

# NUTRITION GUIDE FOR MS & AUTOIMMUNE CONDITIONS

# WELCOME

Thank you for downloading this Nutrition Guide for MS & Autoimmune Conditions.

This nutrition guide is designed to help people with Multiple Sclerosis (MS) and other autoimmune conditions make informed dietary choices. It offers helpful tips and suggestions to maximize nutrition by presenting regional recipes with healthier ingredient alternatives.

This guide is part of a wider series developed by the National Multiple Sclerosis Society to empower people living with MS and other chronic conditions in the UAE. You can download the whole series by clicking the links below:

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Mental Health Handbook &  
Reflection Journal 

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Explaining MS to Children  
Guide & Activity Book 

## ABOUT NMSS

The National Multiple Sclerosis Society (NMSS), which operates under the Ministry of Community Empowerment in the UAE, is dedicated to bettering the lives of people with MS and their communities through education, advocacy, and contributing to global research for a cure. NMSS strives to raise awareness of MS, establish a comprehensive support system for the MS community in the UAE, and provide resources to those impacted by the condition.



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# INTRODUCTION

## HOW TO USE THIS GUIDE

Diet can play an important role in helping manage the symptoms of MS and other autoimmune conditions. This nutrition guide has been designed to support you in the following key ways.

## USE THIS NUTRITION GUIDE ON A DAILY BASIS

### **Empowerment through dietary choices**

This guide provides information about the connection between diet and autoimmune conditions - and how food can be a powerful tool in managing symptoms and improving quality of life.

### **Easy-to-follow tips**

Clear instructions and a special focus on common regional dishes and ingredients to help you take practical steps towards making your diet more MS and autoimmune friendly.





The nutrition guide focuses on providing important information about the role of healthy eating in managing the symptoms of MS and other autoimmune conditions.

Please see the practical meal planning section of the workbook for templates and checklists to help you manage your diet effectively.

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#### Practical Meal Planning



If you need more information about MS, please consult the links to additional resources section to find medical information about MS and other autoimmune conditions.

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#### Additional Resources

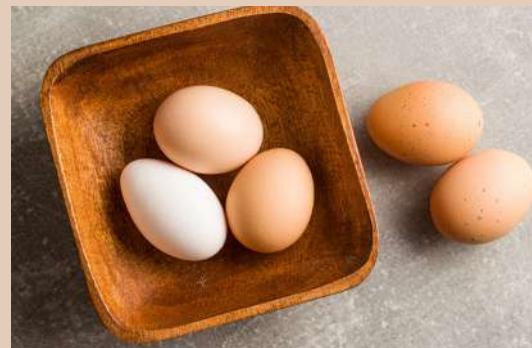


## IMPORTANT HEALTH NOTICE

Please read the following important health note before proceeding:

This guide is intended to offer tips and suggestions to help you manage the symptoms of MS and other autoimmune conditions. It is not a replacement for any treatment plan or medication schedule. Please consult your healthcare team before making any changes to your diet.

Some food groups, such as eggs, dairy and gluten, might be difficult for certain individuals to digest. It is important to discuss any sensitivities such as (lactose intolerance or gluten allergies) with your healthcare provider and make the necessary adjustments.



Listening to your body and keeping a food diary to record your dietary responses is also highly recommended. This makes it easier to track sensitivities and remember your favorite meals/combinations.

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Food Diary



## WHY SHOULD I CONSIDER MY DIET?

Healthy eating is important for everyone, but it can be especially important when managing a chronic autoimmune condition like Multiple Sclerosis (MS).

MS is a chronic, unpredictable condition of the central nervous system that disrupts the flow of information between the brain and spinal cord. The cause of MS is unknown. It is an individual condition, and MS symptoms vary greatly from person to person.

While there isn't one specific diet that will help your MS, making positive changes are likely to impact your overall health and well-being and can prove beneficial to long-term health of the nervous system.



## HOW CAN MY DIET HELP MANAGE MS SYMPTOMS?

### Reducing inflammation

MS is characterized by chronic inflammation. A diet rich in antioxidants and anti-inflammatory agents found in spices, fruits, vegetables and healthy fatty acids like Omega-3s can help soothe this inflammation.

### Boosting energy levels

Fatigue is a common symptom experienced by people living with MS. Nourishing your body with whole grains, lean proteins and unrefined sugars provides sustained energy to reduce feelings of fatigue.

### Protecting nerve health

Myelin, the protective covering of your nerves that is mistakenly attacked in MS, requires specific nutrients for repair and maintenance. Prioritizing foods rich in B vitamins, vitamin D and healthy fats supports nerve health and function.

### Supporting the immune system

A balanced diet rich in anti-inflammatory food can help modulate the immune system response in people living with MS, reducing the frequency and severity of symptom flare-ups.

# UNDERSTANDING THE GUT MICROBIOME

Research studies indicate that the gut microbiome plays a significant role in general health, particularly in the context of MS and autoimmune conditions. The gut microbiome is an intricate ecosystem consisting of trillions of microorganisms, including bacteria, fungi and viruses - and every person's gut microbiome is unique.

## What is the relationship between gut health and MS?

- A healthy gut microbiome helps maintain a balanced immune response and regulate inflammation.
- An imbalance in your gut bacteria is known as dysbiosis. This is like having too many weeds in a garden, which can disrupt the plants' health.
- Dysbiosis can contribute to inflammation, potentially exacerbating autoimmune conditions like MS.

## How can diet influence gut health and MS?

- Foods rich in fiber, like fruits, vegetables, and whole grains, feed beneficial gut bacteria, which can promote immune health.
- Avoiding processed foods and added sugars is also helpful, as these can lead to an imbalance in gut bacteria.
- A diet rich in whole, plant-based foods can help maintain a healthy gut and may support better outcomes for those with MS by reducing inflammation.



## NOTES

For more information about the gut biome, watch the following video from The Washington Post.

[GUT BIOME VIDEO](#)

# RECOMMENDED FOOD CATEGORIES

The following symbol system will guide you through the tips and recipes in this nutrition guide, helping you identify foods that are beneficial for managing your condition.

Prioritizing these food categories will support your overall health and may help manage symptoms associated with MS and autoimmune conditions.



HEALTHY FATS

**Healthy fats:** Nourishing fats that support health and reduce inflammation. Olive oil, avocado/avocado oil, nuts and seeds are excellent choices, as they contain anti-inflammatory Omega-3 fatty acids and monounsaturated fats. Use butter, clarified butter and coconut oil in moderation as they are higher in saturated fats, which may not offer the same anti-inflammatory benefits as unsaturated fats.



PROTEIN

**Protein:** Building blocks for strong muscles and a healthy immune system. Lean meats, fish and seafood, eggs, beans and legumes, nuts and seeds are all good protein sources that support immune health and muscle maintenance. Fatty fish (e.g., salmon, sardines) also contain Omega-3s, which may specifically benefit people with MS and autoimmune conditions due to its anti-inflammatory properties.



WHOLE GRAINS

**Whole grains:** Fiber-rich energy sources that promote gut health. Whole wheat, brown rice, quinoa, oats and barley are high in fiber and beneficial for gut health. Gluten-free grain options, such as buckwheat or millet, are recommended for those who have gluten sensitivities or wish to experiment with symptom management.



DIETARY FIBER

**Dietary fiber:** Essential fibers for digestion and a balanced gut microbiome. Fruits (e.g., apples, berries) and vegetables (e.g., leafy greens, cruciferous vegetables), beans and legumes, whole grains, nuts and seeds are all great sources of dietary fiber.



UNREFINED SUGARS

**Unrefined sugars:** Naturally occurring sugars found in fruits and other products. Fruit, dates, maple syrup and honey offer some nutrients along with sweetness. Note that natural sugars should still be consumed in moderation to avoid excessive sugar intake, which can disrupt gut health.



FERMENTED FOODS

**Fermented foods:** Probiotic foods to support a happy gut. Unsweetened yogurt, labneh, pickled/preserved vegetables, kefir, kombucha, kimchi and sauerkraut are excellent sources of probiotics, which can support a balanced gut microbiome.

## ASSISTIVE AIDS FOR THE KITCHEN

MS and other autoimmune conditions can impact mobility, strength and coordination, making everyday tasks like cooking more challenging. Assistive technology and kitchen aids can help with maintaining independence and enjoyment of meal preparation.



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### NOTES

Refer to the chart next page, which identifies some common MS symptoms with kitchen aids designed to assist with them.

For more information about how to create an accessible kitchen in your home, read this article from MS Focus Magazine.

[CREATE AN ACCESSIBLE KITCHEN](#)

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**Weakness, trembling, lack of coordination**

**Weighted utensils** provide stability and reduce shaking

**Utensil holders** make kitchen implements easier to grasp, hold and manipulate

**Adaptive cutting boards** stabilize food for cutting, reducing hand strain

**Rocker knives** allow for cutting with a rocking motion, requiring less strength

**Mandoline slicers** allow for quick and even slicing with minimal effort and hand strain

**Spill-proof cups and bowls** minimize messes and spills

**Electric can and jar openers** reduce effort required for opening containers

**Palm peelers** allow for one-handed peeling of vegetables

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**Memory or concentration difficulties**

**Smart speakers with reminders** provide prompts for tasks, appointments and medication

**Appliance timers** prevent forgetting food cooking on the stove or in the oven

**Label makers** help with locating items in drawers and cupboards

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**Weakness or balance problems**

**Non-slip mats** reduce the risk of falls on slippery kitchen floors

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**Trouble with vision**

**Contrasting colors** enhance visibility of objects such as utensils and appliances in the kitchen

**Talking kitchen scales and measuring cups** provide auditory feedback for accurate measurement

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**Pain, balance and fatigue issues**

**Perching stools** provide support for those who experience challenges standing for extended periods, making meal preparation more comfortable

# QUICK DIETARY GUIDES

This section of the guide includes printable poster charts for quick and easy dietary advice for people living with MS and other autoimmune conditions.

