## Seeing Green: Why You Should Consider Green Sunglass Lenses by Gary Heiting, OD

With so many sunglass lens colors available to choose from these days, how do you know which lenses are the best for you?

By default, many people end up wearing gray lenses; others choose brown. But the best sunglass lens color for comfort and clear vision may be one you don't immediately think of—green.

Here's why you should consider green sunglass lenses and the essential features to look for in quality lenses:



## Your Eyes Love Green

With all the beauty of the natural world around us, it's probably no surprise that our eyes are most sensitive to the portion of the visible light spectrum that is responsible of our perception of the color green.

The human retina is capable of perceiving light rays with wavelengths that range from roughly 400 to 750 nanometers (nm). "Green light" is located near the middle of this visible light spectrum, having wavelengths ranging from 495 to 570 nm.

In conditions of bright sunlight, the human retina is most sensitive to light rays near the middle of the green light range, peaking at 555 nm. In other words, our eyes function most efficiently when using green light to form clear images.

## Green: The "Sweet Spot" Between Gray and Brown

So how do green lenses compare to gray and brown sunglass lenses?

The primary benefit of gray lenses is their ability to reduce brightness without affecting color perception. The primary benefit of brown lenses is their ability to reduce brightness and enhance contrast.

Green lenses do both—they provide better contrast than gray lenses, and better color accuracy than brown lenses. And, because green lenses favor transmittance of green light, they provide excellent visual acuity.

With all these benefits—and because green lenses are less common and provide a chic, retro look—it's no wonder that more celebrities and other fashionconscious people these days are choosing green sunglass lenses.

## Features To Look For When Choosing Green Lenses

For the best possible vision, comfort and eye protection, look for green sunglass lenses that include these features:

**100% UV protection.** The sun's ultraviolet (UV) rays increase the risk of cataracts, skin cancer around the eyes, macular degeneration and other eye health problems. Make sure the sunglasses you choose block 100% of these harmful rays from reaching your eyes.

**Protection from blue light.** In addition to UV, the sun's high-energy visible (HEV) light rays—more commonly called "blue light"—also may increase the risk of serious eye health problems over time. While not all blue light is bad, choose sunglasses that block the most potentially damaging HEV rays. Ask your eye care provider for details.

A lens material that's comfortable and safe. Nobody likes wearing heavy glasses that slide down you nose or lenses that could easily shatter and cause an eye injury. For the greatest comfort and protection, choose lightweight, impactresistant polycarbonate lenses.

**Polarization.** To avoid blinding glare from light reflecting from water, pavement and other flat surfaces, choose polarized lenses, which provide for maximum comfort and clarity in these conditions.



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