

# **7 Great Ways To Keep Your Vision Sharp & Your Eyes Healthy!**

**An Educational Service Provided By:**

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## **About the office of Dr. David Littlejohn & Staff**

When Dr. Littlejohn opened his new practice February 3, 2104, he knew he wanted to be more than just another “which is better, 1 or 2?” office. He made lists, did a lot of research and came up with what he believed the best ways to serve his patients.

He wanted to offer patients the latest technology to help detect eye conditions and diseases earlier, so he had an Optos Retinal Imaging device installed. These quick, painless images are taken and reviewed by you and Dr. Littlejohn together.

He knew patients did not like the “air-puff” test, so he invested in an instrument that is “puff-free.” So far, patients really appreciate this new technique!

He was concerned that as the world is becoming more and more impersonal, he might lose the most important part of being an optometrist, “The Doctor-Patient” relationship. He insists that patients are scheduled enough time for a quality exam. You may have concerns and he is going to take time to listen to you. You won’t feel like another number here!

He designed a beautiful eyewear boutique, featuring many popular brands. He accepts many insurance plans, including VSP and most Eyemed. For those without vision benefits, he offers Care Credit and discounts on eye wear purchases.

Dr. Littlejohn realized that a beautiful office with the latest equipment is nothing if his staff is not friendly or rude. He is very proud of the

eye care team he assembled. They are some of the sincerest, most knowledgeable, and friendliest staff you will ever meet!

If you can't remember when your last eye exam was, it's time to call! If you are due for your yearly exam, please call today for an appointment. We look forward to seeing you and hope you enjoy this free report, "7 Great Ways to Keep Your Vision Sharp & Your Eyes Healthy!"

P.S. Don't miss the great offer at the end of the report!

Sincerely, Dr. David Littlejohn and Staff  
Heather, Melissa, Nichole, Misty and Richard

## Here are the Simple Secrets You Need to Know to Protect Your Most Valuable Asset – Your Eyesight!

Dear Friends and Neighbors,

If you ask the average person "Which one of your senses would you least like to lose?" I believe we would all receive the same answer: "My eyesight."

**Fear of blindness as we age is an almost universal fear.**

**But there is good news – we can greatly reduce our risk of blindness from many of the age-related eye disorders, including as cataracts, glaucoma and macular degeneration. Many cases can even be prevented!** How to do this is a secret only because you don't yet know how!

I'm providing this easy-to-read report so that you can learn:

- How to reduce the risk of developing the number one underlying systemic cause of blindness: diabetes
- **How to prevent the serious eye complications of diabetes** if you already have it
- The **best foods** you should eat today to help maintain good vision tomorrow and for a lifetime
- **The early warning signs of eye disease** and how to recognize your risk factors for possible sight-threatening conditions
- How to **reduce the risk of vision loss from cataracts, glaucoma and macular degeneration**
- How to set up your computer properly to **minimize eye strain** and maximize productivity
- How to **get the best eye care** and know if you're getting a thorough eye exam
- Which **vitamins are best** to take to maintain optimal eye health

If you want to be able to enjoy the benefits of good vision as you age, you owe it to yourself and your family to read this report!

Best Regards,

Dr. Littlejohn

## Introduction

Ask yourself the following question: “Which of my five senses would I least like to lose?”

If you’re like the majority of people around the world, you probably answered: “My vision.” Indeed our eyesight is so critical to our everyday existence that we often take it for granted. Imagine waking up and not being able to see the alarm clock. Imagine not being able to see your image in the mirror as you style your hair or brush your teeth. Imagine not being able to drive or watch a movie or see a sunset. Imagine not being able to see the brilliant smile of your child or grandchild.

It’s a chilling thought isn’t it, yet unfortunately blindness occurs to nice people all the time. A study by the American Academy of Ophthalmology states that a person goes blind every five seconds. Think of that - in the time it took you to read this paragraph, someone, somewhere, just went blind.

Here are some other sobering statistics:

- More than 1.2 million Americans age 40 and over are blind from eye disease. An additional 2.9 million are visually impaired. (National Eye Institute & Prevent Blindness America, 2012)
- About 39 million people are blind worldwide, with an additional 140 million people visually impaired due to eye disease or injury. (World Health Organization, Oct. 2013)
- Every minute, a child goes blind. (AAO, Sept 2003)
- One hundred million people will lose their sight unnecessarily by 2020 if nothing is done. (AAO, Sept. 2003)

Did you catch that last comment? If nothing is done, one hundred million people will lose their eyesight – their most precious sense – unnecessarily. Therefore obviously something needs to be done – but what?

That is why I am sharing this report. To provide you with seven easy-to-implement suggestions you can start today to save your vision and to maintain healthy eyes - into your 60s, 70s, 80s and beyond. By putting these seven suggestions to use, I believe you can greatly reduce your chances of becoming blind.