Keep these on your phone or print them out and place them on your fridge for quick daily access.

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What to Eat ➔

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Foods to Limit ➔

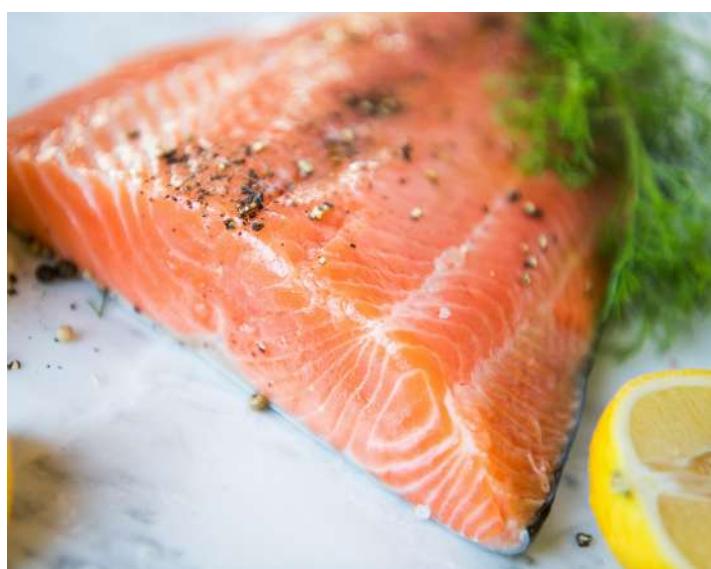
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Reading Labels and Choosing Ingredients ➔

## WHAT TO EAT

Fill your plate with the following foods to promote a healthy immune response:

- **Fruits and vegetables**
- **Lean meats**
- **Beans, peas and legumes** (white beans, kidney beans, chickpeas, lentils, split peas)
- **Fish and seafood**
- **Whole grains and pulses** (whole wheat, brown rice, quinoa, oats)
- **Eggs**
- **Herbs and spices**
- **Seeds and nuts** (especially raw and unsalted)
- **Cacao powder** (unsweetened)
- **Good fats** such as extra virgin olive oil, avocado/avocado oil, nuts and seeds. Use butter, clarified butter (samneh) and coconut oil in moderation
- **Unsweetened** herbal teas and infusions
- **Organic produce** whenever possible to reduce exposure to pesticides. Washing fruits and vegetables before use can also help reduce pesticide residues



## FOODS TO LIMIT

Reduce portions of the following foods to avoid inflammation:

- **Processed meats** such as deli meat and sausages. These can contain nitrates, high sodium and preservatives linked to inflammation.
- **Sugary drinks**, including sodas, energy drinks and other sweetened packaged juices. These contain added sugars and preservatives that can cause inflammation.
- **Packaged snacks** such as crackers, chips, etc. these typically contain unhealthy fats and preservatives that may cause inflammation.
- **Deep-fried foods** such as fried chicken, french fries, etc. Choosing baked or air-fried versions, when possible, can be a healthier alternative.
- **Artificial sweeteners** (such as aspartame) may have negative effects on gut health. Artificial sweeteners found in many packaged foods.
- **Processed and packaged foods** such as instant noodles, instant and microwave meals often contain high sodium and preservatives that may impact inflammation.



# READING LABELS AND CHOOSING INGREDIENTS

Use this chart to shop wisely and select products that support your health and help prevent inflammation or digestive issues.

<b>Check sodium content</b>	Choose low-sodium (140mg per serving) options whenever possible to reduce inflammation and support heart health.
<b>Look for whole grains</b>	Choose products that list whole grains as the first ingredient to promote dietary fiber intake.
<b>Check dietary fiber</b>	Scan the nutritional information on the ingredients and shop for products with 3g of dietary fiber per serving to promote gut health (the daily recommended amount is 25-35g).
<b>Limit hydrogenated oils (trans fats)</b>	Try to avoid refined oils (known as mono- and diglycerides), such as canola oil, soy oil, sunflower oil, grapeseed oil, rice bran oil, etc.
<b>Limit added sugars</b>	Scan the nutritional information on the ingredients and shop for products with less than 10g of added sugar per serving. If sugar is a major inflammation trigger for you, aim for 0-5g of added sugar. Be on the lookout for these other names for sugar: high-fructose corn syrup (HFCS), fructose, sucrose, corn syrup, maltose, dextrin, maltodextrin, dextrose, evaporated cane juice.
<b>Look for natural sweeteners</b>	Always choose natural sweeteners like raw honey, pure maple syrup, molasses, dates, coconut sugar, coconut nectar, whole leaf stevia and monk fruit.
<b>Avoid artificial sweeteners</b>	Look out for artificial sweeteners such as acesulfame potassium, sucralose, aspartame and saccharin as these may disrupt healthy gut bacteria.
<b>Other food additives to avoid</b>	Try to avoid products containing the following common food additives: artificial colors (tartrazine, indigotine, etc.), monosodium glutamate (MSG), nitrites and nitrates, potassium bromate, propylparaben, butylated hydroxyanisole (BHA or TBHQ), butylated hydroxytoluene (BHT), diacetyl, propyl gallate, theobromine. These may contribute to overall toxicity and inflammation in sensitive individuals.

# EATING AND LIVING WELL WITH MS



The tips and recipes in this section have been selected for two key reasons.

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#### Familiar dishes and ingredients

Recipes and tips are centered around classic Emirati and regional dishes with ingredients that can easily be found in local stores. This will enable you to focus on your existing diet, making changes with the potential to help you manage your symptoms.

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#### Dietary awareness

The recipes are presented with basic notes on how they can contribute to an MS-friendly diet. Where appropriate, suggestions for substitutions and additions to recipes are provided to help manage symptoms and support immune function.

# EATING AND LIVING WELL WITH MS

Click the links below to access the different recipes and content sections.

Samak Meshwi	↗	Super Fruit Salad	↗
Balaleet	↗	Batheeth	↗
Chebab	↗	Post-Relapse and After-Treatment Boosters	↗
Machboos (Chicken)	↗	Carrot, Pineapple, Orange and Ginger Juice	↗
Thareed	↗	Spinach and Apple Green Juice	↗
Kousa Mahshi	↗	Tahini Turmeric Smoothie	↗
Notes from a nutritionist	↗	Apple, Kale and Blueberry Smoothie	↗
Fattoush (Vegetarian)	↗	Probiotic Breakfast Smoothie	↗
Harees	↗	Vegetable Broth	↗
Stuffed Vine Leaves	↗	Chicken Broth	↗
Cauliflower Soup	↗	Should I Take Supplements?	↗
A Note About Desserts	↗	Notes From an MS Ambassador	↗



# SAMAK MESHWI

Fresh fish (about 1 kg), cleaned and scaled  
2 lemons, juiced  
4 cloves garlic, minced  
2-3 cm piece of ginger, grated  
1 teaspoon ground cumin  
1 teaspoon ground coriander  
1 teaspoon turmeric powder  
½ teaspoon ground black pepper  
Salt (to taste)  
2 tablespoons extra virgin olive oil (for grilling)

**PREP: 30 MINS**

**COOKING: 10 MINS**



HEALTHY FATS



PROTEIN



## MARINATE THE FISH

In a bowl, combine the lemon juice, garlic, ginger, cumin, coriander, turmeric, chili powder (if using), salt, and pepper. Make slashes on both sides of the fish and rub the marinade all over it, inside and out.

## PREPARE THE GRILL

Preheat a grill or grill pan over medium-high heat. Brush the grill grates with olive oil.

## GRILL THE FISH

Place the fish on the grill and cook for 7-10 minutes per side, or until the fish is cooked through and flakes easily with a fork. Note: cooking time will vary depending on the size of the fish.

## SERVE

Serve hot with lemon wedges and simple roast vegetables to balance the meal's macronutrients and add more vitamins to the dish.

# BALALEET (VEGETARIAN)

2 cups wholegrain vermicelli noodles  
4 tablespoons butter  
 $\frac{1}{4}$  cup maple syrup/honey/date syrup  
4 eggs  
Salt and pepper to taste  
1 teaspoon ground cardamom  
 $\frac{1}{4}$  teaspoon saffron threads, soaked in 2 tablespoons warm water

**PREP: 15 MINS**

**COOKING: 25 MINS**



HEALTHY FATS



UNREFINED SUGARS



WHOLE GRAINS

## COOK VERMICELLI

Cook vermicelli according to package instructions until al dente. Drain and set aside.

## PREPARE SWEET BASE

In a large pan, melt butter over medium heat. Add cardamom, sugar substitute and saffron water. Stir until dissolved.

## COMBINE WITH VERMICELLI

Add cooked vermicelli to the pan and mix well to coat with the sweet mixture. Cover and cook on low heat for 10-15 minutes, stirring occasionally until vermicelli absorbs the flavors.

## MAKE OMELETS

While vermicelli is cooking, whisk eggs with salt and pepper. Cook omelets in a separate pan.

## SERVE

Divide the sweet vermicelli into serving bowls. Top each bowl with an omelet and enjoy.



### Health Notes

- This version of Balaleet uses unrefined sugars to sweeten the vermicelli component of the dish.
- Try to find a wholegrain vermicelli (such as a brown rice version) for added benefits.
- Be careful of adding too much salt as this can cause inflammation and water retention.
- Paprika contains both anti-inflammatory and antioxidant properties and is much gentler on the gut than chili.
- Saffron contains antioxidant properties and compounds like crocin to support the nervous system.
- Use avocado oil to avoid saturated fats.

