

## Obesity

**Condition:** Obesity is when an individual has an excess of fatty tissue stored in the body with a reduction in lean muscle mass. An individual is considered obese if he or she weighs 20% or more than what is considered normal weight for his or her height. The BMI (Body Mass Index), the standard screening measurement for obesity, for obese patients is  $30 \text{ kg/m}^2$  or greater. BMI greater than 30 are subdivided into classes of obesity. For example, individuals with BMI of  $40 \text{ kg/m}^2$  or greater are considered to be in Class 3 obesity.

**Background:** Obesity has been and continues to be a growing problem in the U.S. According to the Centers for Disease Control and Prevention (CDC), nearly 42% of U.S. adults were obese as of 2017-2018. That is an increase of about 11% from eight years ago. People with obesity are more likely to be disabled compared to non-obese people.

**Risk Factors:** While genetic factors likely play a role in the development of obesity, it can also be the result of overeating, inactivity, stress, chronic pain, or lack of exercise. Lower self-esteem, increased screen time, excessive alcohol and processed foods, and smoking cessation are additional risk factors, among others. Certain diseases and health conditions can contribute to obesity, such as hypothyroidism, certain autoimmune diseases, and spinal cord injuries, to name a few. Medications such as long-term steroid use and psychiatric medications can also contribute to obesity. Socioeconomic factors also play a role. As an example, food deserts are localities of poor and underserved communities with poor access to healthier foods, which can create conditions supportive for the development of chronic obesity.

**History and Symptoms:** Common symptoms of obesity include excess body fat, joint and muscle pains, rashes in skin folds, sleep apnea, poor mobility, among others.

**Physical Exam:** Physicians conduct cardiac, pulmonary, skin, musculoskeletal, and abdominal exams, as well as check patient's balance, endurance, mobility, and walking ability.

**Diagnostic Process:** To determine if a patient is obese, a physician will check their body mass index (BMI) to see if it is  $30 \text{ kg/m}^2$  or higher. This is done by dividing weight in kilograms by height in meters squared. They may also check his/her waist-to-hip ratio, which also helps to diagnose obesity and is associated with an increased risk of death. Routine bloodwork should be ordered to ascertain and rule out common causes of obesity, if uncertain. Imaging may be required to further work up causes of obesity.

**Rehab Management:** Patients should reduce their caloric intake while eating nutritious foods and increase their exercise. Unless a patient is on a medically-supervised program, the lowest daily caloric intake recommended is 1,200 kcal/24h for women and 1,500 kcal/24h for men. Patients who are severely obese may need to stay in a hospital. Physical medicine and rehabilitation (PM&R) physicians are uniquely positioned in the medical field to help educate, train, and mobilize patients with obesity. PM&R physicians can help patients obtain an improved quality of life where they can manage pain with various physical interventions such as therapy, educate patients about control measures for pain (such as meditation or biofeedback), and provide patients with tools on how to adapt to their environment if they have a disability. PM&R physicians can find ways to engage and reinforce weight management tools with a team of physical and occupational therapists, psychologists, registered dietitians, make medication modifications, and

prescribe or modify adaptive equipment. PM&R physicians also may use holistic approaches for weight loss such as dietary adjustments, supplements, and/or acupuncture.

**Other Resources for Patients and Families:** The CDC's [Division of Nutrition, Physical Activity, and Obesity](#) has many resources that can help families and caregivers.

## Frequently Asked Questions

### What is PM&R?

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit [www.aapmr.org/aboutpmr](http://www.aapmr.org/aboutpmr).

### What makes PM&R physicians unique?

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

### Why see a PM&R physician?

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

### How do I find a PM&R physician near me?

Visit [www.aapmr.org/findapmrphysician](http://www.aapmr.org/findapmrphysician) or contact your primary care physician for a referral.