Introduction

People with MS want more information about the role of wellness strategies in their efforts to live their best lives. At the same time, healthcare professionals often feel ill-equipped to provide answers and recommendations around wellness strategies to their patients due to a lack of well organized, scientifically-based and practical information. This guide provides people with MS and their healthcare providers with information and materials to engage in early and ongoing conversations that support effective wellness and lifestyle strategies.

Wellness encompasses many dimensions, all of which are described on the National MS Society website. This guide focuses on areas of particular interest to people with MS:

- **Physical well-being** including preventive healthcare, diet and exercise
- **Emotional well-being**
- **Role of complementary therapies** in MS management

In addition to summarizing key findings, this guide links to more comprehensive information about each topic in Society publications (i.e., Wellness for People with MS), journal abstracts and other resources.

Each section highlights important points for discussion, and provides the opportunity for the person with MS to record questions for healthcare professionals, list personal goals and identify steps to take to achieve those goals.

This document includes many valuable resources via hyperlinked text, and fillable form fields so you can work online and save a copy to your computer. If you prefer to use a paper copy, click here for a print-friendly version (black & white text with links to resources listed at the end of the guide).

Please share your feedback about this guide in a short survey. Your comments will facilitate enhancements to this resource.
Setting Goals

Success is more easily achieved when goals are SMART:

Specific  Measureable  Achievable  Results-oriented  Time-based

For example, given that being overweight is not good for a person’s overall health and may impact the course of MS, a sample SMART goal might be “I will aim to lose one pound per week for the next five weeks.” Or, the goal might be “Over the next month, I will replace three high-calorie desserts per week with fruit.” These goals are specific, measureable, achievable and make clear the desired results in a specific period of time.

Given that physical activity/exercise may improve aerobic capacity and muscle strength, mobility, quality of life, and symptoms of fatigue, cognitive impairment, bladder and bowel dysfunction and depression, a sample SMART goal might be “I will walk five minutes per day for one week, followed by 10 minutes per day until I am ready to increase the time again.” This goal is specific, measureable and achievable and makes clear the results one hopes to achieve in a specific period of time. For a person whose walking ability is limited, a similar SMART goal might focus on upper body aerobic or strengthening exercise, or water-based exercise.

Because no two people with MS are exactly alike, each person’s wellness goals and strategies to achieve those goals will be different.
Health-Maintenance Strategies

1. **Attend to primary care needs:** Routine primary care (as well as MS care) is essential to promoting health and reducing the risk of other health conditions (co-morbidities), such as heart disease, stroke, diabetes and cancer.

2. **Have a primary care provider:** Many people with MS look to their neurologist for all of their healthcare needs. For those living with chronic illness, however, it is equally important to have a primary care provider (family physician, internist or other primary care clinician) who attends to overall health and provides comprehensive preventive services including checking of vital signs, vaccinations, breast and testicular exams, colonoscopies, and other age-appropriate screenings.

3. **Stop smoking:** Smoking increases a person’s risk of developing MS as well as the risk of developing secondary-progressive MS and of disability progression. People who smoke are significantly more likely to develop antibodies that may reduce the efficacy of natalizumab and interferon beta treatment. Smoking also increases a person’s risk of lung cancer, heart disease and respiratory problems. In addition, smoking presents a significant fire hazard when the smoker has weakness, incoordination or cognitive problems. Recent data suggest that quitting smoking, even after an MS diagnosis, will slow the rate of future disease progression.

4. **Maintain a healthy weight:** Effective weight management can help avoid the most common co-morbidities in people with MS, including obesity, high blood pressure, diabetes and cardiovascular disease.

5. **Reduce or eliminate the intake of alcohol and other substances:** These substances may interact with medications a person is taking, reduce coordination and alertness, and increase the risk of falls. Although cannabis may help reduce certain symptoms of pain and spasticity in MS, smoked marijuana is known to have some of the same negative health consequences as cigarette smoking and cannabis in any form may also impair balance, coordination and cognition in people with MS. There is no evidence that cannabis modifies the MS disease process.
Giving up old habits and creating new, healthier ones is seldom easy. Most people find that having the support of their healthcare providers, family and friends can make it easier to create a plan to achieve their goals, and stick with it. The National Institutes of Health have offered some tips for successfully changing habits, including identifying your barriers and coming up with solutions.

