVOID LATE-NIGHT  
EATING

# Scheduling Tips

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Plan for energy dips

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Vitamin D timing

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Write a weekly meal plan

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freeze large batches of healthy food

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Cut up fresh fruits and vegetables in advance





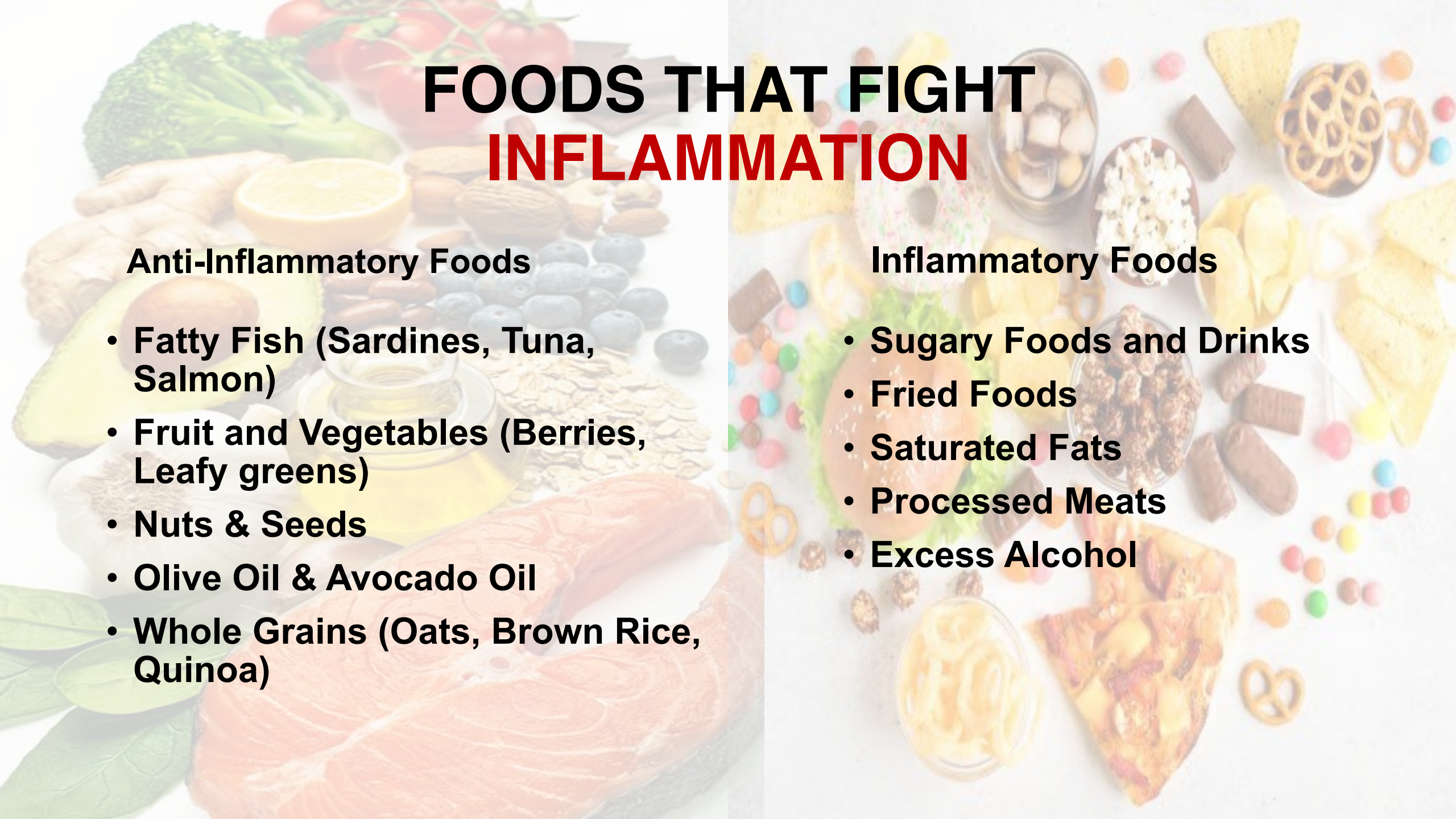
If you could only choose three habits to improve your energy tomorrow, which three would you pick and why?

