

Protect The Health of Your Eyes



EYE HEALTH

**FREQUENTLY ASKED QUESTIONS
NOW ANSWERED!**

Eye Problems & Solutions

Eye Health

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Disclaimer

We hope you enjoy reading this publication, however we do suggest you read our disclaimer.

All the material written in this document is provided for informational purposes only and is general in nature.

Every person is a unique individual and what has worked for some, or even many, may not work for you. Any information perceived as advice must be considered in light of your own particular set of circumstances.

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Every attempt has been made to provide well researched and up to date content at the time of writing. Now all the legalities have been taken care of, please enjoy the content.

Introduction

It is safe to say that our physical senses are not as fully appreciated as they should be, given the degree of inputs they provide us. That is of course, until for whatever reason they fail to serve us as well as they previously had.

Of course all our five major senses are important to us, however, the one usually considered the most essential is sight.

Humans are very visual. Although we discern much from our environment via the others, our most used is sight. If we lose our sight, or it doesn't work as well as it once had, our everyday lives change to a huge degree.

There are many reasons for imperfect eyesight. Broadly, they can be congenital, or acquired through injury or degeneration through aging, and of course, less than ideal care.

This eBook explains some of the most likely encountered conditions that can affect eye health. It contains chapters on how to care for your eyes, and does some very pertinent 'myth-busting' regarding some aspects of eye health and vision.

Astigmatism Explained

As one of the most common diagnoses given at an annual eye exam, it's incredible how many people walk away with this new diagnosis and don't really have a clue what it is, or how they got it.



Even if your optometrist offered a clinical definition and assured you it's nothing to worry about, you probably only remember "your eye is shaped like a football" and got stuck on the word *astigmatism* itself.

The funny thing is, your *eye* isn't shaped like a football – it's the lens. Let's examine what astigmatism is, common signs and symptoms, how it's diagnosed and how it's treated.

Astigmatism Defined

The most basic explanation, and the go-to for optometrists, is the football analogy. This is easy for patients to understand, except they don't get the whole picture. First, it's not an eye disease; it's an irregularity.

Light enters the eye through the cornea and eventually the light reaches the retina, which then sends signals to the brain to report on what you are actually seeing.

Astigmatism is when the light rays reach the retina at different points instead of a single point, which causes "refractive errors".

In those with an astigmatism the cornea or lens has an abnormal shape, which is what causes the refractive errors. The cornea and lens should be symmetrical, like a circle. The measurements from top to bottom and left to right of the cornea and lens are the same length in a normal eye.

In someone with astigmatism, the cornea or the lens is wider from left to right than top to bottom, which is why the "football" description is often used.

Picture the face of a clock. Notice how the distance between 12 and 6 is the same as the distance between 9 and 3. This is not the case with an astigmatism.

To date, researchers haven't isolated a cause and believe it may be genetic. Eye trauma has caused astigmatism in some patients, but the others are unexplained.

Astigmatism Symptoms

The list is short and other than an eye examination, an astigmatism could be left undetected. The symptoms include:

- Blurred vision
- Distorted or wavy vision
- Headaches from straining eyes
- Head or eye pain during or after reading or prolonged periods of looking at device screens, ie. computer, phone, tablet, etc.
- Squinting to see better

If there is pain or discomfort, it's not the actual eye in pain. It's the surrounding muscles trying to compensate for the visual distortion.

Oftentimes, those with an astigmatism will avoid reading books or spending a great deal of time in front of screens. They are trying to avoid the headaches that come along with those activities not realizing it's an astigmatism and can be corrected.

How Astigmatism is Diagnosed

There are a few tools an optometrist may use during a comprehensive eye examination to diagnose an astigmatism. Visual acuity is tested by reading letters across the room with one eye covered at a time. Based on your score there you might then move on to keratometry which measures the curvature of the cornea.

If you've ever been measured for contact lenses, you've probably experienced keratometry. A corneal topographer creates a contour map of the cornea which gives even greater detail on the shape. And of course, there's the phoropter which tests refraction. This is the series of lenses placed in front of your eyes and the optometrist says, "Which one is better? One? Or two?" while he is switching lenses back and forth.

All of these tests in combination give your optometrist a clear picture on a diagnosis of astigmatism, including the measurements needed for treatment.

How Astigmatism is Treated

Luckily, in most cases an astigmatism is treated the same as being nearsighted or farsighted. Glasses, contact lenses and refractive surgery (like LASIK) are all viable options depending on the degree of curvature to the cornea or lens.

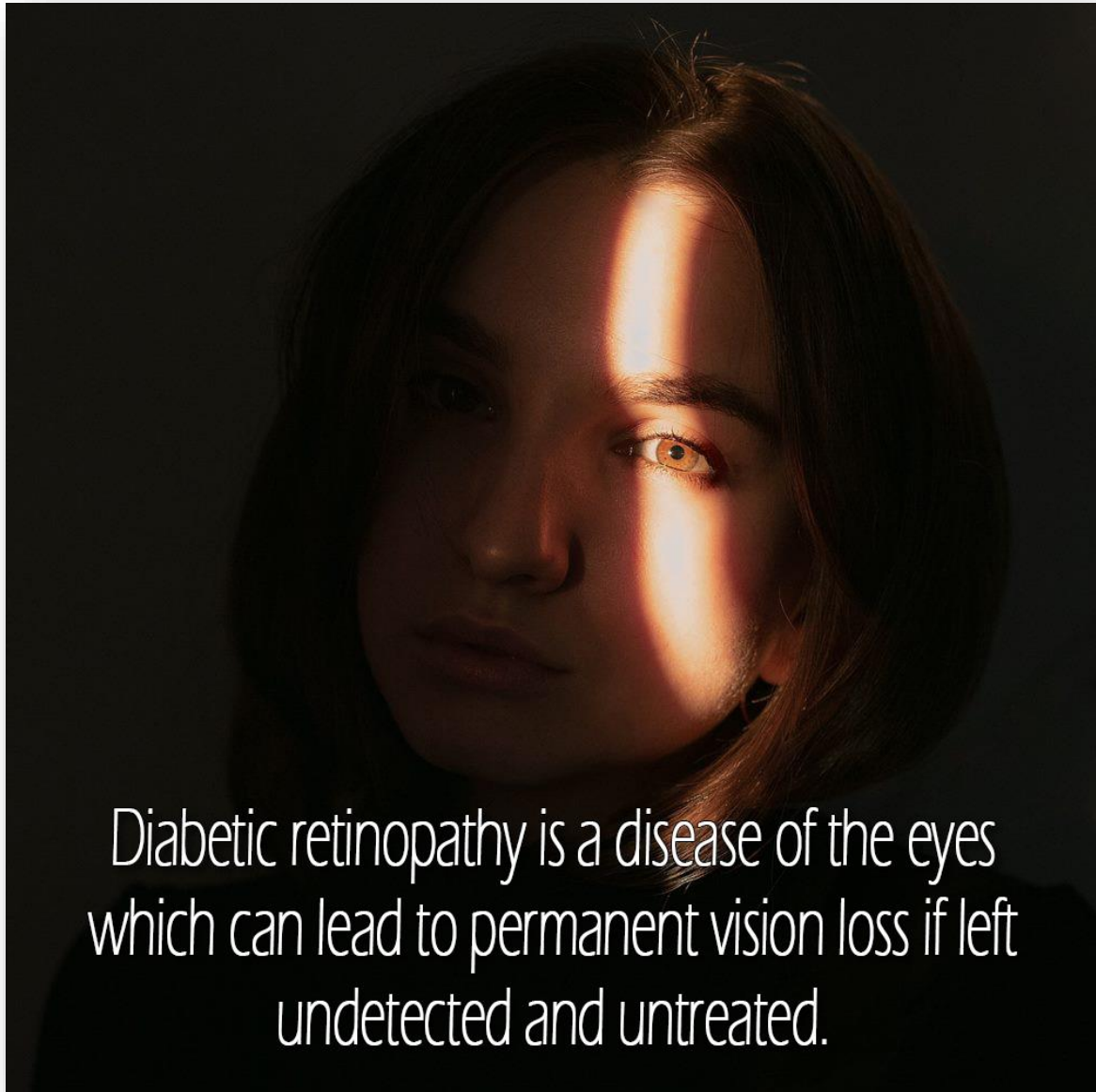
When you choose glasses or even contacts, your eye care professional will take the axis measurements from the testing described above to determine the additional curvature of the corrective lenses you will be wearing.

