

Color Blindness

WHAT IS COLOR BLINDNESS?

Color blindness or color deficiency is the inability to see certain colors. There are color-sensing pigments in the nerve cells of the eye that pick up red, blue, or green light. People with color blindness lack some or all of these pigments. If just one pigment is missing, it may be difficult to see the difference between red and green or between blue and yellow. The most severe form of color blindness is [achromatopsia](#). A person with this rare condition cannot see any color, so everything is in shades of gray.

WHAT IS THE MOST COMMON TYPE OF COLOR BLINDNESS?

The most common type of color blindness is red-green color blindness. It is often due to a genetic problem that is more common in men (X-linked recessive). About 1 in 12 men have some form of color blindness.

WHAT ARE THE SYMPTOMS OF COLOR DEFICIENCY?

Symptoms can vary by the amount of pigment that is missing. Often there is an inability to tell the difference between shades of the same or similar colors. Colors appear washed out and are easily confused with other colors. A child may color things “wrong” by making the sky purple, the grass orange, or trees yellow. Since most people with color blindness can see some colors, they often don’t know they see color differently than others.

HOW IS COLOR BLINDNESS DIAGNOSED?

Your eye doctor can test color vision during an eye exam. The most common test uses a book with several patterns of colored dots. People with color deficiency will not see certain patterns. If you are concerned about color blindness in yourself or your child, please make it known at the start of the visit.

IS THERE ANY TREATMENT?

Inherited color blindness is something you are born with and is a lifelong condition. There is no known treatment. Recently, color blindness correcting glasses have been developed to help some people improve their ability to distinguish colors. However, this only works for a certain type of color blindness.



IS THERE ANYTHING I CAN DO TO HELP?

Early diagnosis can help children with color blindness from low self-esteem in primary school. If your child has a color vision deficiency, be sure to tell their teachers so they can design lesson plans accordingly. It is helpful to label crayons, markers, or colored pencils. Make sure reading materials are printed with black ink on white paper, as colored paper and ink can cause problems. Teach color blind students the colors of common items so they will have a frame of reference when people are discussing colors.

CAN COLOR BLINDNESS AFFECT MY CHILD'S FUTURE?

It is not a severe limitation as they learn to adapt by looking for other cues, such as brightness or location. Color blindness can make certain jobs more difficult, such as electricians, fashion designers, painters, cooks, and military pilots.

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