# Hydration

- Mild dehydration can worsen symptoms
- Aim to drink 6–8 cups (1.5–2 L)
- Carry a reusable water bottle
- Choose water-rich foods
- Drink cold water if sensitive to heat
- Sip water consistently throughout the day instead of waiting until you're thirsty







# **FOODS THAT FIGHT INFLAMMATION**

## **Anti-Inflammatory Foods**

- **Fatty Fish (Sardines, Tuna, Salmon)**
- **Fruit and Vegetables (Berries, Leafy greens)**
- **Nuts & Seeds**
- **Olive Oil & Avocado Oil**
- **Whole Grains (Oats, Brown Rice, Quinoa)**

## **Inflammatory Foods**

- **Sugary Foods and Drinks**
- **Fried Foods**
- **Saturated Fats**
- **Processed Meats**
- **Excess Alcohol**





# Dietary Approaches

- Mediterranean Diet- Plant-based eating plan
- DASH Diet - Emphasizes fruits, veggies & whole grains
- Healthy Eating Plate- Make fruits & veggies ½ your plate
- There is **no single diet proven to cure or treat MS**, but several eating patterns may support overall health, reduce inflammation, and help manage symptoms.







# Sample Meal

## **Breakfast**

- Oatmeal with blueberries, walnuts, and chia seeds

## **Morning Snack**

- Apple with peanut butter

## **Lunch**

- Grilled chicken quinoa salad with mixed vegetables and olive oil

## **Afternoon Snack**

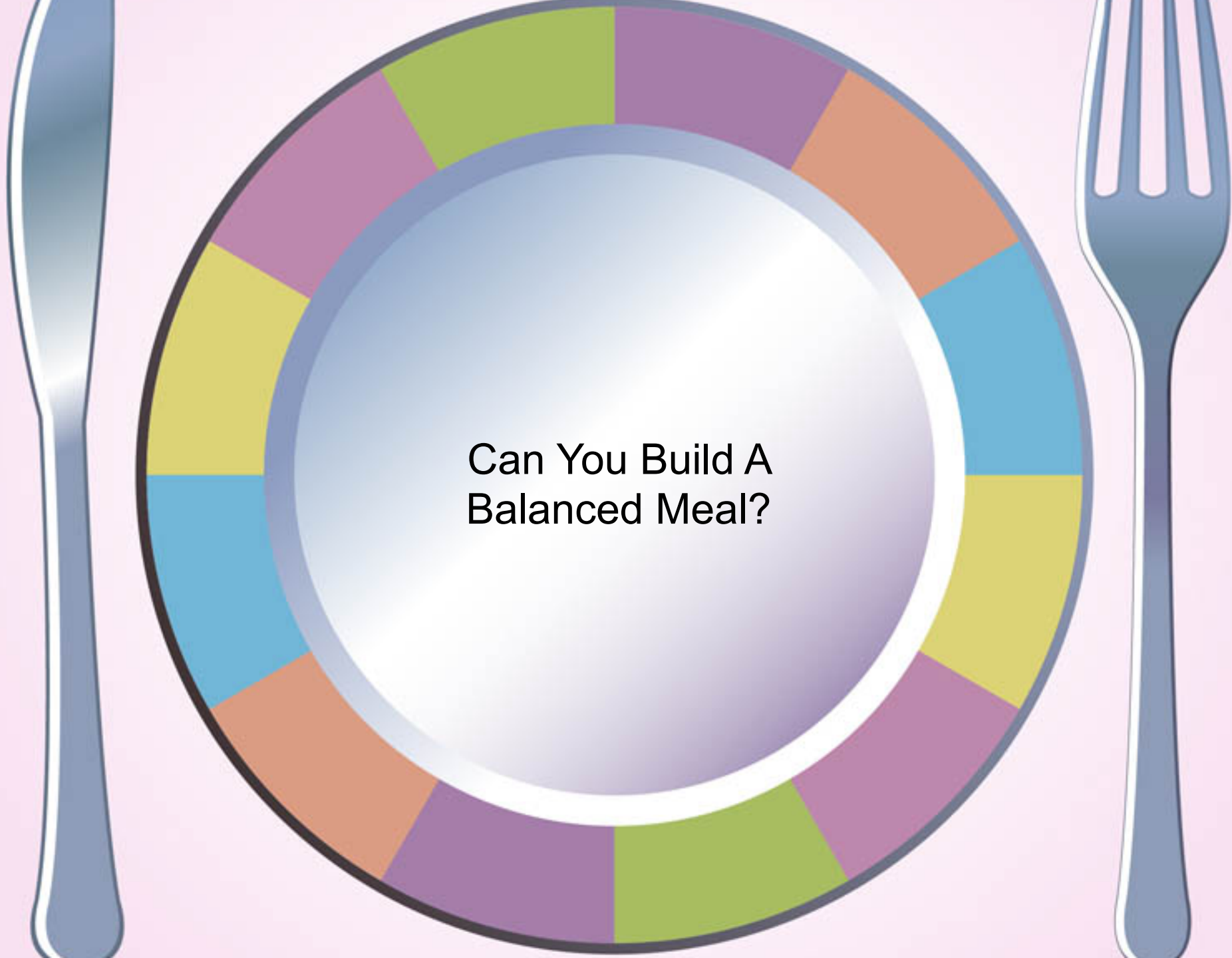
- Carrots and hummus

## **Dinner**

- Baked salmon, brown rice, and steamed broccoli

## **Evening Snack**

- Greek yogurt with berries



Can You Build A  
Balanced Meal?