Once upon a time, hard contact lenses were the only option if you wanted to get away from glasses – astigmatism or not. Now we can use soft lenses to correct nearsightedness, farsightedness and even astigmatism. The hard contact lenses are still available and used only for the more severe cases of astigmatism.

If you think you may have an astigmatism, please consult your eye doctor and make sure to keep up with your annual eye examinations. Your eye doctor will discuss the best options for your particular case and lifestyle needs.

Diabetic Retinopathy - What You Need to Know

As if having diabetes wasn't complicated enough, it's also imperative to consider some of the serious complications which could arise with uncontrolled blood sugars.



Diabetic retinopathy is a disease of the eyes which can lead to permanent vision loss if left undetected and untreated.

What Exactly IS Diabetic Retinopathy?

The light-sensitive, thin layer of tissue at the back wall of your eye is called the retina. When light enters the eye, the retina sends the signal to the brain by way of the optic nerve. The brain then tells you what you're actually seeing; visual recognition.

In diabetic retinopathy, the tiny blood vessels of the retina become leaky and sometimes even deteriorate. Fluid gets into and under the retina from a leaky blood vessel.

This can also lead to macular edema which ends up causing blurry vision. When the blood vessels deteriorate, the retina tries to form new vessels, but they don't get fully developed and end up being weak and leaky as well.

The scar tissue that's formed from weakened blood vessels can also create extra pressure on the retina, causing retinal detachment. It can also lay the ground work for glaucoma and other serious eye issues which could result in blindness.

Diabetic retinopathy is the most common cause of vision problems and blindness in working-age adults in the United States.

From 2010 to 2050, the number of Americans with diabetic retinopathy is expected to double, from 7.7 million to 14.6 million, according to the Centers for Disease Control article [Watch Out for Diabetic Retinopathy](#).

How Do You Know if You Have Diabetic Retinopathy?

You might not even have any symptoms in the early stages, which is why it's critical to get annual comprehensive eye examinations, especially so for those with diabetes. Many eye care professionals dilate the pupils, which is how they

test for diabetic retinopathy and other eye health conditions, even for those without known diabetes.

This is a good thing if you are diagnosed with diabetic retinopathy because it's likely the disease is in the early stages and you can start treatment before you actually notice symptoms.

If the disease has progressed, those with more advanced stages might experience:

- Floaters or spots in the field of vision
- Halos surrounding lights
- Blurry vision
- Loss of central vision
- Loss of color vision.

Everyone with diabetes, type 1 or 2, can develop diabetic retinopathy. The longer you've had diabetes, the greater the risk for developing diabetic retinopathy, particularly if you've had problems controlling your sugar levels.

Also, keep in mind, pregnant women can develop gestational diabetes thus are also at risk for diabetic retinopathy, though the likelihood is much less than someone who has had long-term diabetes.

How Can You Help Prevent Diabetic Retinopathy?

First and foremost, good control of your diabetes is the imperative. Not only to decrease the chances of diabetic retinopathy, but also the many other complications which can arise from diabetes.

Cigarette smoking has been known to increase diabetic complications, so if you're a smoker it would behoove you to start a smoking cessation program.

Also, make sure to keep regular appointments with your eye doctor and request testing for diabetic retinopathy if it's not already part of their comprehensive examination.

Finally, if you do notice vision changes, don't wait until your next yearly examination with your eye care professional. Go ahead and get that checked out right away. It's better to be safe than sorry.

What Treatments are Available?

