

Re: Optical Quality of the Eye

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On Thu, 09 Dec 2004 21:48:30 -0800, Mike Simmons <mikes@nospam.mtwilson.edu> wrote:

>Can you say how much of an improvement one might expect from this? I know
>it's hard to quantify and YMMV and all that. But is it something
>noticeable to the majority of people? Finally, do you know if contact
>lenses will incorporate this technology any time soon?

Mike-

I'd say that the improvement will be small, probably below most people's threshold of detection. I used to design ophthalmic equipment, including corneal topology measurement devices. You'd be surprised how much variation there actually is in the shape of the cornea over periods of hours, days, and longer. Realistically correcting for aberrations beyond simple sphere and cylinder is pretty unlikely. This is especially true for eyeglasses, since you need to look through different areas of the lens. You can do it to some extent with contacts. Actually, near perfect correction is already achieved routinely with glass contacts, which pull the cornea into an ideal shape. But glass contacts aren't very popular anymore.

I abandoned the ophthalmic instrument business a few years ago. Sadly, it has become more about marketing and hype than about medicine. I'd say this falls pretty solidly into the former category.

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