# Benefits of Exercise

- Helps fight fatigue
- Improves mood
- Reduces spasticity
- Reduces pain and inflammation
- Promotes Cardiovascular Health
- Improves mobility, strength, and balance



# Recommended Exercises

- Strength Training
- Water Aerobics
- Stretching
- Aerobic
- Balance
- Start Slowly and Gradually Increase Intensity
- Aim for about 150 minutes of moderate exercise each week, along with 2 days of strength training





# Exercise for Every Level

## Mild Impairment

Activity: walking, stationary bike, Tai Chi, resistance bands, yoga

## Wheelchair Users

Activity: Breathing exercises, core and upper body exercises, stretching

## Limited Walking Ability

Activity: Seated yoga, dancing, boxing, abdominal exercise, stretching

## Bed or Chair Bound

Activity: Breathing exercises, range of motion, electrical muscle stimulation

# Prioritize Sleep & Recovery

01

Keep your room cool and dark

02

Maintain consistent sleep schedule

03

Get morning sunlight and stay active

04

Avoid stimulants

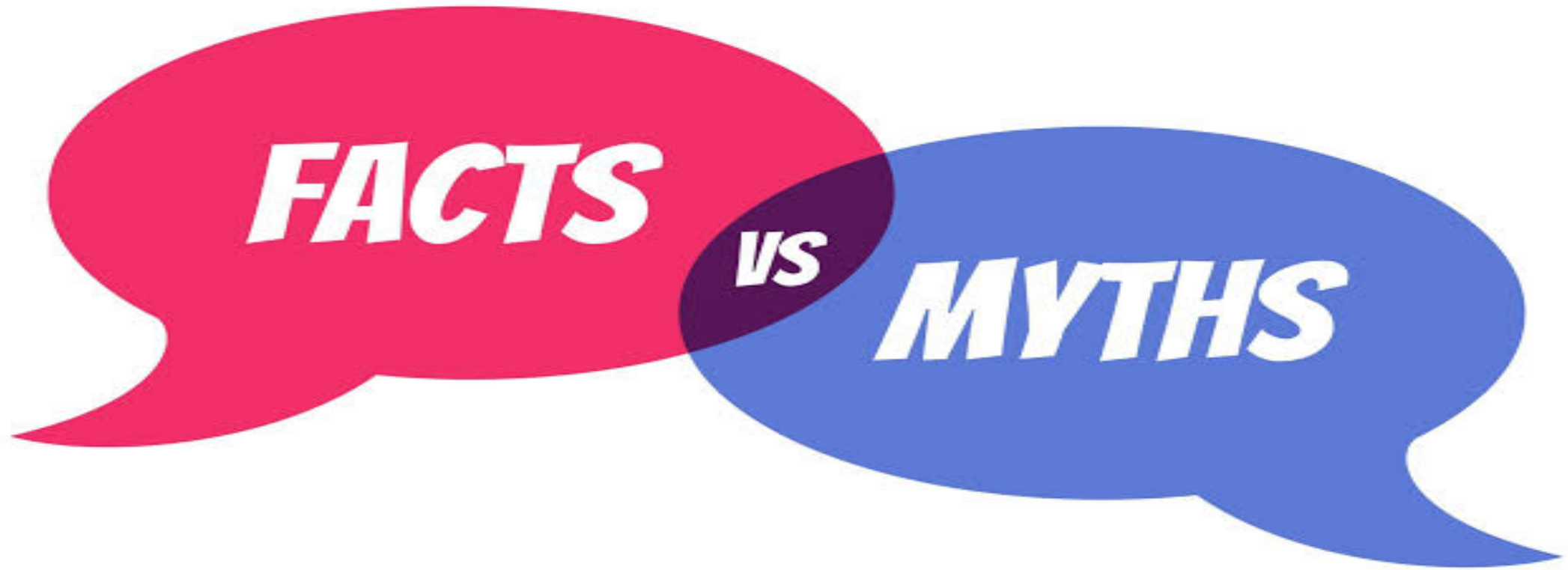
05

Limit screen time before bed



# Do's & Don'ts





There is **ONLY** one lifestyle change that can effectively manage MS symptoms on its own.