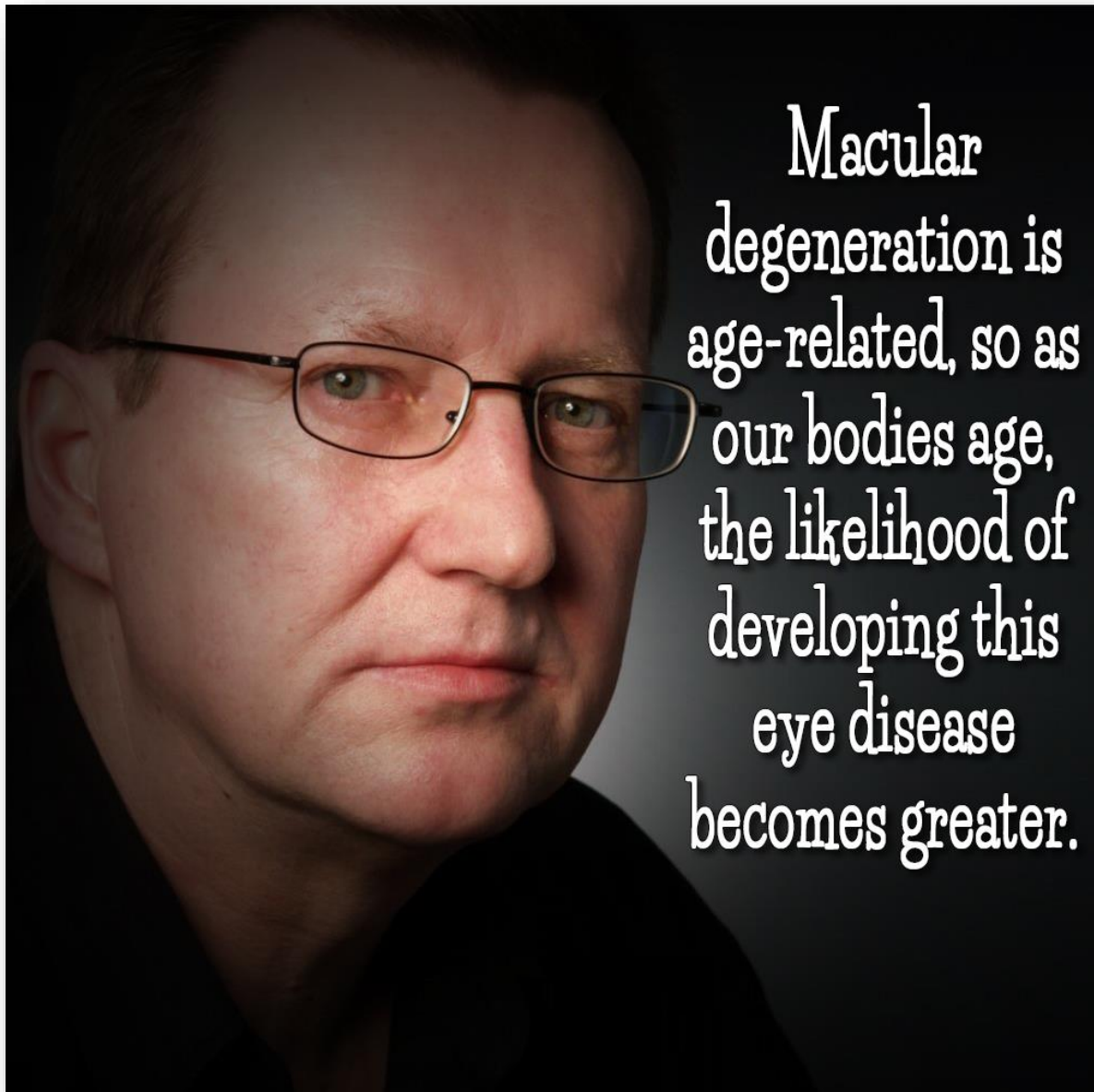
If you've been diagnosed with diabetic retinopathy, there are several treatments available that your eye care professional may recommend, and they all depend on the severity of your particular case.

- **Medical Control:** Getting control of your diabetes is the first step. You may need dietary changes or alterations to your diabetic medication regimen. Your doctor will also take into consideration how well your blood pressure is controlled. Your blood pressure has a direct effect on eye blood vessel health.
- **Medications:** There are a few medications available for treatment, including steroids, which are given by injection. Your eye care professional will determine how many and how often the injections should be administered.
- **Surgery:** Laser surgery is indicated if your eye care professional deems the blood vessels need to be sealed off to prevent leakage. It can also reduce retinal swelling, and oftentimes more than one treatment is necessary. Vitrectomy, another type of procedure, could be indicated for more advanced cases.

The best approach for those who think they may already have or could develop diabetic retinopathy is to *not* panic and take the necessary precautions sooner rather than later.

Macular Degeneration - An Age-Related Eye Disease

Eye diseases are scary, to say the least. We only have two eyes and they are supposed to last us for an entire lifetime. Not to mention, they are incredibly small for the job they have been assigned: sight!



Macular degeneration is age-related, so as our bodies age, the likelihood of developing this eye disease becomes greater. The good news is it typically doesn't affect those people under 50. The bad news is, if you've been diagnosed with macular degeneration, there is no known "cure" for it.

The Spectacular Macula

The eyeball has many parts, and each part performs a unique and incredibly important job. You can thank your macula, measuring a whopping 5mm across, for bringing you virtually ALL of your central vision, the majority of your color vision and the fine details of what you're seeing.

The remaining portion of the retina is what gives us peripheral vision. We depend on what's in front of us a great deal more than what's on the side of us, so the importance of a properly functioning macula is tremendous.

The macula is but a small part of the retina but has a super high concentration of photoreceptor cells. These cells are what detect light that's let in the inner eye and then sends the signal to the brain via the optic nerve. This is how we get from light rays entering the eye to actual recognizable images.

Macular Degeneration Simplified

Key Points:

- This is an age-related disease affecting mostly folks over 50. At age 60, about 1 in 200 people are diagnosed with macular degeneration. At age 90, about 1 in 5 are diagnosed.
- It is caused by natural deterioration of the macula.
- Macular degeneration affects mainly the central visual field.
- As present, there is no cure.
- In the early stages, vision is not affected.
- As the disease progresses, there is distorted and blurred vision.

- The last stage is blindness, though there will never be complete blindness with macular degeneration as it does not affect the peripheral field of vision.

Two Types of Macular Degeneration

There are two types of macular degeneration: Dry and Wet. The majority of diagnosed cases are dry with only about 10-20% being wet. With dry macular degeneration, parts of the macula get thinner and protein deposits grow. The progression is slow and central vision is eventually lost.

Wet macular degeneration is much less common but the worse of the two types. The progression is faster therefore, vision is lost at a much quicker rate. It happens when new blood vessels are formed in the retina, but they are abnormal and leak blood or other fluids which end up scarring the macula.

The Signs and Symptoms

It can affect people differently. The best way to describe it is to look at a photograph. In those with normal vision, every detail of the photo can be seen. The colors, lines, shading and shapes are all there. You can see exactly what's in the photo.

Now, take a dark grey or black marker and draw a cloud smack dab in the middle of the photo. Make the edges of the cloud billowy, rounded and lighter than the center. With the dark cloud in the middle of the photo, now you are unable to see a great deal about it.

Straight lines could look bent or slightly distorted if they are interrupted by the cloud. Words in a book disappear. Driving becomes too dangerous to attempt.