# CHEBAB (VEGETARIAN)

½ cup wholewheat flour  
¾ cup all-purpose flour  
1 teaspoon active dry yeast  
½ teaspoon baking powder  
½ cup milk (use dairy-free milk if you are lactose intolerant)  
100 ml warm water (or slightly more, depending on thickness of batter)  
¼ teaspoon salt  
Pinch of ground cardamom  
Pinch of crushed saffron threads  
2 tablespoons honey or maple syrup  
1 large egg  
1-2 tablespoons olive oil, for cooking  
Fresh fruit (for serving)  
Unsweetened yogurt (for serving)

PREP: 1 HR

COOKING: 15 MINS



HEALTHY FATS



UNREFINED SUGARS



WHOLE GRAINS



PROTEIN



FERMENTED FOODS



DIETARY FIBER

## ACTIVATE THE YEAST

In a large bowl, combine the warm water, sugar and yeast. Stir gently and let stand for 5-10 minutes until foamy.

## COMBINE INGREDIENTS

Add milk, egg, salt, cardamom, saffron and baking powder to the yeast mixture. Whisk until well combined.

## ADD THE FLOUR

Gradually add the flour to the wet ingredients, whisking constantly to avoid lumps. The batter should be thin and pourable. Don't overmix or else the consistency of the chebab will be tough.

## REST THE BATTER

Cover the bowl with a clean cloth and let it rest in a warm place for about 30-45 minutes, or until the batter is bubbly and slightly risen.

## COOK THE CHEBAB

Add oil to the pan over medium heat. Pour a ladleful of batter onto the hot pan and spread it thinly. Cook for 2-3 minutes, or until bubbles appear on the surface and the edges start to set. Flip and cook for another minute or until lightly golden brown on the other side.

## SERVE

Stack the chebab on a plate and serve warm. Serve with honey or date syrup, fresh fruit and yogurt on the other side.

## Health Notes

- Adding whole wheat flour adds nutrients and fiber to your diet.
- Saffron contains antioxidant properties and compounds like crocin to support the nervous system.
- Processed sugar can be a major cause of inflammation. Substitute sugar with honey or maple syrup.



# MACHBOOS (CHICKEN)

1 kg chicken, cut into medium-sized pieces  
3 cups brown rice, soaked for 45 minutes  
 $\frac{3}{4}$  tsp cumin powder  
 $\frac{1}{4}$  tsp clove powder  
1  $\frac{1}{2}$  tsp turmeric powder  
2-3 cm piece ginger, grated  
4 cloves garlic minced  
1 lime, juiced  
Salt and pepper (to taste)  
2 onions, chopped  
2 tomatoes, chopped  
1 cinnamon stick  
4 cardamom pods  
4 cloves  
2 bay leaves  
1 teaspoon turmeric powder  
1 teaspoon ground cumin  
 $\frac{1}{2}$  teaspoon black pepper  
4 cups water  
3 tablespoons extra virgin olive oil (for frying)

**PREP: 45 MINS**

**COOKING: 1.5 HOURS**



**HEALTHY FATS**



**PROTEIN**



**WHOLE GRAINS**



**DIETARY FIBER**

## MARINATE THE CHICKEN

In a bowl, combine the chicken with the marinade ingredients and let rest for at least 30 minutes.

## START COOKING

In a large pot, heat the oil over medium heat. Add the onions and cook until softened. Add the marinated chicken and cook until browned on all sides.

## ADD SPICES AND TOMATOES

Stir in the chopped tomatoes and spice mix. Cook for 5 minutes.

## ADD RICE AND WATER

Add the soaked rice and water to the pot. Bring to a boil, then reduce heat, cover, and simmer for around 30-35 minutes, or until the rice is cooked and the water is absorbed.

## REST AND FLUFF BEFORE SERVING

Remove from heat and let the machboos rest, covered, for 10 minutes. Fluff with a fork before serving.

### Health Notes

- This machboos uses brown rice instead of basmati, adding whole grains and fiber for easier digestion.
- You can use any protein (such as lamb, beef, fish or chickpeas) as the basis for this dish. Just adjust the cooking time as required.
- This marinade works with other chicken or protein dishes, adding balanced flavor with anti-inflammatory and antioxidant benefits.
- This spice mix can be used for other rice dishes, providing a flavorsome combination with anti-inflammatory and antioxidant properties.



# THAREED

1 kg lamb, deboned and cubed  
2 onions, chopped  
4 cloves garlic, minced  
2-3 cm piece of ginger, grated  
2 carrots, chopped  
2 potatoes, peeled and chopped  
1 large zucchini, chopped  
5 or 6 small tomatoes, finely chopped  
1 teaspoon ground cumin  
1 teaspoon ground coriander  
 $\frac{1}{2}$  teaspoon turmeric powder  
 $\frac{1}{4}$  teaspoon ground black pepper  
 $\frac{1}{4}$  teaspoon cinnamon powder  
1 sun-dried lime (loomi), optional  
Salt (to taste)  
4 cups water  
2 tablespoons olive oil (for frying)  
4 pieces of regag bread (wholewheat if possible)  
Unsweetened yogurt

PREP: 25 MINS

COOKING: 2 HOURS



HEALTHY FATS



UNREFINED SUGARS



WHOLE GRAINS



PROTEIN



FERMENTED FOODS



DIETARY FIBER

## PREPARE THE STEW

In a large pot, heat the oil over medium heat. Add the onions and cook until softened. Add the garlic and ginger and cook for 3 minutes.

Add the lamb and cook until browned on all sides.

Stir in the carrots, potatoes, zucchini, tomatoes, spice mix, sun-dried lime and salt and pepper.

Pour in the water, bring to a boil, then reduce heat and simmer for 1-1.5 hours, or until the lamb is tender and the vegetables are cooked through.

## ASSEMBLE THE THAREED

Place the regag bread in a large serving dish. Pour the hot stew over the bread, allowing it to soak up the flavorful broth. Serve immediately.

### Health Notes

- For a vegetarian option, try using white or red beans instead of lamb.
- Use fresh tomatoes instead of canned tomatoes/tomato paste. These products often contain added sugars.
- This spice mix works well in other stews, adding balanced flavor and anti-inflammatory benefits.
- Limit salt to avoid inflammation and water retention.
- For homemade regag bread, use a mix of wholewheat and plain flour for added fiber. Note: you can also use saj or khubz bread as an alternative.
- Serve with plain yogurt to add some probiotic support to this dish.



# KOUSA MAHSI

12 small zucchini (kousa), about 15cm long  
450g (1 pound) ground lamb  
½ cup brown rice, cooked  
2 tablespoons olive oil  
½ cup chopped onion  
¼ cup chopped fresh parsley  
¼ cup chopped fresh mint  
¼ cup chopped fresh cilantro  
1 teaspoon ground allspice  
½ teaspoon ground cinnamon  
¼ teaspoon ground black pepper  
¼ teaspoon salt  
3 cups chopped tomatoes  
½ cup water  
1 tablespoon lemon juice  
¼ cup nuts, toasted  
Unsweetened yoghurt (for serving)

**PREP: 30 MINS**

**COOKING: 60 MINS**



HEALTHY FATS



FERMENTED FOODS



WHOLE GRAINS



PROTEIN



DIETARY FIBER

## PREPARE THE ZUCCHINI

Wash the zucchini and trim the ends. Using a small corer or a sharp knife, carefully hollow out the zucchini, leaving about 1/4 inch of flesh on all sides. Chop the scooped-out zucchini flesh finely and set aside.

## MAKE THE FILLING

In a large bowl, combine the ground lamb, chopped onion, parsley, mint, cilantro, allspice, cinnamon, pepper, and salt. Mix well with your hands. In a separate small bowl, combine the chopped zucchini flesh with 1 tablespoon of olive oil. Add the zucchini mixture and cooked brown rice to the lamb mixture and mix well.

## STUFF THE ZUCCHINI

Carefully stuff the zucchini with the lamb mixture, packing it in firmly but not overfilling.

## COOK THE STUFFED ZUCCHINI

Heat the remaining 1 tablespoon of olive oil in a large pot over medium heat. Add the stuffed zucchini to the pot in a single layer. Pour the chopped tomatoes, water, and lemon juice over the zucchini. Bring to a simmer, then reduce heat to low, cover, and cook for 45 minutes, or until the zucchini are tender and the filling is cooked through.

## SERVE

To serve, arrange the kousa mahshi on a platter and sprinkle with toasted nuts. Serve with yogurt for added probiotic support.



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### Health Notes

- Cinnamon and black pepper are excellent additions to any spice mix, adding antioxidant and anti-inflammatory properties.
- Use fresh tomatoes instead of canned tomatoes/tomato paste. These products often contain added sugars.
- Limit salt to avoid inflammation and water retention.

## NOTES FROM A NUTRITIONIST

Read the following interview with Sedra Jundi, a UAE-based nutritionist and registered dietician, covering some of the key themes and most important topics discussed throughout the eating guide.



Sedra Jundi

**In your experience, what is the relationship between healthy eating and managing MS symptoms?**

Healthy eating is fundamental to managing MS symptoms, as it can support immune health, reduce inflammation and enhance energy levels. MS is an autoimmune condition, so focusing on anti-inflammatory and nutrient-dense foods can help minimize symptom severity and promote overall well-being. Foods that support a balanced gut microbiome, such as those rich in fiber, fermented foods and healthy fats, are especially beneficial, as gut health directly influences immune function.

**What are some key dietary tips you want to share about managing MS symptoms?**

**Prioritize anti-inflammatory foods:** Focus on whole foods like fruits, vegetables, and Omega 3-rich foods to help reduce inflammation.

**Choose healthy fats:** Include olive oil, nuts, seeds, and avocados, as these contain beneficial fats that support nerve and brain health.

