

myasthenia gravis ▾

A guide to nutrition for patients with myasthenia gravis

This guide provides practical advice and information to help you make informed choices about your diet and manage your symptoms effectively

Stay informed

This report is produced in collaboration with Health Spotlight. Join our community using the link below to stay up to date with the latest news and research relevant to your condition:

<https://www.linkedin.com/showcase/myasthenia-gravis-insights>

Disclaimer: This research report provides general information and is not a substitute for professional medical advice. Always consult with your healthcare provider for diagnosis and treatment of any medical condition.

Introduction

Myasthenia gravis (MG) is a chronic autoimmune disorder that causes muscle weakness. While there's no cure, a well-balanced diet can play a crucial role in managing symptoms, maintaining energy levels, and supporting overall health.

This comprehensive guide provides practical advice and information to help you make informed choices about your diet and manage your symptoms effectively. We'll delve into the specific nutritional needs of individuals with MG, offer practical tips for meal planning, and provide strategies for adapting to changing dietary needs as your condition evolves.

By following these guidelines and working closely with your healthcare team, you can optimize your nutrition, enhance your well-being, and live a fulfilling life with MG.

Understanding myasthenia gravis and its impact on nutrition

MG is an autoimmune neuromuscular disorder that causes weakness in the voluntary muscles, those that we control consciously. This weakness can affect various parts of the body, including the muscles involved in chewing and swallowing. As a result, people with MG may experience difficulties with:

- **Chewing:** Muscle fatigue in the jaw can make it tiring to chew, especially tougher foods like steak or raw vegetables. This can be exacerbated by existing fatigue [1].
- **Swallowing (dysphagia):** Weakness in the throat muscles can make it difficult to swallow food and liquids safely, increasing the risk of choking or aspiration (food or liquid entering the airway) [2]. In some cases, dysphagia may be the only presenting symptom of MG, especially in elderly patients [3].
- **Mealtime fatigue:** The effort required for chewing and swallowing can lead to fatigue, making it challenging to consume enough calories and nutrients [4].

These challenges can impact your overall nutritional intake and well-being [5]. However, by understanding the nutritional needs of MG patients and adopting appropriate strategies, you can manage these difficulties and improve your quality of life.

General dietary guidelines for people with MG

While there is no specific "MG diet," following general healthy eating principles is essential. The U.S. Department of Agriculture and the U.S. Department of Health and Human Services recommend the following: [6]

- **Eat a variety of foods:** Include a wide range of fruits, vegetables, whole grains, lean proteins, and healthy fats in your diet to ensure you get all the necessary nutrients.
- **Maintain a healthy weight:** A healthy weight is important for everyone, but it's especially crucial for people with MG. Extra weight can put more strain on your muscles and worsen fatigue [6].
- **Choose a diet low in fat, saturated fat, and cholesterol:** Limit your intake of unhealthy fats, which can contribute to weight gain and other health problems.
- **Choose a diet with plenty of vegetables, fruits, and grain products:** These foods are packed with vitamins, minerals, and fiber, which are essential for overall health.
- **Use sugars only in moderation:** Limit your intake of added sugars, which can cause energy spikes and crashes.
- **Use salt only in moderation:** Too much salt can lead to fluid retention and high blood pressure, which may worsen MG symptoms [8].
- **If you drink alcoholic beverages, do so in moderation:** Alcohol can interfere with muscle function and the effectiveness of MG medications [8]. It can also worsen MG symptoms, particularly muscle weakness [9].

Specific nutritional needs for MG patients

In addition to the general guidelines, people with MG may have specific nutritional needs due to the impact of the condition and its treatments.

Calorie intake

While specific calorie recommendations vary depending on individual factors like age, activity level, and overall health, it's important to ensure you're consuming enough calories to maintain a healthy weight and energy levels [10]. If you experience difficulty chewing or swallowing, consider eating smaller, more frequent meals throughout the day to avoid fatigue and ensure adequate calorie intake [4].

Protein requirements

Protein is crucial for maintaining muscle mass and strength, which is especially important for people with MG. Include good sources of lean protein in your diet, such as [8] :

- Fish (salmon, tuna, cod)
- Poultry (chicken, turkey)
- Lean meat (beef, pork)
- Eggs
- Beans and lentils
- Tofu

Vitamins and minerals

Certain vitamins and minerals play a vital role in managing MG symptoms and overall health.