Can I guarantee this? Unfortunately not. But then wearing a safety belt is no guarantee that you won't have a car accident. But since it's been proven that using a safety belt greatly reduces your chances of serious injury in case of an accident, doesn't it make sense to wear one? Why not think of the suggestions in this report in a similar way? They are a form of safety belt for your eyes – a series of easy-to-do choices that will greatly reduce your chances of going blind.

Just think – if by implementing these seven recommendations into your daily routine, you would see just one more sunset, one more blossoming rose or one more smile of a child, wouldn't it be worth it?

Read on and find out about how to keep your vision sharp and your eyes healthy!

## **#1: Have Your Eyes Examined Regularly**

Of course! It seems obvious on the surface that one of the best things you can do to prevent vision loss from eye disease is to have your eyes checked regularly. Many eye diseases such as glaucoma, macular degeneration and diabetic retinopathy can be easily controlled if detected early enough, thereby preventing or limiting any loss of vision. It just makes sense that regular eye examinations would be the number 1 thing you could do to prevent vision loss. And yet still, it's astounding just how few people regularly have their eyes checked.

In a study by the College of Optometrists in Vision Development, it was found that up to 25 percent of school-age children have some form of vision problem that may affect learning, but only 14 percent of children ever receive a comprehensive eye exam. This leaves nearly 10 million children with undetected eye problems.

Even people with known eye problems aren't getting eye exams. A study conducted at Duke University showed that only 70 to 90 percent of patients with glaucoma had a yearly check-up. Glaucoma is an eye disease that can slowly and silently cause blindness over a period of time. These patients often need to be followed at least two to three times a year. And yet a full 10 to 30 percent of them aren't even going to the eye doctor yearly.

Similar numbers were found in patients with macular degeneration and diabetes. Only 65 to 80 percent of patients with macular degeneration have yearly eye exams and only 50 to 60 percent of patients with diabetes have them. Many of these people will very likely become legally blind from their untreated conditions.

The evidence speaks for itself – the number one recommendation is to make sure you have your eyes examined regularly!

### **Who Should I Go to For My Eye Exam?**

There is often much confusion regarding who to see for an eye exam – after all there are three different “O”s that care for eyes in various ways. Who should you choose?

To answer this question, let's first define who the three “O”s are:

- **Optometrists (O.D.s)** – A doctor of optometry receives his degree after four years of post graduate training in a college of optometry. Optometrists are licensed to perform comprehensive eye exams, prescribe glasses and contact

lenses, and can write prescriptions to treat many types of eye disease including conjunctivitis (pink eye or red eye) and glaucoma. Optometrists typically do not perform surgery, although we may remove superficial foreign objects such as metal specks from the eyes. We receive additional training on understanding and treating the functional aspects of vision – how to help people see the best they can in their day-to-day lives.

- Ophthalmologists – Ophthalmologists are medical doctors (M.D.s) or osteopaths (D.O.s) who take a three year residency in eye care after they receive their doctor’s degree. In addition to providing comprehensive eye examinations, ophthalmologists are able to prescribe eye medications and perform surgery. Some ophthalmologists go on for additional training and become specialists in certain areas such as retinal or glaucoma treatment.
- Opticians – Opticians are professionals trained to fit, fabricate and dispense eyeglasses. Many states also allow opticians to dispense contact lenses. Opticians do not perform eye examinations.

Which one should you choose – an ophthalmologist or an optometrist? Obviously I may be biased, but I know today’s optometrists are well trained and skilled at detecting eye disease. If specialized medical or surgical treatment is ever needed, we will quickly arrange for you to see the right ophthalmologist for the problem.

## **Who Should Go For An Eye Exam and How Often?**

The easy answer to this question is “Everyone” and “At least once a year”. Let me take a moment to expand on this.

I believe everyone from the age of 5 should have a yearly eye examination. Although it is difficult to perform a comprehensive eye exam on kids younger than that, I examine children as young as 3. An eye exam should certainly be considered at any age if there are concerns such as an eye turn (“crossed eyes” or “wall eye”), squinting, excessive tearing or rubbing of the eyes, or any signs of poor visual development.

Some doctors may recommend an exam every two years for young and middle aged adults, but I believe it is better to check yearly. Certain conditions such as glaucoma can develop in people as young as 35 to 40. Since glaucoma is a disease without any symptoms, why take a chance of having it for as long as two years without knowing it?

There is a slogan in the eye care industry that goes, “See Clearly, Check Yearly”. I couldn’t agree more.

## What Is Done During A Comprehensive Eye Examination?

A comprehensive eye examination performed by an optometrist or ophthalmologist should involve an assessment of two main areas: a visual assessment and an ocular health assessment. A visual assessment evaluates how you are presently seeing and checks for any need for glasses, contact lenses or refractive surgery. The visual assessment would involve the following types of tests:

- Visual Acuity Testing – this is where you are asked to read an eye chart. For kids or people with difficulty reading a chart with pictures may be used.
- Refraction – here the doctor will assess your need for correction with glasses or contact lenses.
- Binocular Testing – the doctor will do various tests to probe how well your eyes work together as a team.

