

Fatigue in MS

Fatigue is one of the most common symptoms of MS, occurring in about 80 percent of people with MS. Fatigue can significantly interfere with your ability to function at home and work and is one of the primary causes of early departure from the workforce. Fatigue may be the most noticeable symptom of MS despite minimal activity limitations.

Several factors contribute to fatigue

- **Disrupted sleep.** Sleep may be disrupted by trips to the bathroom, pain, muscle spasms, periodic leg movements, sleep apnea, or depression.
- **Depression.** Depression is one of the most common symptoms of MS. Left untreated, depression reduces quality of life and makes other symptoms - including fatigue, pain, and cognitive changes - feel worse.
- **Deconditioning.** If you experience decreased physical activity, your body can become deconditioned or “out of shape.” With deconditioning, even limited activity can be tiring.
- **Overexertion.** When you push your body too hard, it’s known as overexertion. This involves physical or mental effort that’s beyond current abilities which can lead to fatigue.
- **Medication side effects.** Medications can contribute to fatigue or sleepiness.
- **Temperature sensitivity.** MS can make you sensitive to heat. Becoming overheated can lead to feeling tired and weak.
- **Poor nutrition.** An unhealthy diet that is high in sugar and processed foods and low in nutritional quality may result in feelings of fatigue.

In addition, the MS disease process can cause unique kinds of fatigue:

- **Lassitude.** This type of fatigue - often referred to as ‘MS fatigue’ - is characterized by:
 - Overwhelming exhaustion, preventing participation in physical and/or cognitive activities.
 - Occurs daily, worsening as the day progresses.
 - Comes on easily and suddenly and tends to be worsened by heat.
 - Is unrelated to activity or sleep.
 - Is thought to be caused by biochemical changes in the central nervous system.
- **Impaired nerve conduction.** Nerve damage from MS leads to disrupted nerve signals resulting in muscles that tire easily and weakness in the limbs. Often, with this type of fatigue,

the legs feel stiff and heavy with extended standing or walking.

Fatigue management

The first step in managing fatigue is to identify all the factors that may be contributing to it. Sometimes addressing those factors is enough to reduce the fatigue to a manageable level. This includes:

- Medical evaluation for possible non-MS causes of fatigue such as:
 - Anemia and other vitamin deficiencies (such as vitamin D or vitamin B12).
 - Dehydration.
 - Infection.
 - Thyroid problems.
 - Hormonal imbalances.
 - Sleep apnea.
 - Depression.
 - Other possible illnesses and conditions.
 - Medications - review all medications with your healthcare provider to identify any that may be contributing to feelings of sleepiness or fatigue.

If fatigue continues to be a problem, management options may include:

- Occupational therapy: strategies to simplify tasks at work and home.
- Physical therapy: exercise program to improve overall conditioning; energy-saving ways of staying mobile
- Sleep regulation: treating MS symptoms or other conditions that interfere with sleep.
- Psychological interventions: stress management, relaxation training, membership in a support group, or psychotherapy.
- Cooling strategies.
- Vitamin supplementation: treating underlying vitamin deficiencies with vitamins and/or diet.
- Amantadine hydrochloride, armodafinil (Nuvigil®), and modafinil (Provigil®) are three medications that are commonly prescribed off-label to help with sleepiness or mental fatigue.

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