Hypermobility describes a child that has several joints that are more flexible than usual. This happens when the connective tissue which makes up the joint structures (capsule and ligaments) is more compliant (more easily stretched) than usual. Usually in children this is a benign condition and is called Benign Hypermobility Joint Syndrome (BHJS).

**Benign Hypermobility Joint Syndrome (BHJS)**

Hypermobility syndrome facts
1. The joint hypermobility syndrome is a condition that features joints that easily move beyond the normal range expected for a particular joint.
2. Hypermobile joints tend to be inherited.
3. Symptoms of the joint hypermobility syndrome include pain in the knees, fingers, hips, and elbows.
4. Often joint hypermobility causes no symptoms and requires no treatment. Treatments are customized for each individual based on their particular manifestations.

**What is the joint hypermobility syndrome?**

The joint hypermobility syndrome is a condition that features joints that easily move beyond the normal range expected for a particular joint. The joint hypermobility syndrome is considered a benign condition. It is estimated that 10%-15% of normal children have hypermobile joints or joints that can move beyond the normal range of motion. Hypermobile joints are sometimes referred to as “loose joints,” and those affected are referred to as being “double jointed.”

**What causes joint hypermobility syndrome?**

Hypermobile joints tend to be inherited in specific genes passed on by parents to their children. It is felt that these certain genes predispose to the development of hypermobile joints. As a result, there is a tendency of the condition to run in families (familial). Genes that are responsible for the production of collagen, an important protein that helps to glue tissues together, are suspected of playing a role. Joint hypermobility is also a feature of a rare, inherited, more significant medical condition called Ehlers-Danlos syndrome, which is characterized by weakness of the connective tissues of the body. Joint hypermobility is commonly seen in people with Down syndrome.
Recognising joint hypermobility

One of the measures used in assessing Hypermobility is the Beighton scale. A child over 6 and under 12 who scores 7/9 is considered to be hyper mobile.

Joints are held together by a joint capsule and ligaments which are made up of connective tissue. Connective tissue is a stiff material that has a little give and as the joint move the capsule and ligaments stretch a little bit, but still hold the joint surfaces together quite firmly and limit the amount of movement at the joint.

One of the most common indicators of BHJS observed by parents are hyper mobile knees. When a child with hypermobile knees stand, the knees bend backwards in such a way the knees lock into position and the quadriceps muscles do not have to work to keep the joint steady.

This is fine as long as the knee is locked – but as soon as the knee is bent a little, the quadriceps muscles have to work to keep the knee straight and if they are not strong enough the knee is less stable.

The hips, spine, ankles, shoulders, fingers and elbows are also affected by increased laxity in the connective tissue.

In people with joint hypermobility, the muscle sheaths are also more pliable which means that the muscles have less inherent stiffness and give more easily. The muscles have less muscle tone. The stiffness in muscles also means that the forces generated by the muscles as they contract are easily transferred to the bones to produce movement and stability. Because the muscles of children with hypermobility have more give, they are less efficient at transferring force from the the muscle contraction to the bones. This means that the muscles have to work harder to produce movement and provide stability.

How GJH affects a child’s posture and movement skills

The increased compliance (laxity) in the joints and the tendency to poor muscle strength and endurance affects a child movement skills in numerous ways:

- A characteristic posture in standing with knees bent backwards and a slightly protuberant abdomen.
- Child may not like standing erect and always something or someone to lean on.
- Poor balance and agility skills - due to weakness and poor development of coordination
- Slumped sitting posture
- BHJS ) or sitting propped up on one knee
- Poor endurance - tire very quickly, find school day very tiring
- Lack of strength and endurance for many childhood activities, such as climbing on the jungle gym, riding scooters, playing ball games, keeping up in the playground.
- May have pain in the legs when walking or at night - this is usually due to the tightness in the muscles
- If the hypermobility is associated with a very cautious nature, the child will also avoid any activities that
require mental or physical effort.

- Although the joins are hypermobile, the child may have some quite tight muscles which are often the source of discomfort in sitting and standing
- Child may walk on the toes, and have difficulty walking with a normal heel strike.

All these difficulties can be improved by an exercise programme that trains muscle strength, endurance and flexibility and teaches the child to take on challenges and to keep going when the going gets tough.

It is as simple as that - targeted fitness training is the key

Please note that this page provides information on children with generalised joint hypermobility. It does not apply directly to children who have Ehlers Danlos Syndrome (Hypermobility Subtype)