

Color vision disorders

A color perception disorder is called **daltonism** . In total, 9% of men and 0.4% of women suffer from color blindness in the population. According to severity, they are divided into:

- **complete color blindness**: a person perceives only shades of gray;
- **partial color blindness**: impaired perception of only some of the colors (partial or complete).

In the population, the red and green color disorder is gonosomally recessively inherited (the responsible gene is located on the X chromosome), therefore they are more common than the blue color vision disorder.

Types of color vision disorders

Protanopia

Protanopia is a color perception disorder in which the sufferer does not perceive the color red. A partial disorder is called a protanomaly.

Deuteranopia

In Deuteranopia, the affected person does not perceive the color green. A partial disturbance is called a deuteranomaly.

Tritanopia

Tritanopia means that the sufferer does not perceive the color blue. A partial disorder is called tritanomaly.



Normal color sensitivity



Protanopia



Deuteranopia



Tritanopia

Examination of color perception

Chromaticity is examined using pseudoisochromatic charts . They are tables with different colored spots that make up symbols.

References

Related resources

- Biochemistry of the vision process
- KRÁLÍČEK, Petr. *Úvod do speciální neurofyzologie*. 2. edition. Praha : Karolinum, 2002. 230 pp. ISBN 8024603500.