# MSAA Resources

## Toll-Free Helpline

- Provides MS information, emotional support, and referrals to resources.
- **Phone:** (800) 532-7667 ext. 154
- **Email:** MSquestions@mymsaa.org

## Cooling Products Program

- Provides free cooling vests and accessories to help manage heat sensitivity and fatigue.
- **Access:** Apply through the MSAA Cooling Products Program website.
- **Phone:** (800) 532-7667 ext. 154
- **Email:** clientservices@mymsaa.org

## Equipment Distribution Program

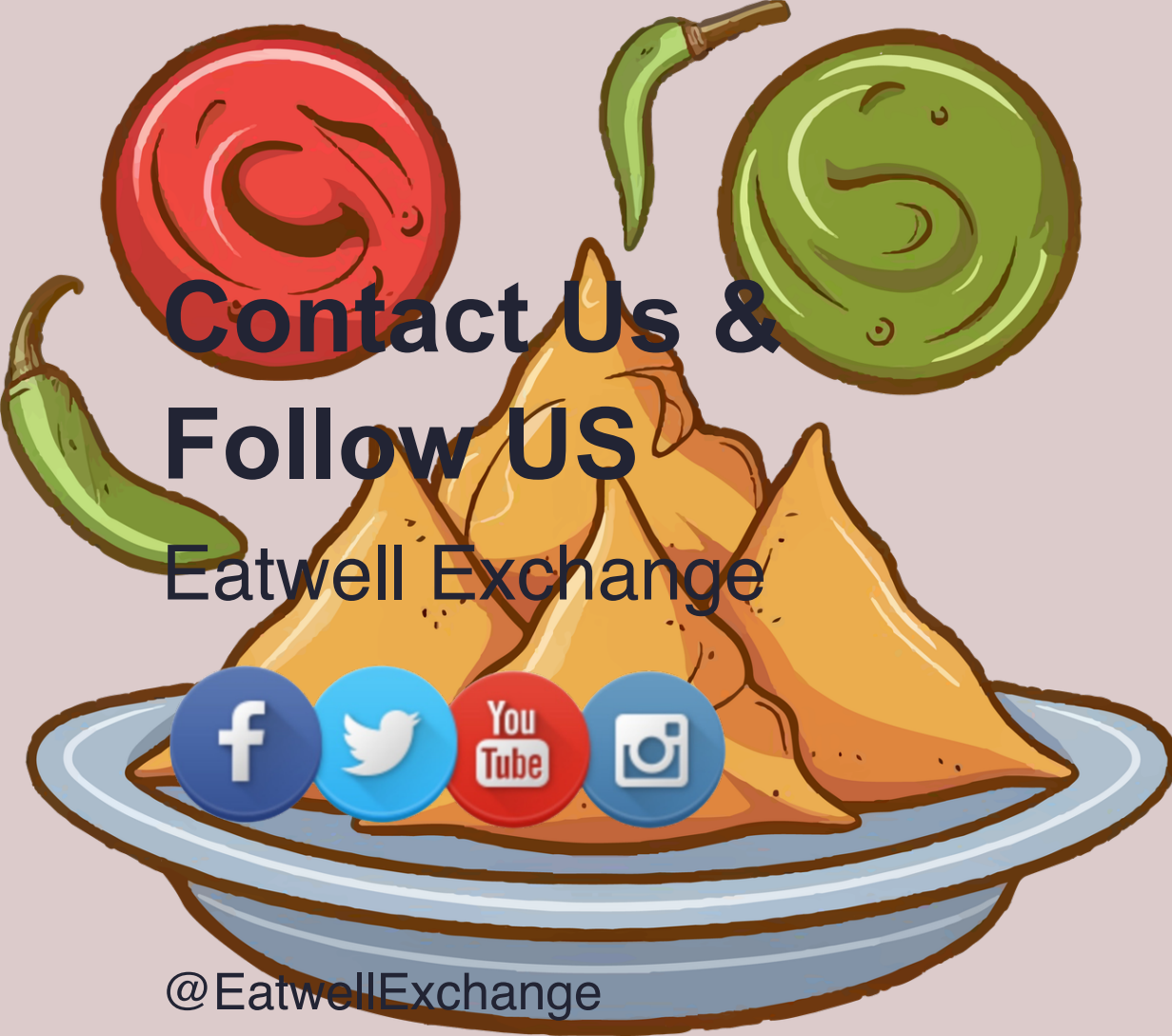
- Offers free mobility and safety equipment to improve independence.
- **Access:** Apply through the MSAA Equipment Distribution Program.
- **Phone:** (800) 532-7667 ext. 154

## MRI Access Program

- Helps eligible individuals receive financial assistance for MRI scans used for MS d
- **Access:** Apply through the MSAA MRI Access Program.
- **Phone:** (800) 532-7667 ext. 154



# Thank you!



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# Resources

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