The ocular health assessment part of the eye exam does just that – it tests to see how healthy your eyes are, inside and out. Here are some tests your doctor should do:

- Health History – a thorough eye exam is built on knowledge of your physical and visual health history. The doctor will give you a questionnaire or ask you about health conditions, medications, computer use, hobbies, and many other subjects that will help give the best vision and eye care possible.
- Slit Lamp Examination – the doctor will examine the front part of your eyes using a special microscope known as a slit lamp. This instrument is used to check the health of the external eye and to detect abnormalities such as eye allergies and cataracts. It can also be used along with special lenses to evaluate the retina.
- Tonometry – a measurement of the intraocular pressure or fluid pressure within the eyeball. An elevated intraocular pressure reading may be a sign of glaucoma. This test may be done using a number of different instruments, including the non-contact tonometer (NCT) or “air-puff”. While the sound and sensation may be startling, the eye is not harmed. Other tonometry tests may require the use of an eye drop to anesthetize, or numb, the surface of the eye so you won’t feel a thing; these drops wear off very quickly. In my office I also have a new type of instrument that doesn’t use the air-puff, and is so soft that it doesn’t require numbing.

- Visual Field Testing – this is a test to check the sensitivity of your peripheral, or side, vision. This painless and simple test reveals any subtle loss of peripheral vision that may be a sign of diseases like glaucoma.
- Ophthalmoscopy – here the doctor will use various lights and lenses to examine the internal structures of the eye and the retina. The doctor may choose to use eye drops to dilate, or widen, your pupils. This allows for a much clearer view of the retina to help make sure that everything is healthy. While the drops will tend to blur your vision and make your eyes a bit light sensitive for a few hours, it is one of the best ways to detect possible retinal disease.
- Retinal Imaging – these are optional tests that may be available, using new technologies such as the Optomap retinal scan. They give the doctor additional ways to analyze the internal structures of the eye, and also provide detailed digital pictures that we can refer to each time you have your eyes checked. We can share these images with other medical specialists when called for. These images can usually be taken without dilating the pupils, and don't affect the vision for more than a few minutes.

A comprehensive eye exam can usually be done in less than an hour.

## **What Diseases Can Be Detected During An Eye Exam?**

Shakespeare once wrote, “The eyes are the window to the soul.” I’m not sure that’s completely true, but the eyes can certainly be considered a window to the internal workings of your body. Nowhere else on the body are we able to view actual blood vessels in action like we can when we look at the retina. We can often judge general physical health and detect diseases by looking at and into the eyes.

Check out the following list of eye diseases, followed by a list of systemic diseases, that all can be found during an eye exam:

Common Eye Diseases:

- Cataracts
- Glaucoma
- Macular Degeneration
- Retinal Detachment

- Dry Eye
- Corneal Degeneration

Systemic Diseases That Can Be Detected During An Eye Exam:

- Diabetes
- Hypertension – High Blood Pressure
- Hypercholesterolemia – High Cholesterol
- HIV/AIDS
- Graves Disease
- Herpes Simplex/Herpes Zoster infections
- Carotid Stenosis – a narrowing of the carotid artery and a risk factor for strokes

### **Eye Disease Warning Signs**

If you experience any of the following symptoms, you really should have your eyes examined quickly.

- Sudden loss of vision in one or both eyes
- Seeing flashes of light in your eyes
- Seeing large numbers of spots or “floaters” in your eyes, especially if the number has increased dramatically recently
- Double vision
- Pain in or around the eyes

### **Summary**

Recommendation #1 is quite simple to remember – have your eyes, and the eyes of those in your family, checked yearly. This is the first best thing you can do to maintain clear vision and healthy eyes!

## **#2: Have A Physical Examination Regularly**

The eyes do not exist outside of your body – instead they are an integral part of your body. In order to be healthy and function properly, your eyes depend on all of the other parts of your body to be healthy and to do their jobs as well. If your circulation is poor, your eyes will lack the proper nutrients they need to work. Likewise, if your heart doesn't work well, the blood won't even make it to your eyes!

Having a regular physical exam with your family doctor is critical to keeping your eyes healthy. During your exam, your doctor will be checking for general physical conditions that, if untreated, will not only cause serious health issues, but can cause blindness as well.

In the last chapter, we mentioned some of the physical diseases that can be detected during an eye exam. Here's a brief review:

- Diabetes
- Hypertension – High Blood Pressure
- Hypercholesterolemia – High Cholesterol
- HIV/AIDS
- Graves Disease
- Herpes Simplex/Herpes Zoster infections
- Carotid Stenosis – a narrowing of the carotid artery and a risk factor for strokes

I'd like to take some time to discuss the most potentially devastating of these conditions when it comes to your eyes – diabetes.