Questions for Healthcare Provider(s) about Health-Maintenance Strategies:
1. __________________________________________________________________________________________
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

SMART Goals for Health-Maintenance Strategies:
1. __________________________________________________________________________________________
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

Next Steps Regarding Health-Maintenance Strategies:
1. For example: Check with my primary healthcare provider to make sure I’m up-to-date with recommended preventive healthcare screening strategies and ask about strategies to help me quit smoking
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

Opportunities for Support Partner/Family/Friends to Support Health-Maintenance Strategies:
1. For example: Providing support for my efforts to quit smoking or eat more foods containing vitamin D
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

Notes:
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**Diet**

1. **Maintain a balanced diet:** A well-balanced diet helps maintain overall health and may prevent a wide range of diseases. In addition, diet may have an effect on the MS disease process, including direct effects on the immune system, indirect effects through modulation of the gut flora, and effects on components of the central nervous system. See a recent summary, Diet and MS, including references.

2. **Achieve a healthy weight:** Research findings point to obesity as a possible risk factor for developing MS. The incidence of MS appears to be increasing worldwide at the same time that caloric intake and being overweight or obese are increasing. In recent studies, obesity and body size at age 18–20 were associated with an increased risk of MS, as was higher Body Mass Index (BMI) at age 7–13. It has also been shown that obesity can affect disability progression and health-related quality of life.

3. **Reduce sodium intake:** Some recent evidence points to sodium, which is a primary component of salt, as a potential factor in MS disease activity. In an observational study, people who consumed a moderate or high amount of sodium had a higher rate of relapses and a greater risk of developing a new lesion on MRI than people who consumed a low amount of sodium.

4. **Monitor vitamin D levels:** Several studies have suggested that low intake and low blood levels of vitamin D play a role in the risk of MS and of disease progression. Vitamin D supplementation is currently being evaluated in randomized, controlled clinical trials in order to determine whether there is a causal relationship between vitamin D and MS disease activity — or some other non-influential association — and whether the potential benefits of vitamin D supplementation outweigh any risks for people with MS. In the meantime, vitamin D can be obtained from oily fish (including salmon, mackerel, sardines, herring and trout), egg yolks and cod liver oil, as well as dairy products, cereals and orange juice that have been fortified with vitamin D. Determining whether a person is a candidate for vitamin D supplementation depends on his or her blood level of vitamin D, which can be obtained with a simple blood test. The normal range of 25-hydroxyvitamin D is 30–100 ng/mL (75–250 nmol/L); a vitamin D level in the 20–30 ng/mL range is considered low; a vitamin D level below 20 ng/mL is considered deficient.

5. **Consider polyunsaturated fatty acids (PUFAs):** The potential role of PUFAs in slowing disease activity has been studied with mixed results. As with vitamin D supplementation, carefully controlled trials are necessary to identify potential benefits and risks.
6. **Use caution with probiotics**: Probiotics (bacteria and other microorganisms that may provide health benefits) may eventually prove to be a potential treatment for MS. However, studies of the safety and effectiveness of probiotics in MS are very limited. Since some probiotics may stimulate the immune system, both the potential benefits and risks must be studied.

Research studies in the area of diet have generally been of inadequate size and design to provide useful information about dietary strategies in MS. The evidence available thus far related to dietary factors is insufficient to establish either efficacy (how well a particular diet or supplement works in the structured environment of a controlled clinical trial) or effectiveness (how consistently or persistently people can use a diet or supplement in everyday life). The most popular diets are summarized in the table below.

While additional research is being conducted on diets in MS, the following recommendations are based on what is known today:

- Limit sugar and processed foods
- Increase fruits and vegetables
- Choose lean sources of protein (including chicken, turkey, soy products, fish, beans)
- Choose healthy fats (polyunsaturated fats from nuts, seeds, vegetable oils and oily fish)
- Consume adequate fiber and fluids
Questions for Healthcare Provider(s) about Diet:
1. ________________________________________________________________
2. ________________________________________________________________
3. ________________________________________________________________

SMART Goals for Diet:
1. ________________________________________________________________
2. ________________________________________________________________
3. ________________________________________________________________

Next Steps Regarding Diet:
1. For example: Ask my healthcare provider or the National MS Society (1-800-344-4867) for a referral to a dietician
2. ________________________________________________________________
3. ________________________________________________________________

Opportunities for Support Partner/Family/Friends to Support Diet:
1. For example: Joining me in preparing and eating well-balanced meals that contain fewer processed foods, healthier proteins and fats
2. ________________________________________________________________
3. ________________________________________________________________