At first the cloud might be translucent but still present, like when there's a smudge on your sunglasses. It's annoying, but you can still see through it if you concentrate. As time passes, the smudge gets darker and darker and loses its translucency.

Diagnosis and Treatment

For both dry and wet macular degeneration, the diagnostic stools are pretty much the same. Your eye care professional can detect problems with your macula with a comprehensive eye exam. If they notice an issue, further studies might be indicated, like an OCT (ocular coherence tomography) scan.

If your optometrist believes you may have wet type macular degeneration, a referral is usually made to a retinal specialist and shouldn't be more than a week or so in the future. Early detection and treatment of wet type is critical.

There are major studies under way, but unfortunately, macular degeneration is incurable at the present time. The treatments options are meant to slow the progression of the disease or prevent severe vision loss. Steroid injections, laser surgery and low-vision aids are the among the available options at the current time.

Aging is a fact of life, and just because our bodies get older does not mean we will definitely be diagnosed with macular degeneration. Recent research is even pointing toward vitamin and mineral supplements to aid in macular degeneration prevention.

No matter what, make sure to keep up with your annual eye examinations and report any abnormal visual disturbances immediately.

Cataracts

If you've ever seen an old mirror with a foggy or cloudy blemish, you've already got an idea of what a cataract looks like. Cataracts are also commonly described as how it feels when looking at an impressionist painting.



Things are a bit blurry, unclear and it's almost like someone used a blue filter giving everything a yellow tint. They aren't painful, but they are a nuisance.

A cataract forms when protein deposits build up on the lens of your eye. You can imagine how that might block light from passing through the lens which leads to unclear vision and can cause loss of vision if left untreated.

We tend to blame cataracts on the aging process, but that's not the only risk factor. Below we will go over the causes, types of cataracts, signs and symptoms, treatment options and prevention tactics for cataracts.

The Cause: Where Do Cataracts Come From?

Age is the typical answer for cataract development, but that's not the only way people end up with these little protein deposits on the lens of their eyes. They can be a congenital anomaly, secondary to another medical condition or as a result of a traumatic injury.

A baby born with a cataract may still have vision restored if treatment is sought quickly.

Some medical conditions, like uncontrolled diabetes or high blood pressure, could also be the culprit. Another risk factor to be aware of is in taking steroids or diuretics, which are often prescribed for other medical ailments.

As if the list of potential causes wasn't long enough, let's add cigarette smoking, exposure to toxic substances, and even heavy alcohol use to the ticket.

Let's sum up the risk factors:

- Natural aging process
- Not protecting eyes from UV rays
- Diabetes
- High Blood pressure
- Subsequent to a traumatic injury or illness
- Smoking
- Radiation or other toxic substance exposure
- Excessive alcohol use
- Extensive steroid or diuretic use history
- Present at birth.

If you're looking at that list in awe, you're not alone. We were all born, and we are all aging. That's two risk factors we've all got which are completely out of our control. If you couldn't see the importance of staying on top of your eye health before, you should now.

Types of Cataracts

- *Nuclear*

This is the most common. You've probably seen someone, up in their years, with what appears to be a big cloud covering the colored portion of their eye. It might even look a little yellow.

This is caused by the hardening of the lens over time and typically age-related. It's usually smack dab in the middle of the eye and significantly changes the ability to focus. Think of putting a sheer curtain over a window.

- *Cortical*

These occur on the outside edges of the lens and look like spokes on a wheel pointing inward toward the center of the iris. This type causes blurred vision, problems with glare and depth perception.

- *Posterior*

This type of cataracts is located on the back side of the lens where the membrane is that holds the lens in place. It causes a “halo” type of vision and creates major problems with driving, reading and light glare.

Signs and Symptoms

Please keep in mind that cataracts form over time and you may not even know your vision problems, which seem normal enough, are due to a cataract. Only when they have significant progression are they visible to the naked eye in most cases.

Here are the main signs and symptoms to watch out for:

- Clouded or blurred vision
- Difficulty with night vision
- Double vision in one eye
- Less vivid colors or a yellow tint to objects
- Frequent need for stronger and stronger corrective eyewear
- Increasing sensitivity to lights
- Appearance of a “halo” around lights, especially noticeable at night.

Treatment Options

Typically, the first line of defense is going to be corrective eyewear; glasses or contacts. If your vision can be corrected this way, this is the preferred treatment with many eye care professionals. When corrective lenses are no longer an option, it might be time for surgery.

Cataract surgery, in the most basic form, is simply an outpatient procedure where the surgeon removes the damaged lens and replaces it with a man-made lens.

Can Cataracts Be Prevented?

Short answer: Maybe. There are no studies to date that definitively prove cataracts can be prevented, or even slow their growth. However, many eye care professionals believe there are several strategies that might be helpful.

- Routine eye examinations
- Protect your eyes from harmful UV rays; sunglasses
- Maintain control of other health issues; diabetes, hypertension, etc.
- Smoking cessation
- Get plenty of good, quality sleep
- Proper diet and nutrition
- Limit alcohol consumption.

As always, the importance of routine eye exams and reporting anything unusual to your eye care professional is critical.

Eye Infections

The eyes are complex organs with a direct line to the brain. Their job is incredibly important, and all the many working parts of an eye turn reflected light into the images we see.



We've got to make it through our entire lifetime with just the two of them. Therefore, eye health should be a top priority if we want our eyes to last as long as possible.

There are several *eye diseases* we really can't do much about and are a natural part of aging. Some of us will be affected, and others not so much. Overall health history is a big factor regarding eye disease later in life.

However, during the rest of our lifetime though, we are probably going to be challenged by an *eye infection* of one type or another. Arm yourself with the knowledge regarding common eye infections, what to look out for and how to treat them.

Sources of Eye Infections

You've probably already heard of bacterial and viral eye infections, but those aren't the end all, be all, of the story. Allergies are a huge perpetrator of eye symptoms and infections. Eye infections can also stem from fungal sources, though more rare than bacterial or viral.

4 Common Eye Infections

If you take a look at the four common eye infections we list below, nearly all of them has the suffix "-itis" which basically describes an inflammatory response to something else.

Therefore, with each one of these common eye infections you should expect to see some swelling and/or redness. This is how our body tells us something is wrong and we should probably take a closer look.

Other typical eye infection symptoms which should trigger further investigation, are pain, itching, increased tearing and tinted eye discharge. If you are experiencing any or all of these symptoms, please seek the advice of an eye care professional sooner rather than later.

