

# Retinal Implants

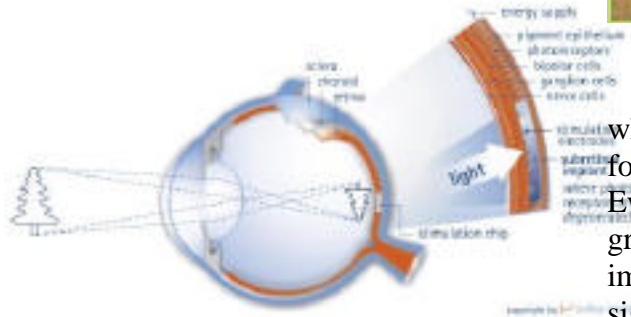
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What are retinal implants?

Retinal implants can be defined as any number of biomedical devices that are being developed by numerous private companies to help improve and restore useful vision to people who may have lost it through different eye conditions such as retinitis pigmentosa or macular degeneration.

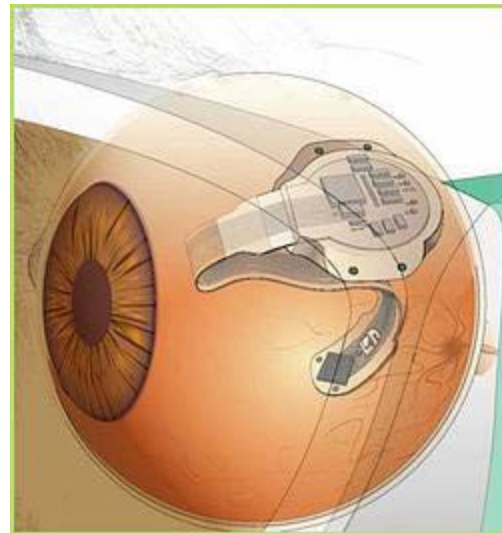


The retina is a thin layer of tissue which lies on the back inside wall of the eyeball. Photoreceptors (rods and cones) are housed inside the retina. The goal of putting an implant on the retina is to replace the malfunctioning (or non functioning) photo receptors.



electrodes receive electrical signals from a digital camera outside the body. In tests, this has allowed users to see a small array of light from about an arms length away.

There are currently two different types of implants showing promise in clinical trials. The first, Epiretinal Implants, sit on the retina and stimulate ganglia through the retina. The second Subretinal Implants sit behind the retina and stimulate the ganglia from underneath the retina.



Retinal implants are a project which will improve the quality of living for many individuals in the future. Everyone takes being able to see for granted, but hopefully one day these implants will be able to give the gift of sight back to those who have lost it.

Retinal implants work through an array of electrodes which are implanted on the back of the retina. These

<http://www.bostonretinalimplant.org/>  
<http://www.eye-chip.com/>  
[http://en.wikipedia.org/wiki/Retinal\\_implant](http://en.wikipedia.org/wiki/Retinal_implant)