Vitamin D

- Importance for MG: Improves immune response, reduces fatigue
- Food Sources: Fatty fish, fortified foods, sunlight exposure

Calcium

- Importance for MG: Supports bone health, especially important with corticosteroid use
- Food Sources: Dairy products, leafy greens, fortified foods

Potassium

- Importance for MG: Replenishes potassium lost due to medication side effects
- Food Sources: Bananas, potatoes, avocados, apricots

Omega-3 Fatty Acids

- Importance for MG: Support immune health and reduce inflammation
- Food Sources: Fatty fish (salmon, tuna, mackerel), flaxseed, walnuts

Curcumin

- Importance for MG: Potent anti-inflammatory and antiviral properties
- Food Sources: Turmeric root

Zinc

- Importance for MG: May help lessen the severity of viral infections
- Food Sources: Meat, seafood, beans, nuts, whole grains

Vitamin C

- Importance for MG: May help lessen the severity of viral infections
- Food Sources: Citrus fruits, berries, tomatoes, peppers

Important note about Magnesium: While magnesium is an essential mineral, it can interfere with certain MG medications and may even trigger a myasthenic crisis in some individuals [13]. It's important to consult with your doctor before starting any magnesium supplement and follow their recommendations for usage.

Fiber

Fiber plays a crucial role in bowel health and regularity, which can be particularly important for MG patients who may experience digestive issues as a side effect of medication [14]. Include plenty of fiber-rich foods in your diet, such as fruits, vegetables, beans, nuts, seeds, and whole grains.

Anti-inflammatory diet

As an autoimmune disease, MG involves inflammation in the body. An anti-inflammatory diet may be beneficial in managing MG symptoms [14]. This type of diet emphasizes foods rich in omega-3 fatty acids, colorful fruits and vegetables, and spices like turmeric and ginger, while limiting processed foods, refined sugars, and unhealthy fats.

Nutritional supplements

If you have difficulty chewing or swallowing, or if you're concerned about getting all the necessary nutrients from your diet, nutritional supplements can help fill in the gaps [15]. Talk to your doctor or a registered dietitian about which supplements might be right for you.

Impact of certain foods on muscle weakness

While no specific foods directly cause muscle weakness in MG, some foods can exacerbate fatigue and make chewing more difficult [1]. It's important to pay attention to how different foods affect you and adjust your diet accordingly. Consider limiting or avoiding:

- **High-fat and processed foods:** These can contribute to weight gain and fatigue.
- **Sugary foods and drinks:** These can cause energy fluctuations and worsen fatigue.
- **High-salt foods:** These can lead to fluid retention and high blood pressure.
- **Alcohol:** This can interfere with muscle function and medication effectiveness.

Managing eating and swallowing challenges

If you experience difficulties with chewing and swallowing, here are some tips to make mealtimes easier:

Modifying food textures

- **Choose soft foods:** Opt for foods that are easy to chew and swallow, such as mashed or pureed vegetables, cooked cereals, yogurt, and soups [5].
- **Moisten dry foods:** Add sauces, gravies, or yogurt to moisten dry foods and make them easier to swallow [5].
- **Cut food into small pieces:** Cut your food into bite-sized pieces to reduce the effort required for chewing [5].
- **Thicken liquids:** If you have trouble swallowing thin liquids, consider using a thickening agent to make them safer to consume [7].

Assistive devices

If you have significant swallowing difficulties, your doctor or speech therapist may recommend assistive devices, such as:

- **Special utensils:** These can help with gripping and manipulating food.
- **Modified cups and straws:** These can make it easier to drink liquids.

- **Thickening agents:** These can be added to liquids to make them easier to swallow.

Managing fatigue during mealtimes

- **Stay hydrated:** Dehydration can worsen fatigue and muscle weakness, so make sure to drink plenty of fluids throughout the day [8].
- **Eat smaller, more frequent meals:** This can help prevent fatigue and ensure you get enough calories and nutrients [5].
- **Eat your largest meal earlier in the day:** When you have more energy [5].
- **Rest before meals:** To conserve energy [15].

Weight management

Maintaining a healthy weight is crucial for managing MG. If you're struggling with weight gain, here are some tips:

- **Focus on a balanced diet:** Follow the general dietary guidelines outlined earlier.
- **Increase physical activity:** Engage in regular, moderate-intensity exercise as tolerated [\[17\]](#).
- **Work with a registered dietitian:** A dietitian can help you create a personalized weight management plan [\[8\]](#).

It's important to approach weight management with a focus on overall health and well-being, rather than just weight loss.