Notes:
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<table>
<thead>
<tr>
<th>Diet</th>
<th>Basic guidelines</th>
<th>Restrictions</th>
<th>Possible deficiencies</th>
<th>Evidence for benefit in MS</th>
<th>Evidence for benefit in other diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paleolithic</td>
<td>Emphasizes consumption of game meats (30–35% of daily caloric intake) and plant foods (besides cereals), multiple daily servings of green, sulfur-rich and intensely colored vegetables and fruits, with a high intake of PUFA to target a ratio of saturated to unsaturated fats of 1.4–2:1</td>
<td>Processed food, domesticated meats, dairy</td>
<td>Folic acid, thiamine, vitamin B6, calcium and vitamin D, insufficient caloric intake</td>
<td>Single observation study demonstrating possible improvement in fatigue in progressive MS patients (however diet was bundled with other interventions and there was no comparison group)</td>
<td>Single study showed improvement in cardiovascular risk factors</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>High intake of whole grains, vegetables, fruits, legumes, olive oil and fish, a low intake of saturated fats (butter and other animal fats), red meat, poultry, dairy products and a regular but moderate intake of ethanol (mainly red wine)</td>
<td>No specific exclusions</td>
<td>None expected</td>
<td>None</td>
<td>Extensive evidence for a benefit on cardiovascular health, diabetes and possibly on cancer risk</td>
</tr>
<tr>
<td>McDougall</td>
<td>High carbohydrate, low fat, low sodium vegan diet with cereals, potatoes, and legumes as staples. Fruits and vegetables are allowed in any amount. Low sodium intake and small amounts of sugar are recommended</td>
<td>Dairy, eggs, meat, poultry, fish and all oils</td>
<td>Iron, vitamin B12, vitamin D, calcium and omega-3 fatty acids</td>
<td>None</td>
<td>One study showed improvement in cardiovascular risk factors with one week of the diet (did not look at long term effects)</td>
</tr>
<tr>
<td>Gluten Free</td>
<td>Avoidance of all foods containing wheat, barley, triticales or their derivatives</td>
<td>Foods containing wheat, barley or triticales or their derivatives</td>
<td>None expected</td>
<td>None</td>
<td>Treatment for Celiac disease and non-celiac gluten sensitivity</td>
</tr>
<tr>
<td>Swank</td>
<td>Low fat diet that advocates reduction in the intake of saturated fats. Whole grain cereals are recommended, daily intake of 2 servings of fruits and vegetables, intake of white fish and shellfish and trimmed poultry is allowed. Low fat dairy is allowed and small quantities of red meat are permissible after the 1st year of the diet</td>
<td>Processed food with saturated fats, high fat dairy products, red meat for 1st year</td>
<td>None expected (possibly vitamin A, C, E and folate)</td>
<td>Observational data from a single cohort of patients treated with this diet suggested an improvement in relapses and functional status. (There was no control comparison group)</td>
<td>None</td>
</tr>
<tr>
<td>Dietary Approaches to Stop Hypertension (DASH)</td>
<td>High in fruits, vegetables, low-fat dairy, whole grains, lean meats, fish and poultry, nuts and beans (considered to be the “Americanized” version of the Mediterranean Diet)</td>
<td>No specific exclusions</td>
<td>None expected</td>
<td>None</td>
<td>Has been shown to lower blood pressure and to reduce the risk of some kinds of cancer, stroke, heart disease, kidney stones and diabetes</td>
</tr>
</tbody>
</table>

Wellness Discussion Guide | National MS Society
Exercise/Physical Activity

1. **Make exercise and physical activity a part of daily life:** Staying physically active, with regular aerobic and strengthening exercises, household chores or recreational activities, is vital for health and well being.

2. **Gear exercise and physical activity to abilities, limitations and interests:** A physical or occupational therapist can recommend a personalized plan as well as adaptive equipment (e.g., recumbent bicycle or tricycle) or modified programs (e.g., seated yoga, aquatics programs) to meet individual needs.

3. **Consider exercise guidelines for people with MS:** An exercise guideline has been published by the MS Society of Canada for adults with mild to moderate disability. The guideline suggests starting an exercise program gradually and increasing duration, frequency and intensity until the following are met:
   - 30 minutes of moderate intensity aerobic activity twice a week
   - Strength training exercises for major muscle groups twice a week

   A physical therapist, exercise physiologist or other fitness professional with experience in MS can make personalized recommendations regarding type, intensity and frequency of activities.

