

# DUMBO EARS

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What a great way to fly! Lift up your ears, start flapping them in the breeze, and take off into the friendly skies! Not only were Dumbo's ears functional, but they looked great on the baby elephant. Maybe we should all have ears like Dumbo's.

The human external ear (the outer part of the ear -- the part that you can see) won't help you fly, and it you can't cool yourself off by flapping it. But it does help you to hear better. It acts sort of like a funnel to collect sounds and send them into your ear canal, on their way to the eardrum, and then to the inner ear. Animals like rabbits have ears that are even more specialized at collecting sound; they can even move them so that they can concentrate on sounds coming from a specific direction.

Human ears have a fairly characteristic shape. Unlike horses, they don't point up above our heads. Unlike Mr. Spock's ears, they are rounded, not pointed, and normally they protrude only a slight amount from the head. In some people, however, they protrude excessively. These ears are called "lop ears," or "elephant ears." Kids with these ears are often ridiculed by their peers as having "Dumbo" ears. The trait for these ears is genetically determined -passed on from one generation to the next.

## **How ears get their shape**

The shape of the ears is determined by a framework of cartilage (like the gristle in meats). This allows for flexibility and retention of the shape. If the ear is bent, it springs back into its former shape. This cartilage "skeleton" is then covered on the front and the back with skin. In people with lop ears, the cartilage provides the shape that makes the ears stick out. During fetal development the ears first stick out from the head, but as development takes place, the cartilage develops natural folds and bends the ears back closer to the head. When these folds do not form, the result is a cup-like ear that continues to stick out away from the side of the head.

## **How surgery can help**

In cases where people are bothered by the appearance of their ears, plastic surgery can be done to reshape the cartilage. This is done by a combination of procedures--all performed in one operation. Usually a precise removal of a small amount of cartilage is combined with a thinning of other cartilage and applying sutures to create a series of new curves in the cartilage to allow it to form and

retain a more normal appearance. The incisions are made behind the ear so that the scars are generally completely hidden. This type of outpatient surgery can be performed in a hospital or office surgery center setting under local or general anesthesia. There is generally very little discomfort associated with the surgery or recovery period.

### **The best age for surgery**

Surgery to correct lop ears can be performed just about any time after age four. It is generally advised at age 5 or 6 - just before a child enters school. By this time the ear is almost fully grown, and the child is a healthy candidate for general anesthesia (being put to sleep). By having the ears corrected prior to beginning school, the child is able to avoid a great deal of peer ridicule about his or her appearance. Over the years I have been very impressed by how much kids of this age felt self-conscious about their ears, how motivated they were to have them corrected, and how very proud of their ears they were when the bandages were taken off and they first experienced their very own new ears. They couldn't fly like Dumbo, but they didn't seem to mind!