Detoxification and immunity

Toxins can inhibit the body's natural immunity, which is essential for managing MG [12]. You can support your body's detoxification processes by:

- **Engaging in daily exercise:** Physical activity helps improve circulation and eliminate toxins.
- **Drinking plenty of water:** Water flushes out toxins from your system.
- **Eating sulfur-containing foods:** Cruciferous vegetables (broccoli, cauliflower, Brussels sprouts), eggs, and green leafy vegetables support detoxification pathways.
- **Eating prebiotic foods:** Prebiotics nourish the beneficial bacteria in your gut, which play a role in detoxification and immune health [12]. Good sources of prebiotics include onions, garlic, bananas, and asparagus.

Stress management and active recovery

Stress can have a significant impact on your immune system and overall health [12]. Incorporating active recovery techniques into your routine can help manage stress and support your well-being. These techniques include:

- **Breathing exercises:** Deep breathing can help calm your nervous system and reduce stress.
- **Meditation:** Mindfulness meditation can help you focus on the present moment and reduce anxiety.
- **Journaling:** Writing down your thoughts and feelings can be a helpful way to process emotions and reduce stress.
- **Yoga:** Gentle yoga poses can promote relaxation and reduce muscle tension.
- **Guided imagery or visualization:** These techniques involve focusing on positive images or scenarios to promote relaxation and reduce stress.

Practical advice and meal planning tips

Here are some practical tips to help you plan MG-friendly meals [5]:

- **Plan ahead:** Prepare meals in advance or choose quick and easy recipes to minimize fatigue [9].
- **Cook in batches:** Cook larger quantities and freeze leftovers for future meals.
- **Use convenience foods wisely:** Opt for pre-cut vegetables, frozen fruits, and other convenience items to save time and energy [18].
- **Keep a food diary:** Track your food intake and note how different foods affect your symptoms.
- **Experiment with recipes:** Find recipes that are easy to prepare and enjoyable to eat.

Sample meal plans

Here are some sample meal ideas that may be suitable for people with MG:

- **Breakfast:** Scrambled eggs with avocado and whole-wheat toast (ensure the toast is soft and well-moistened)
- **Lunch:** Chicken salad sandwich on soft bread with a side of fruit salad
- **Dinner:** Baked salmon with mashed sweet potatoes and steamed green beans
- **Snacks:** Yogurt with fruit, smoothies, hummus with whole-grain crackers (ensure the crackers are soft and moist)

Remember to adjust these meal plans based on your individual preferences and needs.

Recipes

Here are a few recipe ideas from the Myasthenia Gravis Foundation of America (MGFA) and MG United: [\[19\]](#)

- **Healthy green smoothies:** Combine leafy greens like spinach or kale with fruits, yogurt, and healthy fats like avocado for a nutritious and easy-to-swallow meal or snack.
 - **Apple green smoothie:** Spinach, apple, cucumber, mango, yogurt, coconut water.
 - **Creamy mango mint smoothie:** Spinach, mint leaves, avocado, yogurt, mango, coconut water.
 - **Sunrise green smoothie:** Romaine lettuce, cucumber, mandarin oranges, yogurt, pineapple, mango, orange juice.
- **Hearty black bean burgers:** A vegetarian option that can be made with soft, easily-chewed ingredients.
- **Tasty and comforting minestrone soup:** A soup packed with soft vegetables and beans.
- **Flourless chocolate cupcakes:** A gluten-free treat that's soft and easy to eat.
- **One-pot curry: rogan josh:** A flavorful curry that can be made in a slow cooker or pressure cooker, minimizing prep time and effort.
- **Roasted sweet potato and ginger soup:** A comforting soup with

anti-inflammatory ingredients.

These are just a few examples, and many other recipes can be adapted to suit the needs of MG patients.

Importance of working with a healthcare professional

Every person with MG is unique, and your nutritional needs may vary depending on the severity of your condition, your medications, and other individual factors. It's essential to work with a healthcare professional, such as a doctor or registered dietitian, to develop a personalized nutrition plan that meets your specific needs [\[22\]](#). They can provide guidance on:

- Appropriate calorie and protein intake
- Vitamin and mineral supplementation
- Managing eating and swallowing difficulties
- Weight management
- Medication interactions with food

By actively participating in your care and communicating your experiences and needs to healthcare professionals, you can ensure that your treatment plan is tailored to your specific circumstances.