**Stay hydrated:** Proper hydration is crucial for energy levels, muscle function, and overall health.

**Limit processed foods:** Reduce intake of packaged snacks and sugary drinks, as these can trigger inflammation.

**Include probiotic-rich foods:** Yogurt, kefir and fermented vegetables can support a healthy gut microbiome, which is linked to immune health.

**What are some key features, both positive and negative, of 'traditional' Emirati or regional cuisine and its impact on gut health?**

Traditional Emirati cuisine has some wonderful qualities, such as its use of anti-inflammatory spices like turmeric, cardamom, and saffron, which add flavor while supporting health. Fresh seafood, lean meats and fiber-rich foods like dates and lentils are also beneficial. When adapting traditional dishes, I recommend choosing whole grains, limiting added sugars and incorporating more vegetables to make them more gut-friendly and aligned with an MS-friendly diet.

**What are your favorite things to cook that promote immune health?**

I love preparing vegetable-based soups with turmeric and ginger, which are both soothing and packed with immune-supporting antioxidants. Smoothies with leafy greens, berries and a spoonful of chia seeds are another favorite. Fermented foods, like homemade yogurt or kefir, are also wonderful for immune health, and they're easy to add to a variety of dishes.

**What are some of the challenges of following an MS-friendly diet?**

One major challenge is the time and effort required to prepare fresh, whole foods, especially when MS-related fatigue is present. Finding suitable options when dining out or with family can also be difficult, as many meals include processed ingredients or added sugars. Additionally, some people may struggle with eliminating certain foods they enjoy, so finding balanced substitutions that align with an MS-friendly diet is key.

**In what ways can friends, family members and primary caregivers support people with ms to maintain an MS-friendly diet?**

Support can make a big difference. Family and friends can help by preparing meals that are nutrient-dense and MS-friendly, joining in on grocery shopping for healthier foods and encouraging hydration. It's also helpful to create a positive, non-restrictive environment where the person feels supported rather than pressured, which can motivate them to make lasting, healthy changes.

# FATTOUSH (VEGETARIAN)

2 cucumbers, diced  
2 tomatoes, diced  
1 radish, diced  
1 red onion, thinly sliced  
 $\frac{1}{2}$  cup chopped fresh parsley  
 $\frac{1}{4}$  cup chopped fresh mint  
 $\frac{1}{4}$  cup pomegranate seeds  
1 can/250g chickpeas, cooked and drained  
 $\frac{1}{4}$  cup extra virgin olive oil  
 $\frac{1}{4}$  cup lemon juice  
1 garlic clove, minced  
 $\frac{1}{2}$  teaspoon sumac  
Salt and pepper to taste  
2 wholewheat pita breads, cut into triangles and toasted until crispy

**PREP: 25 MINS**



## COMBINE THE SALAD INGREDIENTS

In a large bowl, combine the cucumbers, tomatoes, radish, red onion, parsley, mint, pomegranate seeds and chickpeas.

## MAKE THE DRESSING

In a small bowl, whisk together the olive oil, lemon juice, garlic, sumac, salt and pepper.

## TOSS THE SALAD

Pour the dressing over the salad and toss to coat.

## ADD THE PITA BREAD AND SERVE

Just before serving, add the crispy pita bread to the salad and toss gently.

### Health Notes

- Adding protein (like chickpeas) to fattoush helps balance the carbohydrates from the pita bread, regulating blood sugar. Rinse canned chickpeas thoroughly to reduce sodium.
- This simple, versatile dressing can be used in a variety of salads.
- Choose wholewheat pita bread to add a whole grain element and complex carbohydrates to the dish.



# HAREES

1 cup wheat berries  
(wholewheat kernels), soaked in cold water overnight.

1 kg chicken or lamb with bone

4 cups water

1 or 2 cinnamon sticks (to taste)

½ teaspoon ground black pepper

1 teaspoon salt (to taste)

2 tablespoons butter or samneh

**PREP: 25 MINS**  
**(PLUS SOAKING TIME)**

**COOKING: 4-6 HOURS**



HEALTHY FATS



WHOLE GRAINS



PROTEIN



DIETARY FIBER

## Health Notes

- Wheat berries are a true whole grain and an excellent source of dietary fiber.
- Cooking the meat with the bone in adds collagen and minerals to the dish.
- Cinnamon has anti-inflammatory properties.
- Black pepper has anti-inflammatory and antioxidant properties.
- Limit salt to avoid inflammation and water retention.
- Use butter or clarified butter in moderation for serving. Clarified butter is butter with the water and milk proteins removed.

## PREPARE THE WHEAT BERRIES

Rinse the soaked wholewheat kernels thoroughly and drain.

## COOK THE MEAT

In a large pot, combine the lamb (or chicken), water, cinnamon, salt and pepper. Bring to a boil, then reduce heat and simmer for 2-3 hours, or until meat is very tender. Skim off any foam that rises to the surface.

## SHRED THE MEAT

Remove the meat from the pot and shred it using two forks, discarding the bones. Reserve the stock for later.

## COMBINE AND COOK

Add the shredded meat and the wheat to the leftover broth. Bring to a boil, then reduce heat and simmer, covered, for 1-2 hours, stirring occasionally. The mixture will thicken as it cooks. If it becomes too thick, add a little more water. Be sure to stir every 10-15 minutes so that the harees doesn't stick.

## MASH THE HAREES

Mash the harees with a midrib. If you don't have one, you can use a potato masher or a handheld blender to achieve a smooth consistency. Be careful not to over-blend; you want it to be creamy but still have some rough texture.

## SERVE

Ladle the harees into individual bowls and drizzle with butter or samneh.



# STUFFED VINE LEAVES (VEGETARIAN)

Grape leaves, rinsed and drained  
1 cup brown rice, cooked  
2 tablespoons olive oil  
1 can/250g chickpeas, cooked and drained (optional)  
1 small onion, finely chopped  
1 cup chopped broccoli florets  
 $\frac{1}{2}$  cup chopped cauliflower florets  
 $\frac{1}{4}$  cup chopped fresh parsley  
1 tablespoon lemon juice  
Salt and pepper (to taste)  
Vegetable broth (or water)

**PREP: 30 MINS**

**COOKING: 60 MINS**



## PREPARE THE FILLING

In a bowl, combine the cooked brown rice, chickpeas (optional), chopped onion, broccoli, cauliflower, parsley, olive oil, lemon juice, salt and pepper. Mix well.

## STUFF THE VINE LEAVES

Lay a grape leaf flat on a surface, shiny side down. Place a spoonful of the filling in the center of the leaf, near the stem end. Fold the sides of the leaf over the filling, then roll up tightly from the stem end to the tip.

## COOK THE STUFFED LEAVES

Arrange the rolled vine leaves seam-down in a pot. Add enough vegetable broth or water to cover the leaves. Place a small plate on top of the leaves to keep them submerged.

## SIMMER

Bring the liquid to a boil, then reduce heat and simmer for about 45 minutes, or until the leaves are tender and the filling is cooked through.

## SERVE

Serve warm or cold as an appetizer or side dish. Drizzle with a little olive oil and lemon juice before serving.

---

### Health Notes

- For protein, add chickpeas to your stuffed vine leaves (rinse canned chickpeas thoroughly to reduce sodium).
- This filling uses cruciferous vegetables, rich in vitamins A, C, E and K, as well as minerals such as potassium, calcium and magnesium.
- Using vegetable broth instead of water to cook the vine leaves adds additional nutrients and depth of flavor to the dish.



# CAULIFLOWER SOUP (VEGETARIAN)

1 large cauliflower head, cut into bite-size florets  
3 tablespoons extra virgin olive oil  
2 tablespoons unsalted butter, melted  
1 medium red onion, chopped  
2 cloves garlic, minced  
4 cups vegetable broth  
1 tablespoon fresh lemon juice (or more to taste)  
 $\frac{1}{4}$  teaspoon ground nutmeg  
 $\frac{1}{2}$  teaspoon sea salt  
2 tablespoons finely-chopped fresh parsley, chives and/or green onions (for garnish)

**PREP:** 30 MINS

**COOKING:** 60 MINS



This recipe was contributed by Fatima Makhlof, a UAE-based nutritionist living with MS.

## ROAST THE CAULIFLOWER

Preheat oven to 220°C (425°F). Cut cauliflower into florets and toss with 2 tablespoons olive oil and a pinch of salt. Place on a baking sheet (for easy clean-up) and roast for 25-35 minutes, tossing halfway, until tender and caramelized.

## START THE SOUP

While the cauliflower roasts, sauté the red onion in 1 tablespoon olive oil with  $\frac{1}{4}$  teaspoon salt until softened. Add garlic, cook briefly, then pour in the vegetable broth.

## ADD CAULIFLOWER

Reserve the prettiest roasted cauliflower florets for garnish. Add the rest of the roasted cauliflower to the pot.

## SIMMER AND COOK

Bring the soup mixture to a simmer and cook for 20 minutes, stirring occasionally.

## BLEND

Remove the soup from the stove and let it cool slightly. Add the melted butter and then blend the soup until smooth. Add lemon juice and nutmeg, then blend again. Season with salt and more lemon juice (if required).

## SERVE

Garnish each bowl with a roasted cauliflower floret and chopped parsley, green onion, or chives. Store leftovers in the refrigerator for up to four days or freeze for longer storage.

### Health Notes

- Cauliflower, a cruciferous vegetable, is rich in vitamins, minerals and fiber.
- Nutmeg contains anti-inflammatory compounds called monoterpenes and evidence suggests the spice may also protect against cell damage.
- Be careful of adding too much salt to the recipe as this can cause inflammation and water retention.