Diabetes is a metabolic condition in which the body either does not produce sufficient amounts of insulin or in which the body becomes insensitive to the insulin that is present. Insulin is a hormone produced by special cells in the pancreas. Its primary function is to help transport glucose from our blood stream into each of our billions of individual cells that make up our bodies. Glucose is the basic sugar fuel our cells need to survive.

Without the action of insulin it is possible for our cells to literally starve to death surrounded by a blood stream full of sugar.

Over a period of time, this state of high blood sugar damages the blood vessels and causes them to become leaky. Fluid and blood can accumulate in the tissues. The fine and delicate blood vessels of the retina are particularly prone to this type of damage, leading to a sight-threatening condition known as diabetic retinopathy.

Studies show that someone who has diabetes is 25 times more likely to lose vision than someone who does not have diabetes. My point is that by uncovering any systemic diseases like diabetes early enough and by treating them properly, vision loss and blindness can be prevented for many people. So do yourself – and your eyes – a favor. If you haven't had a check-up with your doctor for a while, go ahead and make an appointment today. In fact, get up and do it now while you're thinking about it! It may be the best thing you do today to help keep your eyes healthy and your vision sharp.

### **#3: Eat The Good Stuff!**

Remember the old joke: “Carrots must be good for your eyes - you never saw a rabbit wearing glasses have you?”

Well, in a way, there’s a lot of truth to what your mother used to tell you – eat your carrots and vegetables, they are good for your eyes! A healthy diet rich in antioxidants and the right kinds of fat can be instrumental in keeping your vision sharp and your eyes healthy.

Let’s take some time to discuss what antioxidants and essential fatty acids are, why they are good for your eyes and how to get the proper amounts in your diet to ensure healthy eyes.

#### **Antioxidants**

An antioxidant is a substance that prevents oxidation and can guard the body from the damaging effects of free radicals. Free radicals are not escaped terrorists – they are molecules with one or more unpaired electrons. Over time, free radicals can destroy cells and they play a role in many diseases, particularly age-related ones. Eye diseases such as macular degeneration and cataracts have been linked to damage caused by free radicals. By taking in the right types of antioxidants into our bodies through the foods we eat, or through supplementation, we can help stop the formation of free radicals and prevent disease.

There are several different types of antioxidants that can be helpful in preventing eye disease. Let’s discuss the important ones.

#### ***Vitamin A and Carotenoids***

Vitamin A is an antioxidant that we can get from animal sources such as by eating beef or chicken liver or taking cod liver oil. Carotenoids are simply red and yellow pigments found in plants that are also antioxidants. Some carotenoids are converted by our bodies into vitamin A. Vitamin A is essential for the health of our eyes and research is finding that other carotenoids, such as lutein and zeaxanthin, are helpful as well.

Vitamin A is a key factor in preventing night blindness. A deficiency in vitamin A can also lead to xerophthalmia, a severe dry eye condition that results in corneal ulcers and blindness. In fact, vitamin A deficiency is one of the leading causes of blindness in

developing countries. Vitamin A may also help prevent the formation of cataracts and the development of macular degeneration.

The U.S. Recommended Daily Allowance (RDA) of vitamin A for males age 11+ is 1,000 Retinol Equivalents (RE) and for females age 11+ it is 800 RE. You can convert Retinol Equivalents to International Units (IU) with the following ratios: 1 RE = 10 IU for plant sources and 1 RE = 3.3 IU for animal sources.

If you are a smoker, be sure to take extra vitamin A because tobacco prevents your body from absorbing it. Be careful though – **don't get your vitamin A by taking beta-carotene supplements.** This has been shown to increase your risk for lung cancer. In fact, if you have a history of smoking, even if you have stopped smoking, **avoid beta carotene in multivitamins and supplements.** Instead try to eat more of the foods rich in vitamin A.

Good food sources of Vitamin A include cod liver oil, beef or chicken liver, carrots, sweet potatoes, kale, butternut squash, and sweet red peppers. It's best to select fresh foods, but if these are unavailable, go for the frozen variety over the canned. The high heat of the canning process can leach out much of the nutritional value of the food.

### ***Lutein and Zeaxanthin***

Lutein and Zeaxanthin are carotenoid antioxidants found in leafy green vegetables such as spinach, kale and collard greens. They are also found in yellow and orange fruits and vegetables such as corn. As opposed to vitamin A, cooked vegetables are actually better sources of lutein and zeaxanthin as the heat from cooking will break down the food's cellular walls, releasing the lutein and zeaxanthin.

Studies have shown that lutein and zeaxanthin are beneficial in preventing cataract formation and may reduce the risk of developing macular degeneration. There is currently no US RDA for lutein or zeaxanthin, but they are essential as they cannot be manufactured by your body.

### ***Vitamin C***

Studies show that Vitamin C is also helpful in reducing the risk of cataracts and macular degeneration as well as preventing and alleviating glaucoma.