Conclusion

Living with MG can present challenges, but by paying attention to your nutritional needs and adopting appropriate strategies, you can manage your symptoms effectively and improve your overall quality of life. Remember to:

- **Focus on a balanced diet:** Include a variety of fruits, vegetables, whole grains, lean proteins, and healthy fats.
- **Maintain a healthy weight:** Extra weight can worsen fatigue and put more strain on your muscles.
- **Manage chewing and swallowing difficulties:** Choose soft foods, modify textures, and use assistive devices if needed.
- **Stay hydrated:** Dehydration can exacerbate MG symptoms.
- **Address specific nutritional needs:** Ensure adequate calorie and protein intake, and consider vitamin and mineral supplements as needed.
- **Manage stress:** Incorporate active recovery techniques into your routine.
- **Work with your healthcare team:** Develop a personalized nutrition plan that meets your individual needs.

With the right approach to nutrition and a strong partnership with your healthcare providers, you can live well with MG and enjoy a fulfilling life.

References

1. Myasthenia gravis - Symptoms and causes - Mayo Clinic
<https://www.mayoclinic.org/diseases-conditions/myasthenia-gravis/symptoms-causes/syc-20352036>
2. Dysphagia in myasthenia gravis - The Walton Centre
<https://www.thewaltoncentre.nhs.uk/patient-leaflets/dysphagia-in-myasthenia-gravis/631546>
3. Myasthenia gravis masquerading as dysphagia: unveiled by magnesium infusion - PMC
<https://pmc.ncbi.nlm.nih.gov/articles/PMC3992550/>
4. Tips for Swallowing Difficulty with Myasthenia Gravis - Healthline
<https://www.healthline.com/health/eating-and-drinking-myasthenia-gravis>
5. Best Diet for Myasthenia Gravis - AmeriPharma® Specialty Care
<https://ameripharmaspecialty.com/myasthenia-gravis/best-diet-for-myasthenia-gravis/>
6. Nutrition Tips for Myasthenia Gravis
<https://myastheniagravis.org/life-with-mg/nutrition/>
7. Tips for Eating with Myasthenia Gravis (MG)
<https://myastheniagravis.org/life-with-mg/tips-for-eating/>
8. Nutrition and Myasthenia Gravis: Foods to Avoid - Mama Health
<https://www.mamahealth.com/myasthenia-gravis/nutrition-foods>
9. Diet and Alcohol - myaware
<https://www.myaware.org/myasthenia-diet>

10. Nutritional Needs of the Patient with Myasthenia Gravis

<https://www.mgawpa.org/pdfs/Medical/Nutritional%20Needs%20MG%20.pdf>

11. Myasthenia Gravis - Life Extension

<https://www.lifeextension.com/protocols/neurological/myasthenia-gravis>

12. 8 Ways to Optimize Immune Health Naturally - Conquer Myasthenia Gravis

<https://myastheniagravis.org/8-ways-to-optimize-immune-health-naturally/>

13. Magnesium and Myasthenia Gravis: Is It Safe? 7 Facts To Know | MGteam

<https://www.mgteam.com/resources/magnesium-and-myasthenia-gravis-is-it-safe-facts-to-know>

14. Nutrition with a Neuromuscular Disease - Muscular Dystrophy Association

<https://www.mda.org/sites/default/files/2024/10/Nutrition-with-a-Neuromuscular-Disease.pdf>

15. Infusion Nursing Notes Blog | Tips for Managing Fatigue with Myasthenia Gravis

<https://blog.nufactor.com/post/tips-for-managing-fatigue-with-myasthenia-gravis.aspx>

16. Problems Swallowing With Myasthenia Gravis: Tips for Eating Safely | MGteam

<https://www.mgteam.com/resources/problems-swallowing-with-myasthenia-gravis-tips-for-eating-safely>

17. How Do I Exercise With Myasthenia Gravis? - WebMD

<https://www.webmd.com/brain/exercise-safely-mg>

18. Learning to Love Convenience Vegetables: Cooking with MG

<https://myasthenia-gravis.com/living/convenience-vegetables-cooking>

19. Soft Food Recipes | myaware

<https://www.myaware.org/pages/category/soft-food?take=8>

20. Healthy Green Smoothies from MGFA | Myasthenia Gravis Foundation of America,

<https://myasthenia.org/blog/2023/04/19/healthy-green-smoothies-from-mgfa/>

21. Food and Nutrition Myasthenia Gravis - MG United

<https://www.mg-united.com/food-and-nutrition-myasthenia-gravis>

22. User Involvement in Myasthenia Gravis Research - PMC

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9202346/>