- **1. Conjunctivitis**

More commonly referred to as “pink eye”, conjunctivitis is an inflammation of the outermost membrane surrounding your eyeball. The resultant appearance is a pink or red area on the whites of your eyes.

Allergic conjunctivitis is usually treated with over-the-counter antihistamines. If the origin is bacterial or fungal it is extremely contagious.

Bacterial conjunctivitis is treated with an antibiotic, usually in the form of an eyedrop, to kill the bacteria.

Fungal conjunctivitis just has to run its course, typically 7 to 10 days. Applying a clean, warm cloth several times a day to help with the discomfort is recommended, as well as frequent hand-washing.

- **2. Keratitis**

When the cornea is infected it’s called keratitis. The cornea is a clear, dome-shaped outer layer covering the iris and pupil. The biggest risk factors for developing keratitis are if your immune system is compromised, you use corticosteroid eyedrops for another condition, eye injury, and if you wear contact lenses.

The source of keratitis can be bacterial, viral, fungal, traumatic, or even parasitic though rare. Antibacterial or antiviral eyedrops are the usual course of treatment depending on which type of keratitis is to blame.

- **3. Stye**

The medical term is hordeolum, but ‘stye’ is much easier to remember and say. It’s similar to a pimple in appearance and usually occurs on the eyelid near the lashes.

A sty is formed when an oil duct gets clogged or an eyelash follicle gets infected. Most styes will heal on their own in about a week and warm compresses several times a day can help alleviate the pain.

A chalazion is similar to a sty but it usually forms farther from the edge of the eyelid than a sty and they don't typically turn red and painful. The majority of the time they will go away on their own.

As with a pimple, doctors recommend to refrain from trying to "pop" the sty. You could inadvertently make the infection worse.

Treatment options for resistant styes are antibiotic ointments, steroid injections or surgical removal.

- **4. Blepharitis**

Inflammation of the whole eyelid is called blepharitis. It could be the top, bottom, or both, and it is caused by clogged oil glands. It feels as though something is stuck in your eye and you'll notice increased tearing and probably some crusting on your eyelashes and in the corners of your eye.

You are at higher risk for blepharitis if you have dandruff, an allergic reaction to face products (make-up, creams, etc), lice or mites on your eyelashes or if you have a weakened immune system due to another illness.

Again, treatments are similar to most of the above approaches. A warm, wet compress, as well as corticosteroid eyedrops, will help control the swelling, redness and pain.

Additionally, antibiotics might be a recommended course of treatment and artificial tears could help lubricate your eyes.

Preventive Measures

You can't prevent every eye infection, but the following tips will definitely help:

- Wash your hands frequently
- Try to keep from rubbing or "scratching" your eyes if they are irritated
- Don't share eye products
- Use proper care of contact lenses and don't wear them for longer than they are designed
- Keep up with personal hygiene
- Wash sheets, pillowcases, towels and face cloths regularly
- Toss anything that's been in contact with an infected eye.

Bottom line, don't mess around when it comes to your eyes. If you think you might have an eye infection, go ahead and make that eye doctor appointment just to be on the safe side. Seeking treatment quickly greatly reduces your risk of severe complications.

Are You Near-Sighted or Far-Sighted?



Having trouble reading those emails on your phone? Can't see the road sign up ahead? If you're noticing changes in your vision, it's probably time to get your eyes checked. Over the course of our lives our eyes will change. It's all part of the aging process.

As an adolescent and young adult, your eyes don't really level out until about age 20. Then you've got a good 20 years ahead with stable vision before the next change comes in and all the sudden your arms aren't long enough to see what's right in front of you!

If you needed corrective lenses early in life, chances are you're going to experience several more gradual vision changes over the years.

What Does it Mean to be Nearsighted?

If you can get a splinter out of your finger without requiring a magnifying glass, or if you can see things up close clearly, you are nearsighted.

The medical term for nearsightedness is myopia. The medical description is that nearsightedness is a refractive error that occurs usually because the eyeball has grown too long, believe it or not.

The light entering the eye is supposed to reach all the way to the retina at the back of the eyeball to focus but falls short and stops just before it gets there. If the light can't reach that far now, it can't properly focus. This makes far away vision blurry and close-up vision isn't affected.

Fun fact: About 40% of the population in the United States is nearsighted.

What About Farsighted?

Picture yourself sitting on the couch in your living room. You can see the television across the room just fine, but the screen on your phone in your hand is blurry and hard to read. If you stretch out your arms as far as possible it gets a little better, but you still probably strain a little. This is a classic case of farsightedness.

Hyperopia is the fancy name for farsightedness and it affects about 25% of the population in the United States. If nearsightedness happens because the eyeball

grew too long, the opposite must be true for farsightedness. Short eyeballs mean great distance vision!

The downside is that things up close, like getting out a splinter, are difficult to focus on because the light entering the eye jumps right over the retina due to the smaller eyeball.

Two Conditions, Same Symptoms

It's fairly easy to discern the difference between nearsightedness and farsightedness based on vision alone. However, those aren't the only symptoms you might notice.

Vision doesn't typically change overnight. Oftentimes we may notice the other signs before we really know the true cause. You will probably experience unexplained headaches, usually felt near the eye socket, which could be blamed on seasonal allergies or increased tension. Your eyes may feel more tired from straining. Squinting to see clearly is also very common.

Treatment Options

There are three treatment options available for both nearsightedness and farsightedness:

- Corrective eyeglasses
- Contact lenses
- Surgery.

The exam to test your vision is the same no matter what treatment modality is catching your eye. The optometrist or ophthalmologist will likely not only check your vision but also your eye health by dilating your pupil and taking pictures of the inside of your eyeball.

The results of all the tests will give your eye care professional the whole picture and how best to address your chief complaint.

Your eye care professional will go over all of the available options with you and help you choose what's right for your diagnosis. Health history, lifestyle and cost are huge factors to be weighed when deciding the treatment route, and more often than not people use a combination of therapies.

A 40-year-old might opt for LASIK to correct distance vision and use "readers" for things up close. An active person or sports enthusiast might opt for contact lenses during times of activity and still use glasses at home or when they aren't training.

Additionally, monovision LASIK is an option for some patients. This is where one eye is surgically corrected. Eye care professionals have adopted the same type of method with contact lenses as well.

Basically, a person who is farsighted might have one eye corrected for nearsightedness, usually the non-dominant eye, and leave the other eye as is. An added perk for monovision LASIK is the cost is cut in half as the price for LASIK is "per eye".