The US RDA for vitamin C is 60 milligrams for both men and women. This is a minimum necessity, as not only are our bodies unable to make vitamin C, we can't store it either. You should also consider taking additional vitamin C if you smoke, drink or have diabetes.

Vitamin C is found in fruits, berries, tropical fruits, leafy, green vegetables and potatoes. Foods rich in vitamin C include sweet red peppers, kale, broccoli, sweet green peppers, strawberries, oranges, cantaloupe, grapefruit, mangoes and raspberries. Once again, it is best to consume these fruits and vegetables raw if possible as cooking will tend to decrease the vitamin C content. Also, light is destructive to vitamin C, so choose orange or fruit juices in cartons as opposed to clear glass jugs. Finally, choose fresh fruits and vegetables if possible over frozen or canned.

### ***Bioflavonoids***

Bioflavonoids are antioxidants that give certain foods their deep colors. Blueberries and dark chocolate are examples of foods that contain bioflavonoids. Bioflavonoids also help your body absorb vitamin C.

Many of the foods that contain vitamin C are also excellent sources of bioflavonoids. In addition, foods such as cherries, grapes, plums and buckwheat are good sources of bioflavonoids.

### ***Vitamin E***

Vitamin E is an antioxidant shown to be helpful in preventing the development of cataracts and macular degeneration. The US RDA for vitamin E is 10 milligrams (15-22 IU) if you are a male age 11 and up; 8 milligrams (12-18 IU) if you are a female age 11 and up. If you are a smoker, remember your body needs additional vitamin E.

The case for Vitamin E is complicated, though. Several studies have shown that high doses of Vitamin E supplements - 400 IU or more – may actually increase risk of several dangerous health conditions including stroke and prostate cancer, so **be mindful of the amount you get from the combination of multivitamins and supplements**. The studies do generally agree that Vitamin E from natural sources does not have this risk.

The best source of vitamin E can be summed up in one word: nuts. Foods such as sunflower seeds, almonds, hazelnuts, peanuts and mangoes are all excellent sources of vitamin E.

### ***Minerals***

Minerals are essential to your health as they help your body absorb antioxidants. Zinc and selenium are two minerals of particular interest in eye care because studies show they are beneficial in preventing macular degeneration.

Zinc helps your body absorb vitamin A and also helps rid your body of dangerous free radicals. Oysters, hamburgers, wheat and nuts are good sources of zinc.

Selenium helps your body absorb vitamin E. Brazil nuts, yeast and oysters are good sources of selenium.

### ***Essential Fatty Acids – Omega 3 and Omega 6***

It may seem strange to you to think of “fat” as “essential” to your health, but it’s true – fatty acids are the components your body requires to create the fat it needs to survive and thrive.

Polyunsaturated fats are made up of two types of essential fatty acids – omega-3 fatty acids and omega-6 fatty acids. The main omega-3 is alpha-linolenic acid (LNA) and its main derivatives are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). The main omega-6 fatty acid is linoleic acid (LA). Linoleic acid also has certain derivatives.

The main trouble for our health comes not necessarily from the levels of essential fatty acids we consume, but from the ratio of omega-3 fatty acids to omega-6s. Both are essential, but if we have too much of one and not enough of the other, problems can occur. Unfortunately, this is a problem we all face as our Western diet tends to be too high in omega-6s and not high enough in omega-3s. The ideal ratio of omega-6 to omega-3 ranges from 1:1 to 4:1, yet most of us tend to have ratios between 20:1 to 30:1.

In our eyes, it has been shown that too much omega-6 in our diet can lead to macular degeneration. By increasing our intake of omega-3 (as well as reducing our level of omega-6) we can eliminate this risk. This is not to say omega-6 is bad for your eyes. In the right balance, omega-3s and omega-6s are helpful in preventing and alleviating dry eye syndrome. They are also beneficial in regulating the eye’s intraocular pressure.

To help balance your ratio of omega-3s and omega-6s, it is recommended to consume more food rich in omega-3s and to decrease our intake of omega-6s. The best source of omega-3 fatty acids is cold-water fish such as salmon, mackerel, rainbow trout tuna and sardines. If you don’t like fish, you could try taking fish oil supplements.

It’s also important to remember as you increase your consumption of fish oils that you should also increase your consumption of vitamin E and the other antioxidants. Fish oils tend to release free radicals, which can be taken care of by increased antioxidant levels.

The best way to decrease your omega-6 levels is by making better choices. Our main source of omega-6 fatty acids is from vegetable oils used in cooking. If you typically cook with corn oil, you’re receiving 58 grams of omega-6 fatty acids in every 100 gram serving. By simply switching to olive oil, you can reduce that to only 7.9 grams of omega-6s per 100 gram serving.