## A NOTE ABOUT DESSERTS

Adapting your diet to help manage the symptoms of MS or autoimmune conditions may require you to pay special attention to desserts, as they can lead to the following dietary complications.

### Inflammation

Some studies suggest that sugar can increase inflammation in the body. Since MS is an inflammatory condition, minimizing sugar intake may help manage these symptoms.

### Low nutritional value

Desserts can be high in calories and low in nutritional value. Remember, it is important for people with MS and autoimmune conditions to support their overall health and well-being with nutrient-dense foods.

### Sugar spikes

Desserts that contain processed sugars tend to cause a quick spike in blood sugar followed by a crash that can leave you feeling more tired and sluggish than before. This can exacerbate feelings of fatigue, and changes in blood sugar levels may also interact with certain MS medications.



Follow these tips about how to include desserts in your MS-friendly diet.

- Opt for fruit-based desserts as often as possible. These are lighter than some other puddings and are naturally hydrating.
- Where possible, pair your dessert with a source of fiber, fat, or protein to minimize a sugar spike.
- Remember that an effective way to begin adapting to new dietary changes is to reduce portion sizes. This can be especially effective in the case of desserts.
- Always choose natural sweeteners like honey and dates over processed/refined sweeteners (see the Reading labels and choosing ingredients section for more advice).

---

#### Reading Labels



# SUPER FRUIT SALAD

Berries: Strawberries, blueberries, raspberries, etc.

Citrus: Orange, grapefruit, clementine, etc.

Tropical fruits: Banana, mango, pineapple, kiwi, etc.

Other fruits: Apple, pear, pomegranate, etc.

Nuts: Seeds

Unsweetened yogurt

Chia and flax seeds

**PREP: 20 MINS**



HEALTHY FATS



FERMENTED FOODS



PROTEIN

## Health Notes

- This recipe encourages you to make your own combinations! Use the list above to create a Super Fruit Salad packed with different nutrients.
- Choosing at least one fruit from each of these categories will ensure a good balance of vitamins, fiber and antioxidants in your super fruit salad.
- Add nuts to your fruit salad for a source of protein.
- Add sesame, sunflower or pumpkin seeds to your fruit salad for some healthy fats.
- Add unsweetened yogurt to your fruit salad for some probiotic support.

## PREPARE

Wash and prepare all the fruit according to your available ingredients.

## COMBINE

In a large bowl, gently combine all the prepared fruit. Add any extra ingredients, such as nuts, seeds or yogurt.

## SERVE

Serve the salad immediately or keep in the fridge for later.

# BATHEETH

1 cup wholewheat flour, sieved  
1 cup date paste  
 $\frac{1}{2}$  cup butter samneh (clarified butter), melted  
 $\frac{1}{2}$  teaspoon ground cardamom  
 $\frac{1}{4}$  teaspoon ground ginger  
Chopped nuts (such as almonds or walnuts)  
Sesame, flax and chia seeds (for garnish)  
Unsweetened desiccated coconut (for garnish)

**PREP: 30 MINS**



HEALTHY FATS



WHOLE GRAINS



PROTEIN



DIETARY FIBER



UNREFINED SUGARS

## TOAST THE FLOUR

Toast the flour in a heavy-bottomed pan over medium heat, stirring constantly, until it turns golden brown and fragrant (about 10 minutes).

## COMBINE THE INGREDIENTS

Remove the pan from the heat and stir in the date paste, melted samneh, cardamom, ginger and nuts. Mix well until all the ingredients are combined and the mixture forms a crumbly dough. If the mixture is too stiff, you can warm it slightly to make it easier to mix and shape.

## SHAPE AND SERVE

Traditionally, batheeth is served in small balls or pressed into molds. Garnish with desiccated coconut and sesame seeds for some extra healthy fats.



## Health Notes

- Use wholewheat flour for added dietary fiber and a delicious nutty flavor.
- Dates are a nutritious, fiber-rich sweetener. Make date paste by soaking 250g pitted dates in boiling water for approximately 15 minutes, drain, then blend.
- To reduce saturated fat, use  $\frac{1}{4}$  cup butter (or clarified butter) mixed with  $\frac{1}{4}$  cup olive or avocado oil.
- Add some texture, healthy fats and Omega-3 acids by garnishing with seeds.

## POST-RELAPSE AND AFTER-TREATMENT BOOSTERS

Especially following a relapse of symptoms or a round of treatments, it is important to replenish your body with essential vitamins and minerals to restore gut health and support the immune system.

In these periods, it is recommended to emphasize eating things that provide the following core benefits:

### Hydrating

### Easy to digest

Provides essential fluids to replenish the body and maintain optimal function.

Gentle on the stomach and easily broken down by the body, promoting comfortable digestion.

### Nutrient dense

### Anti-inflammatory

Packed with a high concentration of vitamins, minerals and other essential nutrients relative to their calorie content.

Contains compounds that help reduce inflammation and support a healthy immune response.

### NOTES

On the next pages of this Nutrition Guide, you will find recipes for quick and easy juices, smoothies and broths to help you recover during periods of relapse or following MS treatments.



# CARROT, PINEAPPLE, ORANGE AND GINGER JUICE

4 medium carrots, scrubbed and roughly chopped

1 cup pineapple chunks

2 oranges, peeled

2-3 cm piece of ginger, peeled and roughly chopped



UNREFINED SUGARS



DIETARY FIBER

---

## Health Notes

- This energizing juice provides a boost of vitamins and antioxidants.
- The recipes on this page will require a juicer or juice extractor to prepare.



## PREPARE

Wash and prepare the carrots, pineapple, oranges and ginger.

## BLEND

Process the ingredients through a juicer, going from hardest to softest.

## SERVE

Stir the juice and pour into a glass with ice.

# SPINACH AND APPLE GREEN JUICE

1 cup spinach, washed

2 green apples, cored and roughly chopped

½ cucumber, roughly chopped

½ lemon, peeled



UNREFINED SUGARS



DIETARY FIBER

## PREPARE

Wash and prepare the spinach, apples, cucumber and lemon.

## BLEND

Process the ingredients through a juicer, going from hardest to softest.

## SERVE

Stir the juice and pour into a glass with ice.

### Health Notes

- This refreshing, hydrating juice is packed with nutrients and perfect for a healthy start to the day.



# TAHINI TURMERIC SMOOTHIE

1 banana (frozen and chopped)  
1 tablespoon tahini  
 $\frac{1}{2}$  teaspoon ground turmeric  
Pinch of ground black pepper  
(enhances turmeric absorption)  
 $\frac{1}{2}$  cup water  
2 tablespoons unsweetened yogurt  
1 teaspoon honey or maple syrup



HEALTHY FATS



FERMENTED FOODS



UNREFINED SUGARS



PROTEIN



DIETARY FIBER



## Health Notes

- This creamy and nourishing smoothie is packed with anti-inflammatory ingredients and healthy fats.
- This recipe will require a blender or food processor to prepare.

## PREPARE

Combine all ingredients in a blender.

## BLEND

Blend until smooth and creamy. Add more water if needed to reach desired consistency.

## SERVE

Pour into a glass and enjoy immediately.

# APPLE, KALE AND BLUEBERRY SMOOTHIE

1 green apple, cored and roughly chopped  
1 cup kale, washed and roughly chopped  
½ cup blueberries (fresh or frozen)  
½ cup water  
2 tablespoons unsweetened yogurt  
1 tablespoon nut butter (almond, cashew, or peanut)  
1 teaspoon chia seeds



HEALTHY FATS



FERMENTED FOODS



UNREFINED SUGARS



PROTEIN



DIETARY FIBER

## PREPARE THE FRUIT

Combine all ingredients in a blender.

## BLEND

Blend until smooth and creamy. Add more water if needed to reach desired consistency.

## SERVE

Pour into a glass and enjoy immediately.



## Health Notes

- This vibrant green smoothie is packed full of nutrients, including essential vitamins and minerals such as iron.
- This recipe will require a blender or food processor to prepare.

# PROBIOTIC BREAKFAST SMOOTHIE

1 large mango, chopped  
1-2 cm piece of ginger, finely grated  
½ tsp ground turmeric  
Pinch of ground black pepper  
(enhances turmeric absorption)  
100ml fresh orange juice  
150ml kefir or natural drinking yogurt  
1-2 teaspoons of honey



HEALTHY FATS



FERMENTED FOODS



UNREFINED SUGARS



PROTEIN



DIETARY FIBER



## Health Notes

- This smoothie is rich in probiotic support and can be enjoyed first thing in the morning to promote a healthy gut biome.
- This recipe will require a blender or food processor to prepare.
- Get creative with your smoothie combinations! Use seasonal, fresh and readily-available ingredients and visit some different websites to get smoothie ideas.

## PREPARE

Combine all ingredients in a blender.

## BLEND

Blend until smooth and creamy. Add more water if needed to reach desired consistency.

## SERVE

Pour into a glass and enjoy immediately.

Smoothie Websites





# VEGETABLE BROTH

2 carrots, peeled and roughly chopped  
2 celery stalks, roughly chopped  
1 onion, quartered (yellow or white)  
4 cloves garlic, peeled and minced  
1 teaspoon salt  
1 teaspoon turmeric  
 $\frac{1}{2}$  teaspoon black peppercorns  
A few sprigs of fresh herbs  
8 cups water



## COMBINE

Place all ingredients in a large pot or Dutch oven.

## COOK SLOWLY

Bring to a boil, then reduce heat to low and simmer uncovered for at least 2 hours (or up to 4 hours for a richer flavor). Skim off any foam that rises to the surface.

## SERVE

Strain the broth and serve.

