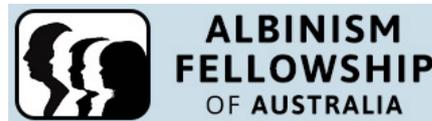


# Explaining Albinism Eyes – a guide for parents and teachers



The following on this page are extracts from the NOAH website (US) with permission (prepared by S. George). (National Organisation for Albinism and Hypopigmentation) <http://www.albinism.org>

Albinism is a group of genetic conditions that causes a lack of pigment. It can effect only the eyes (ocular albinism) or both the eyes and skin (oculocutaneous albinism). Most types of albinism are inherited when an individual receives the albinism gene from both parents. The exception is one type of ocular albinism, which is passed on from mothers to their sons.

The lack of pigment during the development of the eye causes an abnormal development of the retina and affects the formation of the nerve pathways from the eyes to the brain, which causes decreased visual acuity or low vision that cannot be corrected to 20/20. Adults with albinism often describe their vision as lacking fine detail. Corrective lenses (i.e. glasses or contact lenses) and low vision aids (i.e. magnifiers or telescopes) can provide some clarification. Most people with albinism use their vision for reading, and do not use braille. Some have vision good enough to drive a car. Albinism has no affect on mental development.

The degree of visual impairment of children with albinism varies widely. The individual child's vision can also vary somewhat based on the sunlight and artificial light in the classroom, fatigue, and other factors that vary from hour to hour and day to day. Since what children with albinism see varies widely, as does the efficiency with which each child uses its vision, it is important to consider each child with albinism individually.

The social side of education can be the most challenging aspect for a child with albinism. It is a common fact that children can be cruel especially to those kids that are different. Students with oculocutaneous albinism (albinism affecting the skin and eyes) inherently stand out because of their physical appearance. Furthermore, modifications the child may need to make to compensate for low vision sometimes makes the child's feeling of isolation even worse. Therefore, it's important that you avoid drawing attention to your student with albinism. For suggestions on providing social support for your student with albinism, see NOAH's Information Bulletin "Social and Emotional Aspects of Albinism" on the website.

## Eye problems in Albinism often include:

- **Nystagmus:** regular horizontal back and forth movement of the eyes
- **Strabismus:** muscle imbalance of the eyes, "crossed eyes" (esotropia), "lazy eye" or an eye that deviates out (exotropia)
- People with albinism may be either **far-sighted or near-sighted** and usually have **astigmatism**
- **Foveal hypoplasia:** the retina, the surface inside the eye that receives light, does not develop normally before birth and in infancy. (This is an indicator the ophthalmologist uses to detect albinism).
- **Optic nerve misrouting:** nerve signals from the retina to the brain do not follow the usual nerve routes.
- **Photophobia:** sensitivity to bright light and glare. The iris, the coloured area in the centre of the eye, has little to no pigment to screen out stray light coming into the eye. (Light normally enters the eye only through the pupil, the dark opening in the centre of the iris, but in albinism light can pass through the iris as well.)
- **Transillumination:** The lack of pigment in the retina can cause the light to bounce back and is another indicator of albinism.