## **OK – I'm totally confused! Just tell me what I should eat!**

The bottom line for healthy eyes is to try to get enough of these nutrients through the following foods:

- Vitamin A – cod liver oil, liver, carrots, sweet potatoes, butternut squash
- Lutein and Zeaxanthin – spinach, kale, collard greens
- Vitamin C – sweet peppers, kale, strawberries, broccoli, oranges, cantaloupe
- Bioflavonoids – citrus fruits, cherries, grapes, plums
- Vitamin E – sunflower seeds, almonds, hazelnuts, peanuts
- Selenium – brazil nuts, yeast, seafood
- Zinc – oysters, hamburgers, wheat, nuts
- Essential Fatty Acids – cold water fish such as salmon, mackerel, trout and tuna

Food sources are the best sources for vitamins. If you have trouble including all these in your diet, or if you want to make sure you're getting enough, I think it's best to consider good quality supplements with specific ingredients you may be lacking, such as omega-3s, lutein + zeaxanthin, and vitamin A as palmitate (NOT beta carotene!). Be wary of multivitamins; many of these take an everything-but-the-kitchen-sink approach instead of following what research says, and they may contain beta carotene, may have too much vitamin E, or may combine things that compete with each other when taken together, such as vitamin A with lutein. Just remember that healthy eyes start with a healthy diet!

## **#4: Quit Smoking!**

OK, OK – for you smokers, I know you’ve heard all this before so I won’t beat this point to death. I also know just how hard it is to quit smoking. I have watched many friends and family members struggle to break the habit and I realize just how powerful of an addiction it can be. But I would be remiss if I didn’t include the warning in this report.

In addition to all the other devastating health effects of smoking, particularly increased risk of life-threatening cancer, smoking increases your risks of developing a variety of eye diseases such as cataracts, glaucoma, dry eye syndrome and macular degeneration.

A recent study in Archives of Ophthalmology shows that smoking can increase your risk of developing wet macular degeneration by 2 percent. While this may not seem like much, keep in mind that the wet form of macular degeneration is the most devastating type of macular degeneration you could have. It results in severe bleeding within the retina and can quickly lead to irreversible legal blindness.

In addition, smoking makes it more difficult for us as eye doctors to help you prevent macular degeneration from happening in the first place. If you remember from the last chapter, vitamin A is essential to keep the eyes healthy, but by taking beta-carotene, smokers increase their risk of developing lung cancer in the process.

OK, so enough preaching. You know smoking isn’t good for you in a variety of ways. Why not try to give it up once and for all? Do it for yourself, your body and your eyes. Do it for those who love you.

## **#5: Exercise Regularly**

We all know that exercise is essential to our good health. Exercise helps you sleep better, it improves your resistance to fight infections, it helps your brain work better, it prevents depression and it lowers your risk for developing diseases like cancer, heart disease and diabetes. In regard to your eyes, exercise can also help prevent macular degeneration and glaucoma.

Unfortunately, many of us are probably not getting enough exercise. I know this because studies show that being overweight is becoming an epidemic in this country. A lot of this has to do with the prosperity we take for granted. Think about this: In all of human history, never has there been this abundance of food calories available to this many people. I'm not talking about the quality of the food, but simply the availability. And with the lifestyles, hobbies and work habits most of us have, it is physically easier to consume calories than to expend them.

In a study published in the Journal of the American Medical Association in October 2002, researchers found that 64.5% of the American population is overweight. This is up from 55.9% in a survey done 5 years earlier. In addition, 30.5% of the population is considered to be clinically obese.

The problem is not limited to adults. In the US, about 11% of our kids are considered obese and another 14% are overweight. Compare these numbers to kids in China, where only 3.6% of kids are obese and 3.4% overweight.

The trouble with these numbers lies in what results from being overweight. It is suggested that in the US, obesity causes at least 300,000 excess deaths. Health care costs of American obese adults amount to \$100 *billion* dollars.

Studies find that people who are obese are more than seven times as likely to be diagnosed with diabetes, more than six times as likely to have high blood pressure and four times more likely to have arthritis when compared to people with normal weight.

From an eye doctor's perspective, I am particularly worried about the growing epidemic of diabetes in this country. Right now, there are 16 million Americans with pre-diabetes. This is in addition to 17 million Americans that have full-blown diabetes. This equates to 12 percent of the population. This means that 12 percent of the population of this country is at greater risk of blindness because of the potential for diabetic retinopathy.

## What Can Be Done?

The best way to limit your risk of developing diabetes as well as other the other conditions we discussed above would be to maintain a healthy weight. Even if you already have diabetes or high blood pressure or any of these other conditions, you can make your condition infinitely easier to manage by keeping your weight under control.

How do we do this? Our two most important tools are these: proper diet and exercise.

We discussed diet earlier, but let me add one other point, particularly if you are concerned about diabetes. One of the best ways to control your weight is by replacing many of the grain carbohydrates you eat with green vegetables.