Receiving annual eye exams is imperative for overall eye health and wellness. Your eyes are incredibly small in relation to the important job they perform but need routine maintenance just most everything else. Don't take any chances when it comes to eye health.

Protect Your Eyes and Eyesight



Our eyes may be small, but they are mighty. They have an incredibly important job and we depend on our eyes far more than we probably realize.

They don't just give us the visual picture of what's in front of us. They help us sense danger, bring vivid colors to our memories and they are instrumental how we respond to any given circumstance or situation.

Have you ever cried watching a breathtakingly emotional scene in a movie? You don't know those people. They are actors, and yet we can be moved to tears by visual stimuli.

You *see* someone crying or smiling, you *see* a child in danger, you *see* a homeless person with a sign that you *read* asking for help. All of these things bring forth an emotional response. The power of the eye is really astounding.

Over time though, our eyes begin to change. It could start early in life or you might not have much in the way of vision changes until well into your 40s. Either way, gradually and very slowly, our eyes begin to deteriorate. That said, it's critical we learn to care for our eyes to ensure they last an entire lifetime.

Let's go over some of the most valuable tips and tricks for eye protection to keep them from getting worse, or at least slow it down.

Healthy Diet & Quality Sleep

A diet rich in antioxidants, such as lutein and zeaxanthin, is a great start for eye health. You can find these in dark, leafy greens like kale and spinach.

Our body turns beta carotene into vitamin A, an essential vitamin, which is great for eye health and vision. Beta carotene can be found in many fruits and vegetables including sweet potatoes, pumpkin, squash, broccoli, grapefruit and carrots.

Getting enough good quality sleep is how you give your eyes a much-needed break. They are hard at work from open to close and need to recharge. Your eyes give you plenty of signals that they need some downtime. Blurry vision, dry eyes, burning and itching are all indications it's time to shut it down for a while and rest.

Comprehensive Eye Exams

Staying on top of your annual eye exams is a critical part of keeping your eyes healthy. Your eye care professional can detect infections and disorders that can't be seen by the naked eye. Many diseases of the eye can lead to loss of vision and even total blindness. Nip it in the bud by keeping up with your yearly exams.

Manage Chronic Health Issues

There is no magic pill or remedy to stop the aging process and with aging comes the side effect of diminishing vision. However, managing chronic health issues that could potentially cause other eye conditions is imperative. Diabetes comes with a whole host of progressive eye diseases when left unmanaged.

Don't leave your eyes up to chance; manage your overall health to protect your eyes from getting worse.

Sunglasses and Hats

Invest in quality sunglasses and wear those hats! It's not just a fashion statement anymore. You want to protect your eyes from harmful UVA and UVB rays from direct sunlight. In case you weren't aware, your eyes can be sunburned just like your skin. An additional benefit of sunglasses and hats is your eyes won't have to strain so much under the glaring sun.

Limit Screen Time

Unless you live completely off the grid, screens are everywhere. We've become pretty dependent upon them. If staring at a computer is how you make a living, make sure to take breaks for the sake of your eyes.

We tend to blink way less when we are looking at something up close which can lead to dry eyes. It's a good idea to try and stay away from screens as much as possible when you aren't working.

Dim the Lights

Glaring lights mean your eyes have to work even harder. If you spend a lot of time at a computer screen, try using an anti-flare filter and turn the brightness down a bit.

Blue light rays are both good and bad for us. Sunlight is the main source of blue light, but it's also in fluorescent lighting, LED lights and the backlight of computer screens, tablets and smartphones.

By dimming the lights a bit, you reduce the rate of exposure. Researchers suggest long-term exposure to high amounts of blue light could damage retinal cells.

Quit Smoking

Smoking puts you at higher risk for developing cataracts, macular degeneration, as well as problems with dry eyes. The cyanide in smoke that reaches your bloodstream can be very damaging to the cells in your eyes.

Your eyes are small but mighty. Don't underestimate the need for proper care and preventive measures. Your vision will inevitably worsen through the years. We can't stop the natural aging process, but the precautions above will help stave off premature worsening of your vision.

Does Wearing Glasses Weaken Your Eyes?



If you've ever wondered if your eyeglasses actually cause more harm than good, long-term, you aren't alone. Many of us grew up with our parents warning us not to sit too close to the TV or that if we crossed our eyes, they would stick that way.

You'll be happy to know, all of the above are unfounded myths!

That doesn't mean all of the things we've been told about eye health are without merit. Sunglasses and hats do in fact, protect our eyes from harmful UVA and UVB rays.

Carrots, and many other fruits and vegetables, contain beta carotene which the body turns into vitamin A. Vitamin A is an essential vitamin and promotes good vision and healthy eyes.

If you are subjecting your eyes to lot of screen time, taking a break every 20 minutes will help reduce eye strain and dry eyes.

How Do Glasses Work?

As far as the common misconception that wearing glasses could weaken your eyes, we must first understand the design of eyeglass lenses and how they correct vision. The truth of the matter is, eye glasses don't correct "vision" per se. They merely assist in redirecting the light entering the eye so it can reach the retina.

Nearsightedness, farsightedness and astigmatism are the three main reasons someone would be prescribed corrective eyeglasses. For each of these conditions, an eye care specialist can determine exactly what changes need to be made to correct the reflective error, thus creating better vision.

Fact vs. Fiction

So now you have a better understanding of how glasses work, but what does that mean for the actual eyeball and the muscles within? Let's look at a few myths and counter them with the actual facts.

Fiction: Vision seems worse after wearing glasses.

Fact: When you're wearing your glasses, hopefully your vision is as near 20/20 as possible. Your eyes can relax and just enjoy the scenery. They don't have to work

so hard to focus. When you take them off though, your eyes go back to the straining, thus your vision seems worse. The blurriness is simply more noticeable after removing your glasses.

Fiction: Glasses are the cause for continuous prescription changes.

Fact: Time is the cause for prescription changes. The natural process of aging is the true culprit here. You might make it well into your 40s before you need corrective lenses, but you will eventually, in all likelihood, need them. What's more, having glasses doesn't stop the aging process.

Fiction: Glasses make your eye muscles weak so you can't focus well.

Fact: Your eye muscles don't have a thing to do with your focus. Eye muscles allow *movement* of the eyeball and surrounding areas. It's how you blink, wink, squint and move your eyeball in all directions.

The real issue with problems focusing is the lens. Over time the lens becomes less flexible. Again, the natural process of aging seems to be to blame here as well.

Fiction: Wearing glasses will make you dependent upon them.