# CHICKEN BROTH

1 whole chicken (or about 1kg chicken pieces)  
1 onion, quartered  
2 carrots, roughly chopped  
2 celery stalks, roughly chopped  
4 cloves garlic, peeled and minced  
1 bay leaf  
1 teaspoon salt  
1 teaspoon turmeric  
 $\frac{1}{2}$  teaspoon black peppercorns  
10 cups water

## COMBINE

Place all ingredients in a large pot or Dutch oven.

## COOK SLOWLY

Bring to a boil, then reduce heat to low and simmer uncovered for at least 2 hours (or up to 4 hours for a richer flavor). Skim off any foam that rises to the surface.

## SERVE

Strain the broth and serve.



# SHOULD I TAKE SUPPLEMENTS?

Everyone is unique, and we all need different things from our diets to keep functioning at our best levels. This is especially true for unpredictable autoimmune conditions such as MS.

In addition to following the tips included in this nutrition guide, you might want to help nourish your body and strengthen your immune system by taking some dietary supplements.



---

## Vitamin D3

Vitamin D3 helps regulate the immune system to manage MS, and emerging evidence suggests it may protect nerve cells and even aid in myelin repair.

---

## Omega 3 fatty acids

Omega-3s have anti-inflammatory properties to help reduce inflammation in the central nervous system, while DHA (a key fatty acid) supports cognitive function and nerve health. Preferably get these from fish oils or algae oils (for a plant-based option), as these forms are generally more effective in supporting the nervous system than flaxseed or other plant-based Omega-3s.

---

## Calcium

Calcium is essential for maintaining strong bones, and it also promotes proper muscle function (often affected by MS). Note that calcium works best when paired with vitamin D, magnesium and vitamin K2 to ensure proper absorption.

---

## Magnesium

Magnesium is involved in nerve transmission and muscle contraction (both of which can be impaired in MS), and it can improve sleep quality and boost energy levels to help fight fatigue. Forms such as magnesium glycinate or magnesium malate may be gentler on the digestive system and better absorbed, particularly for individuals with MS who are prone to muscle cramps or fatigue.

<b>Vitamin B complex</b>	B vitamins are crucial for nerve health and myelin production, and they are also involved in energy metabolism to improve fatigue and overall well-being. Note that vitamin B complex should ideally include methylated forms of B12 (methylcobalamin) and folate (methylfolate) to ensure proper absorption.
<b>Probiotics</b>	Probiotics support a healthy gut microbiome, which studies suggest may help reduce inflammation and improve overall immune health in people with MS. Choose a high-quality probiotic with multiple strains (e.g., Lactobacillus and Bifidobacterium strains), as these are commonly studied for their role in immune modulation and gut health.
<b>Curcumin</b>	The active compound in turmeric, curcumin has anti-inflammatory properties and may help manage MS-related inflammation. It's often recommended to take curcumin with black pepper (piperine) to enhance absorption.
<b>Coenzyme Q10 (COQ10)</b>	COQ10 supports cellular energy production and may help reduce fatigue in people with MS. It also has antioxidant properties, which can be beneficial for nerve health.
<b>Zinc</b>	This antioxidant has been shown to help reduce nerve damage and may protect brain cells. Lipoic acid may also support energy metabolism and improve fatigue.
<b>Lipoic Acid</b>	Zinc is involved in immune function and may help reduce oxidative stress. It's also known to play a role in repairing cells and supporting overall immune health, though it should be balanced with copper for long-term supplementation.

#### **IMPORTANT HEALTH NOTICE**

The list of commonly recommended supplements provided here is for informational purposes only. It is crucial to consult with your healthcare professional before taking any supplements, as some vitamins and minerals may cause interactions with certain medications, particularly for individuals taking immunosuppressants or other MS-specific drugs. A healthcare professional should oversee the integration of supplements to ensure safety and prevent interference with existing treatments.

## NOTES FROM AN MS AMBASSADOR

Read the following interview with Fatima Makhlouf, a nutritionist based in the UAE, who shares her personal reflections on the connection between diet and living with MS.

**In your experience, what is the relationship between healthy eating and managing MS symptoms?**

Living with MS, you know that keeping up with medications, physical therapy and other management plans are important to taking care of yourself. What's more, following a healthy diet can make a big difference. It isn't that healthy eating is a magic bullet for curing MS. But, following a healthy MS diet can make a difference in how you feel and how your condition progresses. At its core, MS is an inflammatory autoimmune disease and eating a healthy diet can help keep inflammation in check. MS causes more inflammation in your body. But eating healthy foods can help keep that inflammation down.

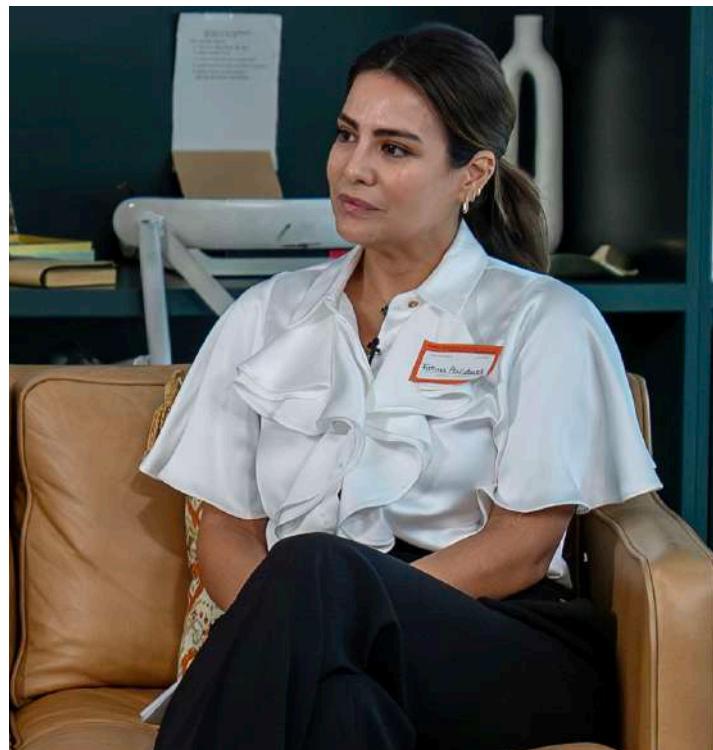
**What are some key dietary tips you want to share about managing MS symptoms?**

There are many anti-inflammatory diets but my favorite and one of the best ones is the Mediterranean diet. This anti-inflammatory diet is characterized by high intakes of poly-unsaturated and mono-unsaturated fatty acids, high-fiber consumption and lower intakes of saturated fatty acids. The Mediterranean diet concentrates on high consumption of plant-based foods, moderate intakes of fish and poultry and dairy products, and low intakes of sweet desserts, processed and red meats. This diet can limit the expression of inflammatory markers and enhance total body antioxidant capacity.

**What are your favorite things to cook?**

I love making desserts that are vegan and delicious. I also enjoy incorporating a variety of vegetables in my dishes that taste good and are healthy.

"Following a healthy MS diet can make a difference in how you feel and how your condition progresses."



Fatima Makhlouf

### **What are some of the challenges of following an MS-friendly diet?**

The biggest challenge is eating out, but over the years I have learned to control the temptations by enjoying the foods that are healthy for my body as well as choosing the right places to eat. It takes time and patience to find recipes that you love. It is always a work in progress.

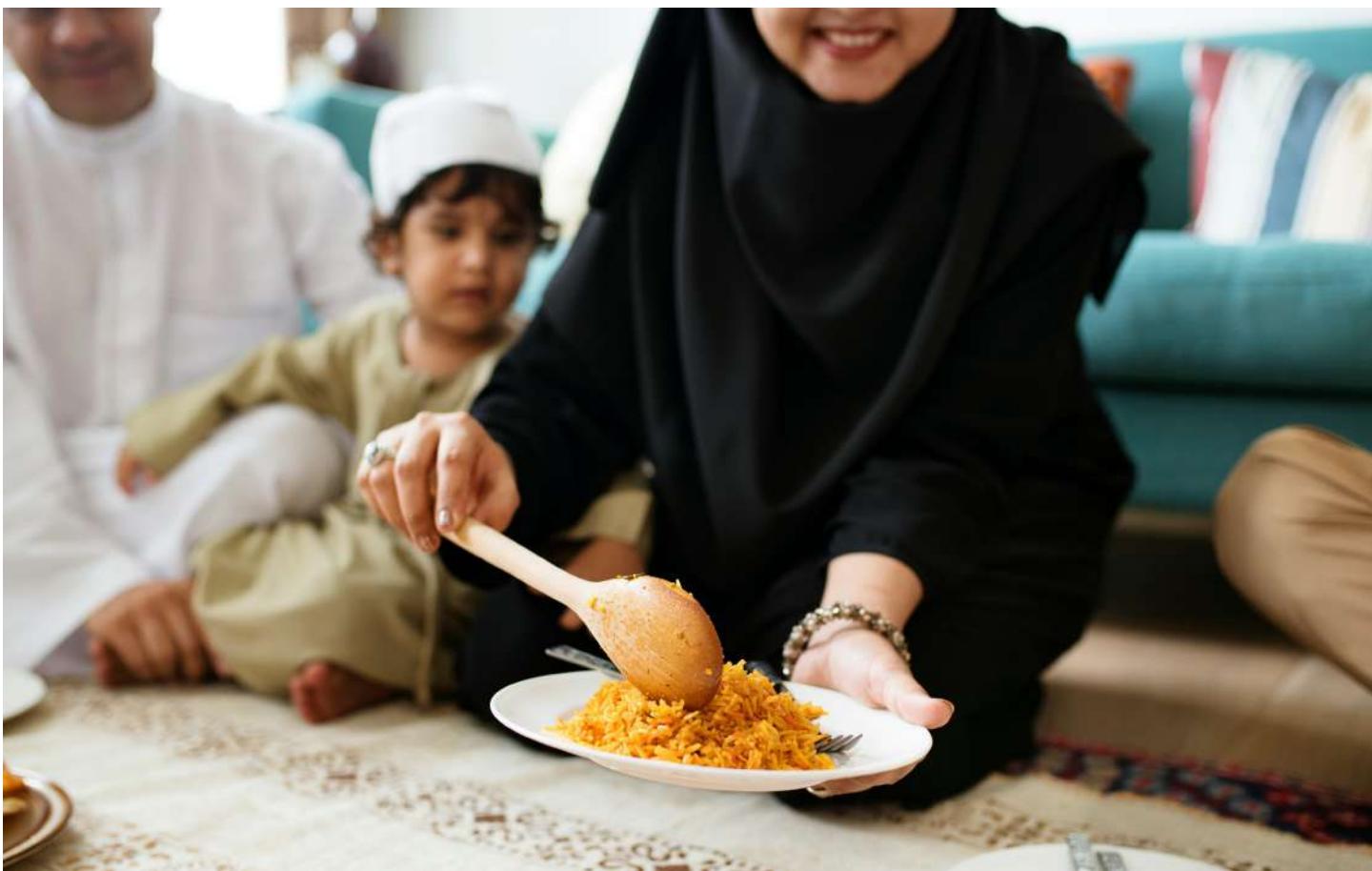
### **In what ways can friends, family members and caregivers support people with ms maintain an MS-friendly diet?**