4. **Distinguish regular exercise from rehabilitation:** Rehabilitation is prescribed for people with MS to preserve and enhance function and mobility affected by worsening MS and to promote recovery from relapses.

Research shows that people with MS are — on average — alarmingly sedentary, regardless of their physical abilities or limitations. Yet a substantial body of research demonstrates that exercise is good for a person’s overall health and for reducing risk for other health conditions (co-morbidities).

Research in MS has also demonstrated that exercise may improve aerobic capacity and muscle strength, mobility, quality of life, and symptoms of fatigue, cognitive impairment, bladder and bowel dysfunction, and depression. However, the efficacy or effectiveness of any specific exercise program for people with MS has not been established.
Questions for Healthcare Provider(s) about Exercise/Physical Activity:
1. _____________________________________________________________________________________
2. _____________________________________________________________________________________
3. _____________________________________________________________________________________

SMART Goals for Exercise/Physical Activity:
1. _____________________________________________________________________________________
2. _____________________________________________________________________________________
3. _____________________________________________________________________________________

Next Steps Regarding Exercise/Physical Activity:
1. For example: Ask my healthcare provider or the National MS Society (1-800-344-4867) for a referral to a physical therapist
2. _____________________________________________________________________________________
3. _____________________________________________________________________________________

Opportunities for Support Partner/Family/Friends to Support Exercise/Physical Activity:
1. For example: Joining me in physical activities that are enjoyable and geared to my level of ability
2. _____________________________________________________________________________________
3. _____________________________________________________________________________________

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Mood

1. Consider self-management strategies to help maintain or enhance emotional well-being. Research in MS suggests that the following may be helpful:

- **Exercise** (aerobic and resistance training) may help reduce depressive symptoms, and being physically active may help people feel less depressed over time.

- **Phone-delivered physical activity counseling** (including motivational strategies, goal-setting, action planning) may reduce the severity of depression in people who become more active.

- **Mindfulness and meditation**, as well as yoga, Tai chi, acupuncture and massage, among others may be effective in reducing mild to moderate depressive symptoms, anxiety and stress.

- **St. John’s wort** is probably effective for treating mild to moderate depression. Because St. John’s wort interacts with many prescription medications, a discussion of possible benefits and risks should occur before starting treatment.

- **Adaptive coping and solution-focused coping** help enhance adaptation and adjustment.

- **Stress management strategies of various types** may help to reduce stress.

Although none of these strategies have been shown to work for everyone with MS, it is likely that any person with MS can find a strategy that would be beneficial. Continue ongoing conversations about lifestyle changes that can promote emotional wellbeing, and be alert to significant mood changes that may require standard medical approaches such as medications and psychotherapy.

2. **Pay attention to major mood changes** — including depression and anxiety — that may get in the way of wellness or self-care strategies of any kind. Depression, for example, is known to be one of the most common symptoms of MS, but also one of the most treatable. The National MS Society (1-800-344-4867) can provide referrals to mental health professionals with experience working with people with MS and/or other chronic illnesses and disability.
Questions for Healthcare Provider(s) about Mood and Stress Management:
1. __________________________________________________________________________________________
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

SMART Goals for Mood and Stress Management:
1. __________________________________________________________________________________________
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

Next Steps Regarding Mood and Stress Management:
1. For example: Ask my healthcare provider or the National MS Society (1-800-344-4867) for a referral to a mental health professional or to other resources offering stress management or mindfulness-based meditation training
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

Opportunities for Support Partner/Family/Friends to Support Mood:
1. For example: Letting me know if they notice significant changes in my mood and supporting my efforts to access the help I may need to manage my mood
2. __________________________________________________________________________________________
3. __________________________________________________________________________________________

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Use of Complementary Therapies

A variety of treatments and strategies (for example, dietary supplements, homeopathy, chiropractic, acupuncture, among others) that lie outside of mainstream Western medicine may be used by people with MS to promote overall health and manage MS. When these strategies and treatments are used in conjunction with standard MS care, they are considered to be “complementary.” When they are used instead of standard MS care, they are considered “alternative.” The majority of people with MS use these treatments and strategies as a complement to their standard MS care.

1. **Be an educated consumer:** Since very little scientific evidence currently exists to indicate that any of these types of therapies have an impact on either MS relapse activity or disability, these therapies should not be used in place of disease-modifying or symptom management medications that have undergone rigorous study and been approved by regulatory agencies such as the U.S. Food and Drug Administration (FDA) or the European Medicines Agency (EMA). When considering the use of complementary therapies, become informed about potential benefits, risks and costs.