Fact: Eyeglasses are designed to help you with blurred vision, a reflective error. Glasses don't change your eyes. They change the angle in which reflected light is received by your eyes.

You simply just get more comfortable with seeing clearly and so when you aren't wearing them the blurriness feels a bit amplified.

The Truth About Eyesight

Vision isn't a constant, meaning it's going to change throughout your lifetime. If you got your first pair of glasses in your 20s or younger, expect several more changes to your prescription throughout the years.

If you are lucky enough to have great vision into the 40+ range, get ready!
Changes are coming!

The “weakening” many assume is related to their glasses is primarily eye strain. Even if you have glasses to correct your vision, your eye can still be strained and get tired.

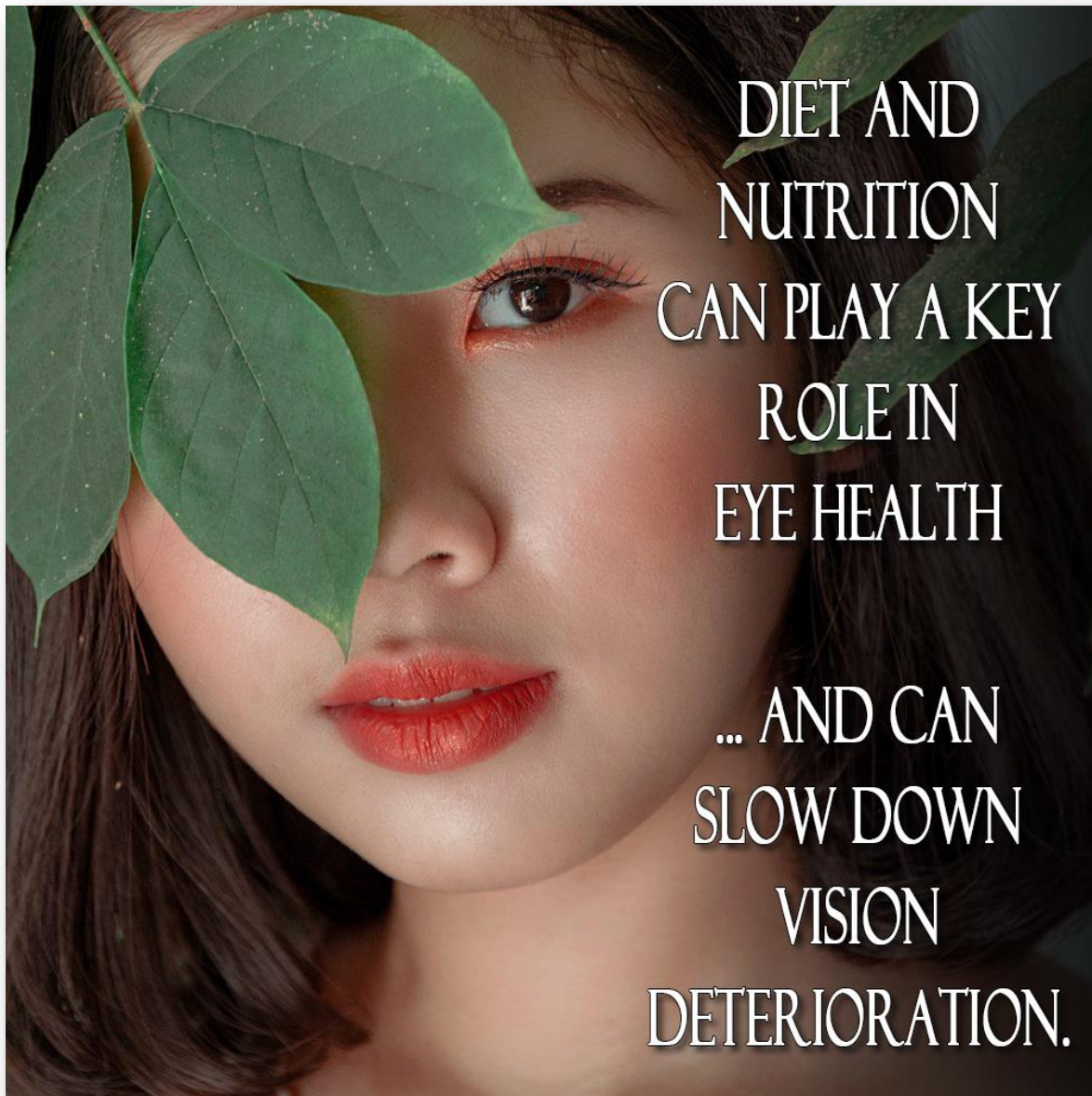
Staring at screens too long is a huge factor in eye strain. It doesn’t matter if you wear glasses or not, your eyes are subject to being overworked.

When eyesight is corrected with glasses, we tend to rely on them. We rely on them because clear vision is bliss, not because our eyes somehow weakened.

You might even find yourself putting your glasses on more frequently than usual, but it’s because you want to see... not because you have ruined your eye muscles.

Sight is a beautiful thing. As always, don’t skip out on annual eye examinations just because you think you see just fine. You might just be used to seeing a fuzzy world and forgot what it’s like to have perfect eyesight!

Nutrition for Healthy Eyes



Truth: Worsening eyesight is inevitable and a result of the natural aging process. Another truth: Diet and nutrition can play a key role in eye health and slow down vision deterioration.

As a kid many of us were told to drink our milk for strong bones and teeth. Our parents begged us to eat spinach claiming it would make us strong. We were also urged to eat our carrots for healthy eyes. The funny thing is, these are all actually true and not just a sly way to encourage a healthy diet.

Our eyes have a very important job for their size, and it would be wise for us to consider diet and nutrition as a major factor in keeping our eyes healthy. After all, we only get one set of them for an entire lifetime. To date, there are several organs where transplants are possible. Eyes have yet to make the list.

Keeping up with annual comprehensive eye exams and maintaining good control of other health conditions, like diabetes and hypertension, are only part of the equation for healthy eyes.

Let's look at a few diet and nutrition suggestions that will give your eyes a natural boost of healthful benefits.

Vitamin A

Being deficient in vitamin A can lead to dry eyes, night blindness, corneal ulcers and a host of other eye issues. The good news is there are plenty of ways to include vitamin A in your diet. Vitamin A can be found in animal-derived foods such as liver, egg yolks and dairy products.

On the plant-based side, you can opt leafy greens, carrots, grapefruit, and many others to get a good dose of beta carotene which the body will then turn into vitamin A.

