

# Down Syndrome

## **What is Down syndrome?**

Down syndrome describes set of cognitive and physical symptoms that result from having an extra copy of Chromosome 21.

Normally, a fertilized egg has 23 pairs of chromosomes. In most people with Down syndrome, there is an extra copy of Chromosome 21 (also called **trisomy 21** because there are three copies of this chromosome instead of two), which changes the body's and brain's normal development.

## **What are the signs and symptoms of Down syndrome?**

Even though people with Down syndrome may have some physical and mental features in common, symptoms of Down syndrome can range from mild to severe. Usually, mental development and physical development are slower in people with Down syndrome than in those without the condition.

Mental retardation is a disability that causes limits on intellectual abilities and adaptive behaviors (conceptual, social, and practical skills people use to function in everyday lives). Most people with Down syndrome have IQs that fall in the mild to moderate range of mental retardation. They may have delayed language development and slow motor development.

## **Some common physical signs of Down syndrome include:**

- Flat face with an upward slant to the eye, short neck, and abnormally shaped ears
- Deep crease in the palm of the hand
- White spots on the iris of the eye
- Poor muscle tone, loose ligaments
- Small hands and feet

**There are a variety of other health conditions that are often seen in people who have Down syndrome, including:**

- Congenital heart disease
- Hearing problems
- Intestinal problems, such as blocked small bowel or esophagus
- Celiac disease
- Eye problems, such as cataracts
- Thyroid dysfunctions
- Skeletal problems
- Dementia—similar to Alzheimer's

### **What is the treatment for Down syndrome?**

Down syndrome is not a condition that can be cured. However, early intervention can help many people with Down syndrome live productive lives well into adulthood. Children with Down syndrome can often benefit from speech therapy, occupational therapy, and exercises for gross and fine motor skills. They might also be helped by special education and attention at school. Many children can integrate well into regular classes at school. For more information about treatments for Down syndrome, visit one of the Web sites provided below or ask your health care provider.

### **Who is at risk for Down syndrome?**

The chance of having a baby with Down syndrome increases as a woman gets older—from about 1 in 1,250 for a woman who gets pregnant at age 25, to about 1 in 100 for a woman who gets pregnant at age 40. But, most babies with Down syndrome are born to women under age 35 because more younger women have babies.

Because the chances of having a baby with Down syndrome increase with the age of the mother, many health care providers recommend that women over age 35 have prenatal testing for the condition. Testing the baby before it is born to see if he or she is likely to have Down syndrome allows parents and families to prepare for the

baby's special needs.

Parents who have already have a baby with Down syndrome or who have abnormalities in their own chromosome 21 are also at higher risk for having a baby with Down Syndrome.

Once the baby is born, a blood test can confirm whether the baby has Down syndrome.

Where can I go for more information?

[Down Syndrome: Condition Information](#)

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