2. **Use complementary therapies wisely:** In order to ensure that complementary therapies do not interact with prescribed medications or treatment strategies, or negatively affect the immune system or central nervous system, discuss any potential therapy before starting. For example, therapies that are “natural” are not necessarily safe, and therapies that “boost the immune system” can over stimulate the immune system of a person with MS. Without this shared knowledge, a person with MS and his or her healthcare provider cannot effectively partner to manage MS.
Questions for Healthcare Provider(s) about Complementary Therapies:
1. _______________________________________________________________________________________
2. _______________________________________________________________________________________
3. _______________________________________________________________________________________

SMART Goals for Complementary Therapies:
1. _______________________________________________________________________________________
2. _______________________________________________________________________________________
3. _______________________________________________________________________________________

Next Steps Regarding Complementary Therapies:
1. For example: Discuss with my MS and primary care providers all of the complementary strategies I am using and/or considering using
2. _______________________________________________________________________________________
3. _______________________________________________________________________________________

Opportunities for Support Partner/Family/Friends to Support My Decision-Making Around Complementary Therapies:
1. For example: Understanding that while I appreciate suggestions for how to manage my MS, I must make decisions about the use of complementary therapies with my healthcare providers
2. _______________________________________________________________________________________
3. _______________________________________________________________________________________

Notes:
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Please share your feedback about this guide in a short survey. Your comments will facilitate enhancements to this resource.
Additional Resources

Neurology Care: Lifestyle and Alternative Medicine

National Center for Complementary and Integrative Health
The U.S. Federal Government's lead agency for scientific research on complementary and integrative health approaches, 1 of the 27 institutes and centers that make up the National Institutes of Health (NIH) within the U.S. Department of Health and Human Services

ORCCAMIND
A center without walls, based at Oregon Health Sciences University, committed to complementary and alternative medicine (CAM) and integrative medicine research in neurological disorders

Wellness for People with MS
Dunn M, Bhargava P, Kalb R. Your patients with multiple sclerosis have set wellness as a high priority — and the National Multiple Sclerosis Society is responding. US Neurology 2015; epub ahead of print (open access)

Can Do Multiple Sclerosis
An organization whose personalized, engaging, and experiential programs expand and deepen understanding of the physical, emotional, interpersonal, intellectual and spiritual aspects of living with MS. The Can Do Multiple Sclerosis Guide to Lifestyle Empowerment (DemosHealth, 2013)

Resources continued on next page.
The National MS Society (“Society”) publishes many other resources about various aspects of MS. Visit nationalMSsociety.org/brochures or call 1-800-344-4867.

Other popular resources include:

- Clear Thinking about Alternative Therapies
- Depression and Multiple Sclerosis
- Exercise as a Part of Everyday Life
- Fatigue: What You Should Know
- Food for Thought: MS and Nutrition
- Managing MS through Rehabilitation
- MS and Your Emotions
- Taming Stress in MS

The Society supports MS healthcare professionals through professional publications, tools, and up-to-date content about MS, new therapies and continuing MS research.

- nationalMSsociety.org/PRC including Current Evidence about Diet and MS, Vitamin D and MS: Implications for Clinical Practice, Depression in MS,
- MS Diagnosis, Disease & Symptom Management free mobile app for healthcare professionals (Apple, Android)
- Custom USB drive (call 1-800-344-4867)

The Society is proud to be a source of information on multiple sclerosis related topics. The information provided is based on professional advice, published experience, and expert opinion, but does not constitute medical or legal advice. For specific medical advice, consult a qualified physician. For specific legal advice, consult a qualified attorney.

The Society does not endorse products, services or manufacturers. Such names appear here solely because they are considered helpful information. The Society assumes no liability for the recipient’s use of any product or service mentioned. The Society does not independently verify whether the information provided by each service provider is accurate. The Society undertakes no responsibility to verify whether the service provider is appropriately licensed and certified and has applicable insurance coverage.

Early and ongoing treatment with an FDA-approved therapy can make a difference for people with multiple sclerosis. Learn about your options by talking to your healthcare professional and contacting the National MS Society at 1-800-344-4867 or nationalMSsociety.org.

The National MS Society mobilizes people and resources so that everyone affected by MS can live their best lives as we stop MS in its tracks, restore what has been lost and end MS forever. To fulfill this mission, the Society funds cutting-edge research, drives change through advocacy, facilitates professional education, collaborates with MS organizations around the world, and provides programs and services designed to help people with MS and their families move their lives forward.