I believe that friends can support the MS patient by asking if they have food intolerances or what they prefer to eat, and to let them have their input when it comes to choosing the restaurant if there is a plan to dine out.



# TIPS FOR RAMADAN

This section of the guide includes key tips to help you navigate the Holy Month, including ideas for how to set up Ramadan spreads (sufra) by combining the dishes included in the Recipes section of the guide in nutritious and flavorful combinations.



**Click on the titles to navigate directly to the following content sections:**

---

Important Tips and Guidelines 

---

Sufra Suggestions 

## IMPORTANT HEALTH NOTICE

Observing Ramadan while managing an autoimmune condition requires careful planning to ensure your dietary needs are met. Please remember to check in with your doctor to see if fasting is recommended in your specific case.

# IMPORTANT TIPS AND GUIDELINES

Follow these tips to ensure you stay healthy, well-nourished and energized during the Holy Month of Ramadan.

## KEY TIPS FROM UAE-BASED NUTRITIONIST AND REGISTERED DIETICIAN SEDRA JUNDI

01

### **Consult with a health professional**

Before making any dietary or lifestyle changes, discuss your plans with your healthcare provider as they can offer personalized advice based on your specific condition and medications.

02

### **Balance hydration and electrolytes**

During non-fasting hours, focus not only on drinking water but also on replenishing electrolytes. Consider adding a pinch of sea salt to water or eating electrolyte-rich foods like cucumbers, watermelon and coconut water to support hydration.

03

### **Reducing inflammation**

Before making any dietary or lifestyle changes, discuss your plans with your healthcare provider as they can offer personalized advice based on your specific condition and medications.

04

### **Balance hydration and electrolytes**

During non-fasting hours, focus not only on drinking water but also on replenishing electrolytes. Consider adding a pinch of sea salt to water or eating electrolyte-rich foods like cucumbers, watermelon and coconut water to support hydration.

05

### **Start small**

Break your fast with a date and a glass of water as a quick source of natural sugar to replenish energy and get hydrated. Follow this with light, hydrating foods. Start with soups, as they are easier to digest, then move to salads.

06

### **Chew slowly**

This is an important tip in managing your digestive system because your gut biome, in fact, starts in your mouth. Eat mindfully and avoid distractions to help with portion control and support digestion, which can be especially helpful for managing MS symptoms.



07

### Nourish your body

Fill your plate with foods that will fuel your body, including a balance of proteins, whole grains and vegetables. Opt for grilled over fried options when available.

08

### Prioritize healthy fats

Include small amounts of healthy fats (like olive oil, avocado, or nuts) in both suhoor and iftar meals. These fats can slow digestion and provide steady energy, helping prevent hunger pangs during the day.

09

### Limit sugary foods

Avoid breaking your fast with sugary or heavily processed foods, as they can lead to energy crashes. Opt instead for natural sources of sweetness like dates or fresh fruit, which offer additional fiber and nutrients.

10

### Avoid overeating

While it's tempting to indulge after a day of fasting, avoid overeating at iftar. This can overwhelm your digestive system, leading to a flare-up of other symptoms.

11

### Plan ahead for suhoor

Suhoor is a crucial meal for sustained energy throughout the day. Opt for a combination of complex carbohydrates (like oats or whole-grain bread), protein (such as eggs or yogurt) and fiber (e.g., fruits and vegetables) to help maintain blood sugar levels and prevent energy dips.

# SUFRA SUGGESTIONS

## SUFRA 1

This spread contains a mix of hearty, filling dishes and some lighter, refreshing options for a balanced meal. Try a lamb version of the harees recipe if you want to avoid having two chicken dishes in the same spread.

---

### Harees (lamb)

Include a small portion of harees for protein and whole grain nourishment.

---

### Machboos (chicken)

A small portion of machboos will provide energy and dietary fiber.

---

### Fattoush (vegetarian)

The fresh and hydrating fattoush salad provides fiber and essential nutrients.

---

### Chebab with yogurt and fruit

This light dessert gives you the chance to add probiotic support to your gut.

---

### Batheeth

Batheeth provides satisfying sweetness without refined sugars.



# SUFRA SUGGESTIONS

## SUFRA 2

This spread includes a vegetable broth and a post-iftar smoothie to offset some of the heavier main options (thareed, kousa mahshi). Try a chicken version of the harees recipe to avoid having two lamb dishes in the same spread.

---

### Vegetable broth

Start with a light and hydrating vegetable broth.

---

### Samak meshwi with roast vegetables

Grilled fish and roast vegetables provide a great balance of lean protein and dietary fiber.

---

### Thareed

A smaller portion of thareed will provide an excellent source of protein.

---

### Kousa mahshi

Kousa mahshi provides added wholegrains and dietary fiber to the spread.

---

### Probiotic breakfast smoothie

Round out this spread with a refreshing smoothie to boot probiotic support for your gut.



# SUFRA SUGGESTIONS

## SUFRA 3

Not hungry? Feeling a little under the weather? Try this lighter and easily digestible spread for those times when you have a small appetite.

---

### Chicken broth

Start with some chicken broth for easy-to-digest protein and nutrients.

---

### Fattoush (vegetarian)

The fresh and hydrating fattoush salad provides fiber and essential nutrients.

---

### Samak meshwi with roast vegetables

Grilled fish and roast vegetables provide a great balance of lean protein and dietary fiber.

---

### Batheeth

Batheeth provides satisfying sweetness without refined sugars.

---

### Super fruit salad with yogurt

Finish this spread with some hydrating fruit and yogurt to boost probiotic support.



# SUFRA SUGGESTIONS

## SUFRA 4

Our final sufra suggestion provides a light and refreshing vegetarian spread.

---

### Vegetable broth

Start with a light and hydrating vegetable broth.

---

### Fattoush (vegetarian)

The fresh and hydrating fattoush salad provides fiber and essential nutrients.

---

### Stuffed vine leaves

Enjoyed warm or cold, the stuffed vines leaves are packed with whole grain energy and dietary fiber.

---

### Balaleet

Balaleet provides a source of protein and satisfying sweetness to the spread.

---

### Super fruit salad

Finish this spread with some hydrating fruit and yogurt to boost probiotic support.



# PRACTICAL MEAL PLANNING

This section of the guide includes practical tips and templates to help manage MS and autoimmune conditions.



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## NOTES

Print these templates or keep them on your phone for easy access.

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[My Food Diary](#) ↗

---

[Weekly Meal Plan Template](#) ↗

---

[Grocery Checklist](#) ↗

## MY FOOD DIARY

Use this food diary to track your food intake over the course of the week.

What do you notice about the foods you are eating?  
Are you experiencing sensitivities after certain meals?  
Which foods make you feel particularly good and full of energy?

### NOTES

Keep these notes to guide your meal planning, and remember to tell your healthcare team about any dietary sensitivities that you notice.

DAY	WHAT DID YOU EAT?	HOW DID YOU FEEL?
SUNDAY		
MONDAY		
TUESDAY		

DAY	WHAT DID YOU EAT?	HOW DID YOU FEEL?
WEDNESDAY		
THURSDAY		
FRIDAY		
SATURDAY		

# WEEKLY MEAL PLAN TEMPLATE

Use this weekly meal planner to help you manage your time and ensure variety in your diet. Remember to cook extra portions and plan for leftovers. An example day with balanced, healthy meals is shown below.

DAY	BREAKFAST	LUNCH	DINNER	SNACKS
Example	Balaleet	Samak meshwi and fattoush (vegetarian)	Machboos (chicken)	Nuts, fruit

DAY	BREAKFAST	LUNCH	DINNER	SNACKS
SUNDAY				

MONDAY

TUESDAY

DAY	BREAKFAST	LUNCH	DINNER	SNACKS
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

# GROCERY CHECKLIST

Fill out your grocery list based on the cookbook recipes you want to try this week!

Print a copy of this every week or keep it on your phone for quick and easy reference.

