

## Bending Without Breaking—Implications of Hypermobility in Dancers

### What is Hypermobility?

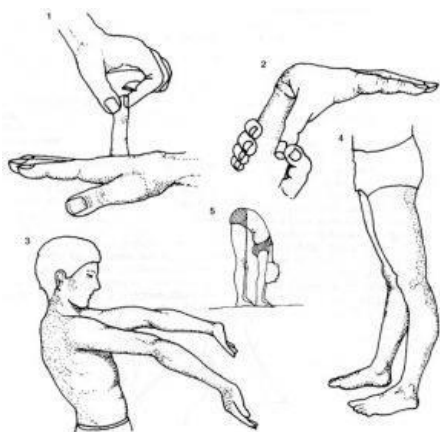
You may have heard it referred to as being “double-jointed” or “super flexible.” By definition, hypermobility is the capability of a joint or group of joints to move beyond physiologically normal limits. Often if only present in one or two joints, the hypermobility is due to a structural or bony difference. If more widespread, hypermobility may be caused by structurally deficient collagen proteins in the tissues that surround the joints.

### Is hypermobility a “bad” thing?

It may or may not be. Many dancers exhibit various levels of hypermobility along a spectrum. Dancers use this hypermobility to achieve some of the desired and necessary ranges of motion that are involved in ballet and other forms of dance. For example, achieving full plié and relevé require more range of motion at the ankle than seen in the average person. Hypermobility at the knee may help create the aesthetic lines that are sought in classical ballet. However, extreme amounts of hypermobility can cause pain and other issues, both in the short-term and long-term. This may be worsened without specific training to control the excess ranges of motion at the joints.

### How do I know if I have hypermobility?

A qualified health care professional—physician, physical therapist, or athletic trainer—can assess you for hypermobility. There is a quick screen called the Beighton Scale that may be used to determine if further tests are required.



Based on the pictures, give yourself 1 point for each of the following:

- Ability to bend the pinky finger back to 90 degrees, one for each side.
- Ability to touch the front of the wrist with the thumb, one for each side
- Ability to palm the floor with locked out knees
- Elbows bending “backward” or beyond straight, one for each side.
- Knees bending “backward” or beyond straight, one for each side.

The max score for quick screen is 9. Research indicates that those with a score of 4 or 5 or greater may be more prone to injury or complications secondary to their hypermobility. Please note that the scale above is a quick screen and should not be used for diagnostic purposes.

### What issues may hypermobility cause?

- Pain
- Feelings of joints being “out of place”
- Difficulty maintaining neutral and proper postures
- Poor proprioception (awareness of where your body and joints are in space)
- Joint subluxations and dislocations
- Slow tissue healing
- Bruising
- Chronic overuse injuries such as tendonitis
- Fatigue
- Early onset of arthritis in the joints

### Can Hypermobility also affect other systems?

In some cases, hypermobility may be diagnosed and classified as **Hypermobility Syndrome (HMS)** or **Ehlers Danlos Syndrome (EDS)**. With these diagnoses, the hypermobility is more systemic and can affect other tissues and organ systems. Generally, the hypermobility associated with HMS and EDS is the result of a collagen mutation. Other systems that can be affected include:

- Cardiac and vascular (heart, blood vessels, circulation)
- Gastrointestinal (stomach and digestion)
- Uro-gynecological (bladder, uterus, pelvic floor issues)
- Nervous system (nerves, brain, depression, anxiety)
- Pulmonary (lungs)
- Eyes, ears, and teeth (hearing, vision, gum health)
- Integumentary (skin)
- Headaches

One of the more serious symptoms of Hypermobility Syndrome is POTS – Postural Orthostatic Tachycardia Syndrome. This presents as dizziness and a racing heartbeat with changes in position.

## What should I do if I think I have hypermobility?

- First, see a licensed healthcare provider. A physical therapist can do a more thorough screen of your muscles and joints and other body systems to determine if your hypermobility is severe.
- The PT can then provide an exercise program to address postural issues, correct muscle imbalances, train your core musculature, teach you self-corrections, and work on proprioception and balance.
- The PT may also utilize taping, bracing, or compression garments for class and rehearsal to assist your body in improving more quickly and to protect your joints while you are re-training them.
- If you are having more severe symptoms, a PT can help you find the right physician to do additional testing. Some symptoms of Hypermobility Syndrome or Ehlers Danlos Syndrome MAY require medications or ongoing medical management.

## Resources

This book was written by a former professional dancer after being diagnosed with JHS:

Knight I., *A Guide to Living with Joint Hypermobility Syndrome: Bending without Breaking*. New York, NY: Singing Dragon; 2011.

This book was written by a physical therapist as a guide for patients:

Muldowney, K. *Living Life to the Fullest with Ehlers-Danlos Syndrome*. New York, NY: Outskirts Press; 2015.

This book was written by a physician specializing in Ehlers Danlos Syndrome:

Tinkle, B. *Joint Hypermobility Handbook- A Guide for the Issues & Management of Ehlers-Danlos Syndrome Hypermobility Type and the Hypermobility Syndrome*. New York, NY: Left Paw Press; 2010.

***Disclaimer:*** *The information presented here is to help guide and inform the dancer and training staff, it is not meant to take the place of the advice of a medical professional. This information is provided by Dance/USA Task Force on Dancer Health.*

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