Eating too many carbohydrates causes your body's insulin levels to rise. This sends a hormonal message to your body's cells, essentially telling them that there's plenty of food, so don't bother burning any fat. In fact, go ahead and store even more, just in case we need it. Therefore excessive carbohydrates not only make you fat, they make you stay fat. Limiting your sugar intake can be crucial in helping you lose weight.

The next key to maintain healthy weight is exercise. Here are some quick tips to keep in mind regarding exercise:

- **Some is Better Than None** – I know how hard it is to start an exercise program, but please realize how critical it can be to your health. As Nike says, “Just do it!”
- **Be Consistent** – 30 minutes per day is a good goal. Some experts recommend 60 minutes a day, but this can be split into two 30-minute sessions.
- **Start With Walking** – If you are overweight, walking is an excellent way to start exercising as it is low risk and inexpensive. Just remember to keep increasing the intensity of your workouts as you progress, otherwise your walks may not be as beneficial.
- **Increase Your Intensity Frequently** – As mentioned, you'll get the most health benefits from your exercise by keeping up the intensity. If you don't want to bother with a heart-rate monitor or measure your pulse, remember this rule of thumb: Work out hard enough that you have some difficulty carrying on a conversation. If you can talk easily, work harder. If you can't talk at all, cut back a little bit.

Remember that your eyes are part of your whole body. Do what it takes to keep your body healthy and your eyes will follow suit!

## **#6: Protect Your Eyes From Injury**

Consider the following sobering statistics:

- Each business day, more than 2,000 US workers experience job-related eye injuries. Ten to twenty percent of these injuries result in temporary or permanent vision loss. Ninety percent of the injuries could have been prevented by the use of protective eyewear. – Prevent Blindness America, February 2004
- In 2000, there were more than 42,000 eye injuries from sports or recreation in the United States. Seventy percent of these injuries involved people younger than 25. The use of protective eyewear would have reduced the chance of significant eye injury by at least 90 percent. – American Academy of Ophthalmology and American Academy of Pediatrics, March 2004
- About 30 percent of the more than 9,000 fireworks related injuries seen each year in emergency rooms are eye injuries. About 25 percent of these eye injuries result in permanent loss of vision or blindness.

The message from these statistics is clear. If we truly value our eyes and vision as much as we say we do, we must take the appropriate steps to protect them, especially when participating in risky activities. Let's take some time to talk about the best ways to protect our eyes on the job and off.

### **Safety Glasses**

If you work with power tools of any kind, from saws to sanders, you need protective eyewear. Even when using a hammer, it's a good idea to wear safety glasses for the odd time when a glancing blow sends a nail flying. Ideally, your safety eyewear should include side shields to prevent debris from hitting your eyes from the side.

Protective eyewear can be as simple and inexpensive as a pair of goggles or shields that fit over your own glasses. These can be purchased at the local hardware or home improvement store. However, if you work with power tools a lot, you may want to invest in a pair of specially fitted safety glasses made with polycarbonate lenses. These can be made by your eye care professional. They can even incorporate your own prescription to give you clear, comfortable vision as well as safety.

To qualify as true safety glasses, the frame and lenses must pass a strict set of criteria set forth by the Occupational Safety and Health Administration (OSHA) known as ANSI standards. The frames must be sturdier than standard “dress” eyeglass frames and the lenses must pass a “drop ball” test. In this test, a small metal ball is dropped onto the lens from a specified height. The lens must survive impact without any chipping or cracking.

If your work requires using power tools or machinery, or if you work in an area with any kind airborne particles or noxious chemicals, your employer needs to provide safety eyewear for you. They may even provide prescription safety glasses for you, so be sure to check with your employer. But no matter what type of protective eyewear you choose, the most important thing is that you wear it!

### **Protective Sports Eyewear**

While games such as tennis, racquetball, and baseball may seem relatively risk-free for the eyes, the truth is actually the opposite. These sports all involve balls that travel at speeds often in excess of 60 mph. Even a sport like basketball can be dangerous, not because of the ball, but because of swinging elbows, hands and fingers. It’s not hard to imagine how an eye can be poked or scratched while players jump for a rebound.

Fortunately, the use of protective sports eyewear is on the rise and is even being considered a necessary part of the game by kids and coaches. Helmets with cages or visors are now required equipment for kids in a sport like hockey, where amazingly many NHL professionals still foolishly put their eyes at risk without them.

In addition to providing essential protection, sports eyewear can also incorporate the player’s prescription. This is valuable in maximizing visual performance during play.

Sports goggles are made in a wide variety of shapes and sizes and are often specialized for a particular sport. Many are designed to be worn under a helmet if needed. Like safety glasses, the lenses in sports goggles are made of a tough, durable material called polycarbonate and are usually treated with a scratch-resistant coating.

In an era when more than 42,000 sports-related eye injuries are occurring each year, don’t let yourself or your child be one of them. Make the investment in the proper safety eyewear for your sport.

### **Sunglasses**

Believe it or not, sunglasses can be considered a form of protective eyewear. They protect your eyes from the harmful effects of the sun’s ultraviolet (UV) radiation.

