

## DYSAUTONOMIA INTERNATIONAL



AWARENESS



ADVOCACY

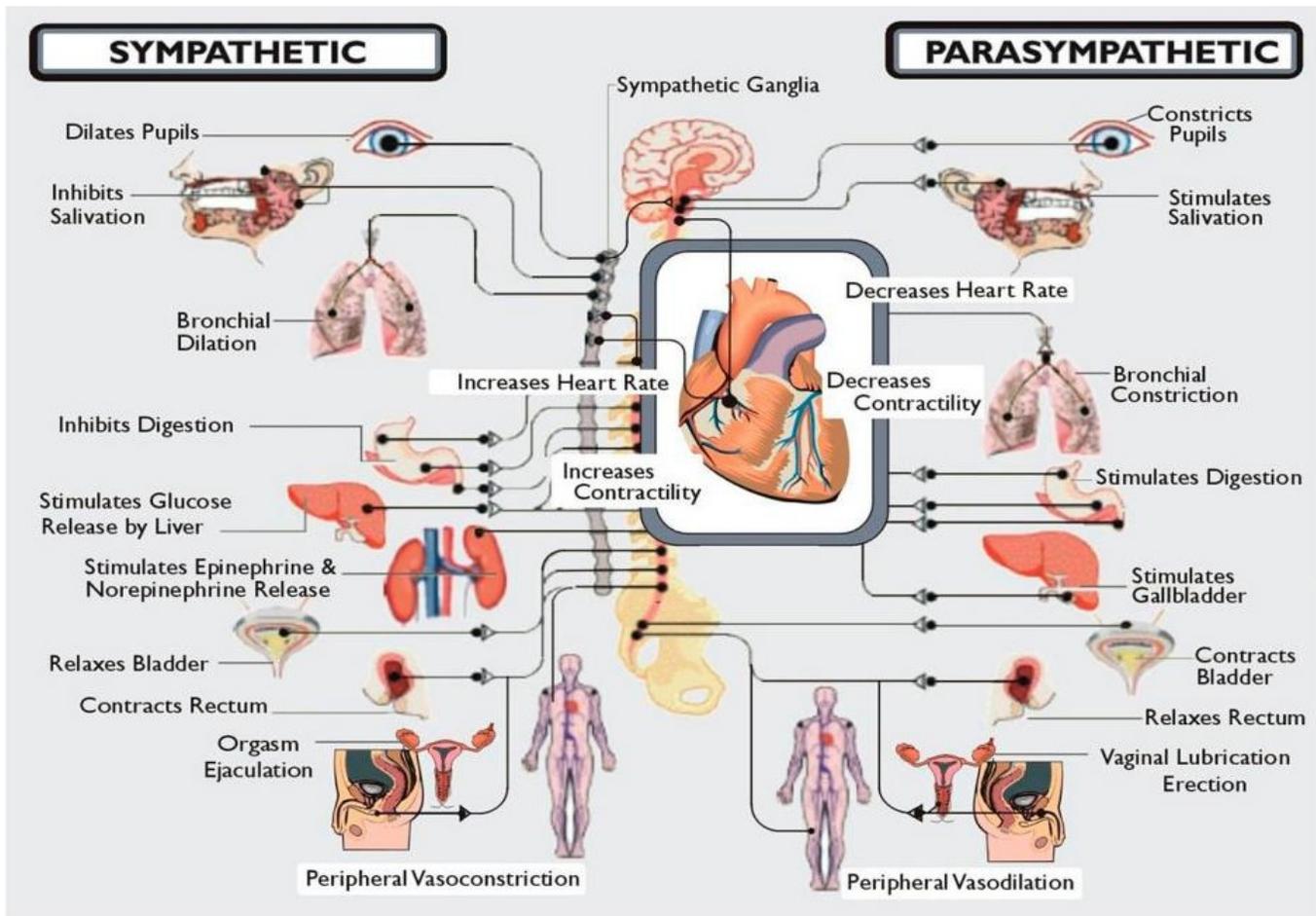


ADVANCEMENT

# What is Dysautonomia?

Dysautonomia is an umbrella term used to describe various conditions that cause a malfunction of the Autonomic Nervous System. The Autonomic Nervous System (ANS) controls most of the essential functions of the body that we do not consciously think about, such as heart rate, blood pressure, digestion, dilation and constriction of the pupils of the eye and temperature control.

