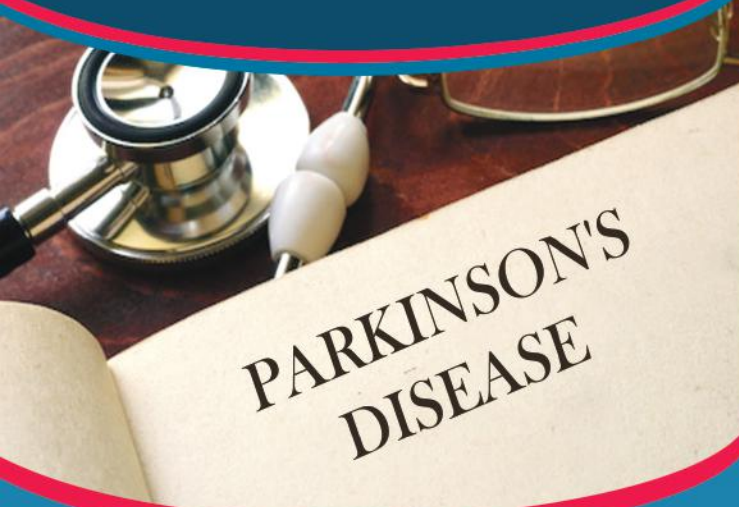




# Parkinson's Disease



## ▶ Parkinson's Disease Treatment ◀

Treatments are available to help reduce the main symptoms and maintain quality of life for as long as possible. Physical, occupational and speech therapy can be critical to the treatment plan. Surgical options also have an important role for a subset of patients with Parkinson's disease. Finally, complementary therapies can be used to treat some Parkinson's disease symptoms.

## ▶ Diet Therapy in Parkinson's Disease ◀

A healthy diet can increase energy, maximize the potential of medications, and promote overall well-being. Flavonoids, caffeine, alcohol, and adequate vitamin D status have emerged as protective factors. Established roles for diets that are low in protein or redistribute protein to evening meals have also been confirmed as useful for many patients.

Some important tips about nutrition in Parkinson's disease:

- ▶ Eat food from all food groups.
- ▶ Choose a diet with plenty of grain products, vegetables and fruits.
  - ▶ Limit sugar intake.
  - ▶ Reduce salt and sodium intake to help decrease the risk of high blood pressure.
- ▶ Incorporate foods high in antioxidants. These include brightly colored and dark fruits and vegetables.
- ▶ Choose a diet low in fat, saturated fat and cholesterol

People with PD may eat less and lose weight because of difficulty swallowing, nausea from medications or movement symptoms that make it difficult to eat. Address these issues, and also consider adding foods with healthy fats, nuts, nut butters and avocado to diet. Try bitter greens or spicy foods to stimulate the appetite.

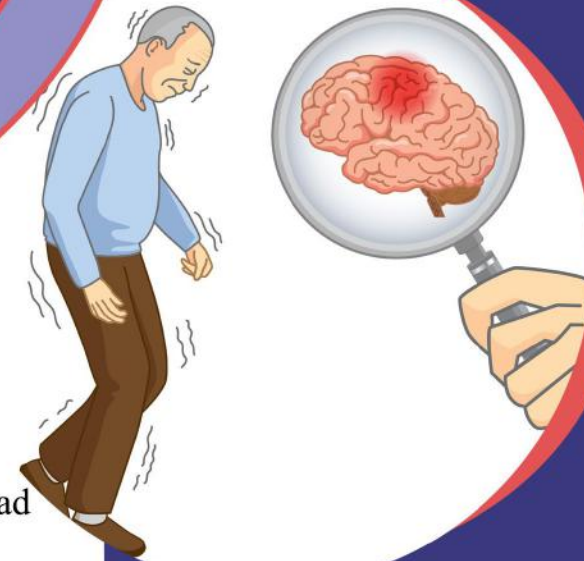


Staying hydrated is important, but if drinking water leads to urinary urgency, try eating foods with a high water content in place of beverages, such as celery, butternut squash, grapefruit, strawberries and watermelon. A poor diet may lead to increased oxidative stress, which could impede the antioxidant defense system. In contrast, a well-balanced diet rich in a variety of foods, including numerous servings of vegetables and fruits (especially those containing nicotine) and moderate amounts of omega-3 fatty acids, tea, caffeine, and wine may provide neuroprotection.

Parkinson's disease patients who had eaten a plant-based diet experienced a significant reduction in the Unified Parkinson's Disease Rating Scale, when compared with a similar group of patients had eaten an omnivorous diet. A protein restriction-induced decrease in requirement for L-dopa may offer more than symptomatic benefit. In addition, high-protein meals raise blood levels of homocysteine.



Parkinson 's Disease



Symptoms and the rate of progression differ among individuals. The 4 main symptoms of Parkinson's disease are:

- ▶ Tremor in hands, arms, legs, jaw, or head
- ▶ Stiffness of the limbs and trunk
  - ▶ Slowness of movement
- ▶ Trouble with balance and possible falls

### ▶ Parkinson's Disease Definition ◀

Parkinson is a chronic and progressive disease that affects the nerve cells in the brain that produce dopamine. Parkinson's develops when cells in the brain stop working properly and are lost over time. The neurotransmitter dopamine helps to regulate movement. This loss of dopamine is the reason that many treatments for Parkinson's disease are intended to increase dopamine levels in the brain.

### ▶ Parkinson's Disease Causes ◀

The exact cause of Parkinson's is still unknown, but researchers think it's a combination of age, genetic and environmental factors that cause the dopamine-producing nerve cells to die. Parkinson's disease is most commonly found in adults over the age of 50 although diagnosis can occur in much younger people.

### ▶ Parkinson's Disease Symptoms ◀

Parkinson's symptoms usually begin gradually and get worse over time.



Other symptoms can include: Have difficulty walking and talking , Mental and behavioral changes , Sleep problems , Depression , Memory difficulties , Fatigue , Irregular blood pressure

Symptoms often begin on one side of the body or even in one limb on one side of the body. As the disease progresses, it eventually affects both sides.

### ▶ Parkinson's Disease Diagnosis ◀

There is no "one way" to diagnose Parkinson's disease. While there is no definitive test that can be taken to determine whether a person has Parkinson's disease, movement disorder specialists look for symptoms and use brain imaging technology to accurately diagnose Parkinson's.

It is important to remember that two of the four main symptoms must be present over a period of time for a neurologist to consider a PD diagnosis.