What is intoeing?
Most people's feet point straight ahead or outward. In some people, however, the feet point inward. This is called intoeing (say "in-toe-ing"), or "pigeon toes." Intoeing is very common in young children. Most of the time, intoeing goes away without any treatment at all. In a few children, it doesn't get better on its own and must be treated.

Is intoeing serious?
Intoewing usually doesn't cause serious problems, even if it doesn't go away by itself. Intoewing doesn't cause arthritis or clumsiness. Sometimes children with intoeing have problems getting shoes that fit, because of the curve of their feet. This fitting problem might make parents consider treatment for their child.

Very few children have a severe twist in the tibia (leg bone) or femur (thigh bone), which might bother them because it looks bad. Sometimes this problem requires surgery.

What causes intoeing?
There are three causes of intoeing in healthy children. They are metatarsus adductus, internal tibial torsion and excessive femoral anteversion.

What is metatarsus adductus?
Metatarsus adductus is a curve in the foot. This is best seen if you look at the sole of your child's foot, shown in the accompanying drawing. If your child has metatarsus adductus, you may notice it while he or she is still a baby. The curve in the foot is probably caused before the baby is born, when the feet are pressed into this position inside the uterus. In 9 out of 10 children with this problem, the feet straighten as the children grow up.
Your doctor may show you how to stretch the baby's foot to help the foot get straighter. If the foot shape is very curved or the curve doesn't go away, your doctor may treat your baby by putting casts or braces on the feet to help stretch them into a straight position. Doctors have different ideas about when the casts or braces should be put on, but many think that if the feet are still curved when the child is 4 to 6 months old, casting or bracing should be started. It should be finished before the child reaches normal walking age. If the feet still have some curve after treatment, it will not cause any problems with running and playing, and is not painful. A strong curve can cause problems with fitting shoes, which is the main reason for using casts or braces.

**What is internal tibial torsion?**

Internal tibial torsion is a twist in the tibia (the leg bone between the knee and the ankle) as shown in the accompanying drawing. Parents usually notice internal tibial torsion about the time their child begins to walk. Some inward twist of the tibial bone is normal in babies. Usually this twist straightens out during the baby's first year. In some children, the twist doesn't straighten enough that the feet point straight ahead or outward, and these are the children who still intoe when they begin walking. Leg bones usually continue to grow straighter until the child is 6 to 8 years old.

Braces and special shoes are not very helpful. One treatment that has been used is a bar with shoes on it that makes the child's feet point out. It hasn't been shown to work in all cases. Braces like this one are expensive, and often children don't like to wear them. So most doctors don't give any treatment for internal tibial torsion in young children. In a small number of children, the twist in the tibia doesn't go away. Even if the twist remains, it hasn't been shown to cause arthritis or problems with running and jumping.

Sometimes appearance is a problem. In this case, the treatment is surgery to cut the bones and turn (rotate) the bones outward, so the feet point straight. Very few children have to have this surgery. This is something that must be carefully discussed with your child's doctor.
What is excess femoral anteversion?

Excessive femoral anteversion is an inward twist in the femur (thigh bone), as shown in the accompanying drawing. This cause of intoeing usually shows up in children between the ages of 2 and 4. It can get worse during early childhood.

All babies are born with some inward twist of the thigh bone. It usually gets better during the first years of life. In babies and toddlers, the ligaments and muscles that connect the bones are tight. As children begin walking, these ligaments and muscles become looser, allowing the hips to rotate more inward. If a child has an extra inward twist of the thigh bone, it may not show up until the child is 2 to 4 years old, because the intoeing gets worse as the ligaments and muscles become looser.

Excess femoral anteversion usually gets better by itself. In most children, the feet will point straight ahead or outward by the time they are 6 to 8 years old. Braces or shoe modifications won't typically help. In a few children with a very strong inward twist of the thigh bone, an operation is possible to cut this bone and twist it outward, so the feet will point straight ahead. Surgery is only considered in very severe cases.