The ANS is made up of two branches: the Sympathetic Nervous System (SNS) and the Parasympathetic Nervous System (PNS). The SNS controls the more active "fight or flight" responses such as increasing heart rate and blood pressure.<sup>1,2</sup> The PNS can be thought of as the "rest and digest" part of the autonomic nervous system, as it slows down the heart rate and aides in digestion.<sup>1,3,4</sup> The endocrine and metabolic systems are involved as well.<sup>3</sup>



These systems are in balance in a healthy person, and react correctly to outside stimuli, such as temperature, stress, and gravity. When they are out of balance and do not function properly for any number of reasons, autonomic dysfunction - or dysautonomia - occurs. People living with various forms of dysautonomia have trouble regulating these systems, which can result in symptoms such as lightheadedness, fainting, unstable blood pressure, tachycardia or bradycardia, gastroparesis and more.

Dysautonomia can occur as a primary disorder or in association with other conditions, such as diabetes, rheumatoid arthritis and Parkinson disease.<sup>1,3</sup> Some of the more common forms of dysautonomia include [Neurocardiogenic Syncope \(NCS, sometimes called Vasovagal Syncope\)](#), [Postural Orthostatic Tachycardia Syndrome \(POTS\)](#) and Orthostatic Intolerance (OI). Some of the less common forms of dysautonomia include [Pure Autonomic Failure \(PAF\)](#), [Multiple System Atrophy \(MSA\)](#), Familial Dysautonomia, Baroreflex Failure, Autoimmune Autonomic Ganglionopathy, and Dopamine Beta Hydroxylase Deficiency.<sup>1,2,3,4,5</sup> This is not a fully inclusive list, as there are many different forms of dysautonomia.

Millions of people around the globe suffer from autonomic dysfunction. Neurocardiogenic syncope is very common, and most often seen in adolescents and the elderly. Sometimes it is a mild one time event, but for many people it is a chronic and disabling condition. Estimates indicate that about 500,000 to one million individuals in the US have Postural Orthostatic Tachycardia Syndrome, which primarily impacts young women. Mayo Clinic estimates that approximately 1 out of every 100 teenagers develops POTS before adulthood. Multiple System Atrophy impacts about 350,000 individuals worldwide. Secondary dysautonomias, such as Diabetic Autonomic Neuropathy, are very common. Diabetic Autonomic Neuropathy impacts approximately 69 million people worldwide. Despite the high prevalence of autonomic disorders, most patients take years to get diagnosed, and many are misdiagnosed before finding an accurate diagnosis.

There is currently no cure for dysautonomia, but secondary forms such as Sjogren's Syndrome induced autonomic neuropathy or Diabetic Autonomic Neuropathy may improve with treatment of the underlying disease.<sup>4</sup> There are many treatments available to improve quality of life, both with medications and lifestyle changes/adaptations geared towards the type of dysautonomia and unique health situation of the patient.<sup>1, 2, 3, 4, 5</sup>

Dysautonomia International encourages you to read the summaries of the more common autonomic disorders under our "[Learn More](#)" tab.

### **Sources**

1. [National Institutes of Health Rare Disease Network's Autonomic Disorders Consortium](#)
2. Dysautonomias: Clinical Disorders of the Autonomic Nervous System. Moderator: David S. Goldstein, MD, PhD; Discussants: David Robertson, MD; Murray Esler, MD; Stephen E. Straus, MD; and Graeme Eisenhofer, PhD
3. [Dysautonomia, A family of misunderstood disorders](#). Richard N. Fogoros, M.D., About.com Guide Updated November 13, 2011.
4. [National Institute of Neurological Disorders and Stroke Information Page](#)
5. Clinical Disorders of the Autonomic Nervous System Associated With Orthostatic Intolerance: An Overview of Classification, Clinical Evaluation and Management. Blair P. Grubb, M.D. Associate Professor of Medicine and Pediatrics, Divisions of Cardiology and Neurology, Barry Karas, M.D. Assistant Professor of Medicine, Division of Cardiology, The Medical College of Ohio.

*Nervous system diagram, Copyright © Vinik 2012.*

*All other content, Copyright © Dysautonomia International 2012.*