## INGREDIENTS

### Proteins

- LAMB
- CHICKEN
- EGGS
- CHICKPEAS
- WHITE BEANS
- NUTS

### Vegetables

- GARLIC
- ONIONS
- TOMATOES
- ZUCCHINI
- BROCCOLI
- CAULIFLOWER

### Spices and herbs

- GINGER
- SAFFRON
- BLACK PEPPER
- TURMERIC
- CARDAMOM
- CINNAMON
- CUMIN
- SALT

### Fruits

- APPLES
- BERRIES
- ORANGES
- LEMONS
- GRAPEFRUIT
- BANANAS
- MANGO
- POMEGRANATE

### Healthy fats

- EXTRA VIRGIN OLIVE OIL
- AVOCADO
- AVOCADO OIL
- BUTTER
- CLARIFIED BUTTER
- TAHINI
- CHIA SEEDS
- SESAME SEEDS

### Whole grains

- WHOLEWHEAT KERNELS
- WHOLEWHEAT FLOUR
- BUCKWHEAT FLOUR
- WHOLEWHEAT BREAD
- BROWN RICE
- QUINOA
- OATS
- BARLEY

### Unrefined sugars

- DATES
- HONEY
- MAPLE SYRUP
- DATE SYRUP

### Fermented foods

- UNSWEETENED YOGURT
- KEFIR
- LABNEH

### Other items



# LINKS TO ADDITIONAL RESOURCES

Please consult the following resources for further support in your dietary journey.

# LINKS TO ADDITIONAL RESOURCES

## IMPORTANT UAE CONTACTS

Emergency calls: 999

MS Helpline: 800677

NMSS Directory



## MS AND AUTOIMMUNE CONDITION GUIDES

Multiple Sclerosis Factsheet	↗	National Multiple Sclerosis Society (UAE)	↗
MS Patient Journey	↗	MS Focus (US)	↗
Beginners Guide to Multiple Sclerosis	↗	National Multiple Sclerosis Society (US)	↗
Understanding Autoimmune Disease	↗	MS Trust (UK)	↗

## RECOMMENDED MS WEBSITES

## DIETARY AND NUTRITION GUIDES

National Nutrition Guidelines	↗
Diet & Nutrition for Multiple Sclerosis	↗
Understanding Dietary Studies and How Nutrition Impacts MS	↗
Diet & Nutrition	↗
Choices: Diets & Supplements	↗
Overcoming MS Diet	↗
Best Bet Diet Cookbook	↗
The Wahls Protocol	↗

# GLOSSARY OF IMPORTANT TERMS

This section contains simple definitions of some of the key terms used in this Nutrition Guide for MS & Autoimmune Conditions.

<b>Additive</b>	A substance added to food to enhance flavor, preserve it, or improve its appearance.
<b>Artificial flavoring</b>	Synthetically created substances that mimic natural flavors.
<b>Calorie</b>	A unit of energy. In nutrition, calories refer to the energy people get from food and drink.
<b>Clarified butter</b>	Clarified butter is butter with the water and milk proteins removed, leaving a composition of 99-100% pure butterfat. Before clarification, butter is 16-17% water and 1-2% milk proteins (also known as milk solids).
<b>Cruciferous vegetables</b>	Cruciferous vegetables are a group of vegetables known for their high nutritional value and health benefits, including being rich in vitamins, minerals and fiber. Broccoli, kale, cauliflower, cabbage and sprouts are good examples.
<b>Dairy</b>	Milk and other food products made from milk, like cheese and yogurt.
<b>Dietary fiber</b>	The portion of plant-based foods that is indigestible, but which aids the digestive process and promotes gut health. Also known as roughage.
<b>Dietary supplement</b>	A product that provides nutrients to supplement the diet.
<b>Dysbiosis</b>	An imbalance in the gut microbiome, where the composition of bacteria is disrupted.
<b>Fermented foods</b>	Foods where carbohydrates are transformed to organic acids by bacteria or yeast (e.g., yogurt and labneh).
<b>Food diary</b>	A record of what you eat and drink to track dietary habits.
<b>Gluten</b>	A protein found in wheat, barley, and rye that can trigger adverse reactions in people with celiac disease or gluten sensitivity.

<b>Gut biome</b>	The community of microorganisms living in your digestive tract.
<b>Healthy fats</b>	Fats that benefit health, like those found in avocados and nuts.
<b>Inflammation</b>	The body's response to certain types of food or imbalances in the gut biome, often noticed by pain and swelling.
<b>Lactose intolerance</b>	The inability to digest lactose, a natural sugar found in dairy products.
<b>Leafy greens</b>	Leafy greens are the edible leaves of plants, often packed with vitamins, minerals, and fiber. Spinach, kale, lettuce and chard are good examples.
<b>Meal plan</b>	A structured guide for daily meals and snacks.
<b>Natural sweetener</b>	Sweeteners derived from natural sources, like honey and maple syrup.
<b>Nutrient</b>	A substance that provides nourishment essential for growth and the maintenance of life. There are six major nutrients: carbohydrates, proteins, fats, vitamins, minerals and water.
<b>Nutrient dense</b>	Foods packed with essential nutrients relative to their calorie content.
<b>Nutritional value</b>	The overall contribution of any food to good health.
<b>Processed meat</b>	Meat that has been preserved by smoking, curing, or adding preservatives.
<b>Relapse</b>	A recurrence of MS symptoms after a period of improvement.
<b>Sodium content</b>	The amount of salt in a food.
<b>Sugar spike</b>	A rapid increase in blood sugar levels.
<b>Trans fats</b>	Trans fats are made when liquid oils are turned into solid fats. Small amounts of trans fats occur naturally, but large amounts are found in some processed foods.
<b>Unhealthy fats</b>	Fats that can negatively impact health, like trans fats.
<b>Unrefined sugars</b>	Sugars in their natural state, like those found in fruits and honey.
<b>Whole grains</b>	Grains that contain the entire grain kernel, providing more fiber and nutrients than refined grains.

# GET INVOLVED

Are you inspired to share your story and connect with others in the MS community?

## GET INVOLVED

### FOLLOW NMSS UAE ON SOCIAL MEDIA

NMSSocietyUAE



National MS Society UAE



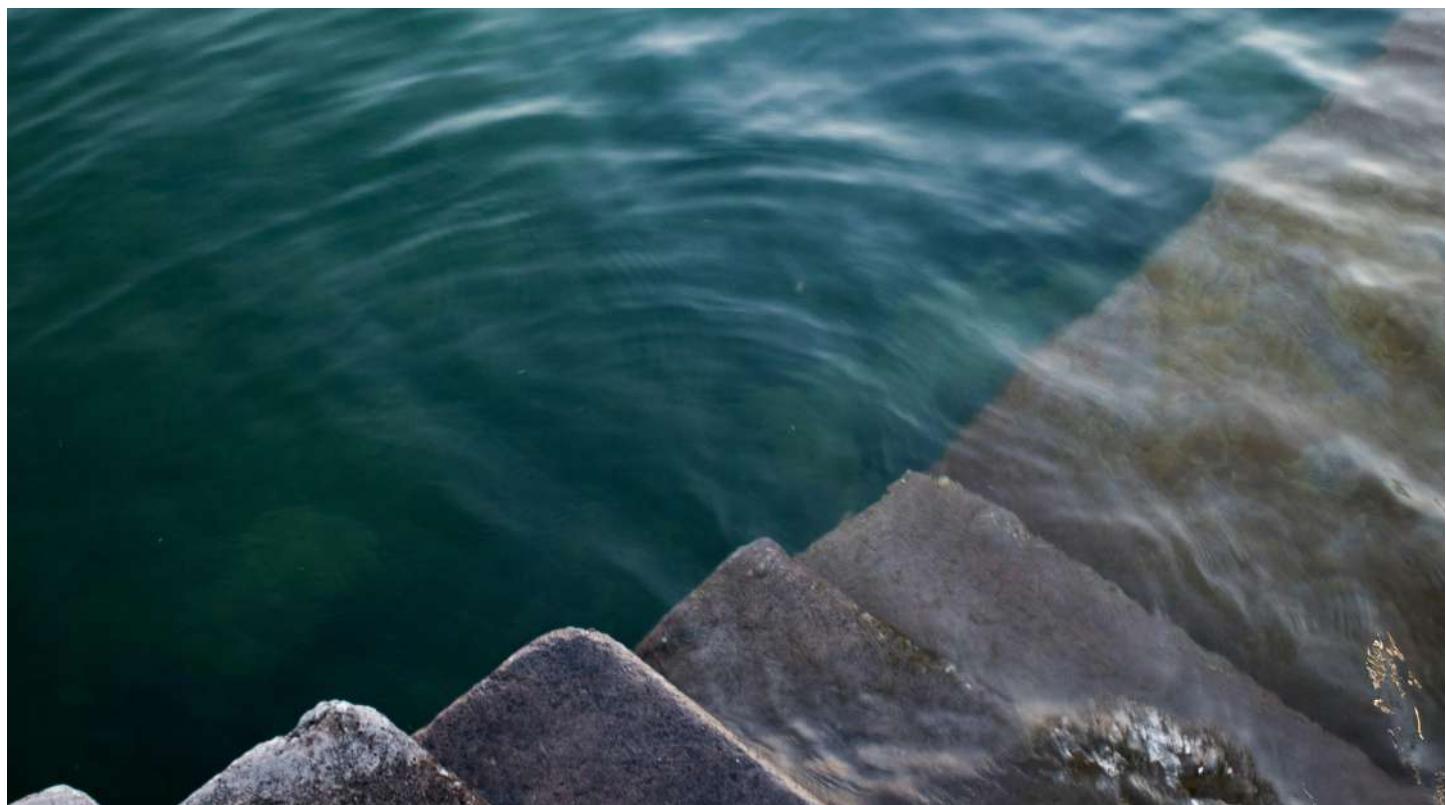
National Multiple Sclerosis Society UAE



NMSSocietyUAE



NMSSocietyUAE



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SEDRA JUNDI

**Fatima Makhlof**, a nutritionist and MS ambassador based in the UAE.

FATIMA MAKHLOUF