Omega-3 Fatty Acids

Studies have shown there to be an abundance of omega-3 found in the retina so it's thought to help maintain vision functions, or at least a part of it. We already know omega-3 is important for brain development, but new evidence is showing benefits with dry eye disease as well.

Additionally, those with diabetes may be at lower risk for developing macular degeneration if they maintain adequate levels of omega-3.

The best source for omega-3 is oily, cold-water fish like salmon and herring. There are over-the-counter supplements with varying amounts of omega-3 to aid in getting the recommended 1,000 mg per day.

Vitamin C

The risk for cataracts and macular degeneration are decreased with vitamin C. Again, the best source is from nature and can be found in oranges, strawberries, broccoli and sweet peppers, among other fruits and vegetables. Over-the-counter supplements are available for purchase as well.

Vitamin D

The benefits of vitamin D are said to include the reduced risk for macular degeneration, which is an age-related eye disease. The best, and cheapest, source of vitamin D is natural sunlight. Just a few minutes of exposure to the sun daily gets you what you need.

Salmon, milk and orange are also other great sources of vitamin D. If none of that works for you, get vitamin D supplements over-the-counter at your local pharmacy or department store.

Lutein & Zeaxanthin

Also said to give an added layer of protection against cataracts and macular degeneration is lutein and zeaxanthin. These are the yellow carotenoid antioxidants located in the macula, which is the central portion of the retina. They are said to aid in blocking blue light; think of sunblock you apply to your skin.

Once again, look for the richest concentration of lutein and zeaxanthin in leafy greens, but they can also be found in sweet corn, egg yolks, pistachios and red grapes.

Of note: Carotenoids are best absorbed when they are ingested with a good source of fat. Eggs are high in fat, so they are a perfect idea packaged in a little shell. Adding an avocado to a leafy green salad with an oil-based dressing is also a great way to hit all the high points.

Just like many other “suggested” ways of eating, diet and nutrition which can benefit eye health is mostly from natural sources. Processed foods offer the least nutritional benefits and can even speed up the very diseases you are trying to avoid.

By no means is this an exhaustive list, but it should definitely give you some food for thought. Not to mention a starting point for your next trip to the grocery store. Hopefully you’re already doing a great job with nutrition and diet and this list just reinforced your choices.

Can Eye Exercises Improve Eyesight?



The self-help industry is big! Now more than ever folks are learning all about homesteading and sustainable living, what things to eat to ward off illness and disease, repurposing techniques, and all sorts of ways to improve ones' life with the DIY method.

It's not farfetched then consider the idea of improving eyesight with exercises. Except that it's completely unfounded, and it goes against the basic anatomy and structure of the eyeball.

Sure, the self-help programs advocating this type of nonsense are boasting all sorts of numbers, statistics and even empty promises that you will be able to toss your glasses out the window when you're finished following their techniques.

Since the 1920s these programs have popped up from time to time and should be no real shocker. We've got knives that can cut through the hood of a car, a towel that can hold a gallon of water, juicers, mixers, and a plethora of other fancy gadgets flooding the late-night channels just waiting for a gullible buyer to fall for their antics hook, line and sinker.

Let's take a deeper look at *why* these claims of improved eyesight with eye exercises aren't going to cut the mustard.

A Lesson in Anatomy

First, we've got to understand the basic anatomy of the eye and it's surrounding structure. Your eye is a complex organ that has a hefty job – eyesight. These are the main parts of the eyeball itself:

- Iris – the colored part of the eye
- Sclera – the white part of the eye
- Conjunctiva – thin layer of tissue that covers the sclera
- Cornea – clear front surface that covers the iris; similar to the lens of a camera.
- Pupil – opening in the center of the iris that allows light in
- Lens – sits just behind the iris and pupil
- Retina – light-sensing cells on the back wall inside the eyeball used for peripheral vision
- Macula – light-sensing area inside the retina used for central vision

- Optic Nerve – receives data from the retina to take to the brain to determine what is being seen.

Imagine looking at a painting. The reflected light from all the many colors and shapes in front of you passes through the cornea and enters the eyeball through the pupil. It then hits the lens and then ends its journey at the retina and macula. This is where the magic happens.

The retina sends electrical impulses, by way of the optic nerve, to the brain. The brain returns the favor by telling us what the image is. Notice, not once in that description is a “muscle” used.

What Causes the Need for Corrected Vision?

Other than trauma, infection or congenital anomaly, we can give credit of failing eyesight to the natural aging process. If our body ages, it must also be true that our eyes do the same.

When you have blurry vision and need corrective eyewear, it’s caused by a reflective error. A reflective error occurs, in most cases, by the shape of the eyeball itself, or the shape of the cornea.

In someone with nearsightedness, their eyeballs are shorter than they need to be. Likewise, in someone with farsightedness, their eyeballs are longer than they need to be for 20/20 vision.

An astigmatism is due to a misshapen cornea. For all of these situations, the light coming in through the pupil isn’t reaching the retina properly; a reflective error. Again, not once is a muscle mentioned.

How Can You Improve Eyesight?

If exercises aren’t the answer, what is? The obvious answer is corrected vision with glasses, contacts or surgery. Oddly enough though, diet and nutrition also play a big role in eye health. Certain vitamins and minerals have been linked to

better resistance from age related eye diseases. Careful management of other health issues and routine comprehensive eye examinations are also key.

The whole point is the eyeball isn't a muscle. You simply can't exercise your eyeball. You can, however, exercise the muscles around your eyeball. They control eye movement; blinking, winking, squinting and up/down/left/right movements of the eyeball.

Of course, you can play tricks on your vision or "train" your eyes to have quicker responses for focusing, but your actual *vision* isn't going to be affected in the least bit. Not scientifically anyway. No study has proven otherwise, despite the claims of self-directed eye exercise programs.

If you want to improve your eyesight, the best idea is to seek the advice of your eye care professionals and get your peepers examined.

Conclusion

Our eye health is too often taken for granted. Sometimes too, is less-than-ideal sight. Many people suffer through years, or a lifetime, with poor sight. This can affect so much of their life, and hold them back in some areas.

This is often avoidable, or at least rectifiable. If you have less than ideal vision, at the very least seek expert testing. You may be surprised to find that a solution is less expensive and more effective than you thought.

This eBook may have given you an insight into what condition you may be suffering from, or how to better manage it. Even if you do not suffer poor eyesight, take heed of the suggestions on eye protection and diet.

The importance of our eye health cannot be overstated.