UV rays are an invisible part of the sun's radiation spectrum. There are three types of UV radiation: UVA, UVB and UVC. UVC is no problem as it is absorbed by the atmosphere. UVA rays are absorbed by the lens of the eye, but there is no documented evidence of any resulting disease because of this. UVB radiation, though, is of greater concern to the eyes.

UVB rays are the ones that cause sunburn and can damage the eyes. When combined with cold wind and snow, UVB rays cause snow blindness, a temporary but painful condition of corneal inflammation. Some experts also believe that UVB radiation may play a part in cataract formation.

To protect your eyes from these UV rays, I recommend you wear a pair of quality sunglasses. Good sunglasses usually have a label that states how much UV light they'll block. To provide the best protection for your eyes, look for sunglasses that block at least 98% of the UVA and UVB rays.

### **Other Potential Eye Hazards:**

#### ***Air Bags***

Trauma to the eye and eye socket can occur during air bag deployment in an auto accident. While this doesn't mean you should deactivate your air bag – it will probably save your life in case of an accident – there are some things you can do to minimize the risk of eye injury:

- Always wear your seat belt and don't sit too close to the air bag.
- If the car has a side air bag, don't rest your head on the door.
- Never let children sit near a front airbag – keep them in the back seat with their seatbelts on.

#### ***Laser Pointers***

Yes, it is possible for a laser to damage your eyes. While unlikely, retinal damage can occur from staring too long at a laser pointer or at a laser gun sight, so why risk it?

#### ***Champagne Corks***

A flying champagne cork can travel with enough velocity to rupture an eyeball or cause a retinal detachment. To avoid ruining your next New Year's Party with an accidental eye injury, point the bottle away from yourself and others and place a towel over the top while popping open the bottle of bubbly.

### ***Paintball***

A study in the journal *Pediatrics* reported that there were more than 1,200 paintball related eye injuries in the year 2000 and more than 40 percent of these occurred in children. To avoid this risk, never take off your head shield when you're on the playing area, even if the game is over.

### ***Lawn Mowing***

Yes, even the Saturday afternoon American pastime of cutting the grass is not without risk. Rocks or wood chips can become dangerous projectiles when picked up by the blades of a lawn mower or other garden tool. Don't forget to wear your goggles.

Also remember to be careful when using bungee cords, household chemicals, or fireworks. All of these have caused eye injuries. Use common sense, wear your protective eyewear and save your sight!

## **#7: Protect Your Eyes From Eyestrain**

Let's face it – while today's technology has improved our lives in amazing ways, it also tends to put a greater strain on our eyes. In the old days (all of 15 to 20 years ago!), too much reading and paperwork was our main problem. This problem was easily solved through the use of reading glasses, proper lighting and recommended rest breaks. Today's technology, however – from computers to the proliferation of cell phones, tablets and personal electronic devices (PEDs) – has created a whole new set of challenges for our eyes.

Recent data indicates that about 175 million Americans currently use computers and about 70 to 75 percent of them report some form of eye or vision problem. These symptoms will range from visual blur to dryness to headaches. While none of the problems may be sight threatening, they certainly are an inconvenience and limit our productivity. I'd like to devote this chapter to giving you some helpful hints on how to prevent eyestrain on or off the job, particularly if you use a computer.

### **Consider the need for reading and/or computer glasses**

Computers in particular can cause vision problems because we are asking our eyes to remain focused on pixel-generated images – images that are constantly flickering. While this flickering may appear imperceptible, it forces our eyes to focus and refocus thousands of times during the work day. This can certainly cause symptoms of eyestrain.

If you are experiencing difficulty with your eyes after prolonged close work or computer work, be sure to mention your symptoms to your eye doctor during your eye exam (see recommendation #1). Your doctor may wish to prescribe special glasses to help your eyes deal with these demanding visual tasks.

### **Use proper lighting**

Eyestrain may result from lighting that is actually too bright or from too much light coming in from the outside. While bright lighting is helpful for reading, it can cause trouble when using the computer. You'll actually want the ambient lighting to be about half of what it normally is when you use a computer. If you're noticing some eyestrain when you use the computer, try turning off or dimming some of the lights and pulling down the blinds or shades on the windows.

## **Minimize glare**

Reflections off the computer screen or off the walls can also cause eyestrain. Consider placing an anti-glare shield on your monitor and follow the recommendations to lower the ambient lighting as noted above. If the paint on your walls in your office or den is a bright glossy white, think about switching to a darker color in a matte finish.

## **Blink more often**

When we work on the computer or read, we actually have a tendency to stare – we blink about five times less than normal. This leads to excessive dryness of the eyes and irritation. Also, many of our offices are dry environments to begin with which can make the problem even worse.

Try to take a blinking break about every 30 minutes: Blink your eyes very slowly, as if you were going to sleep, about 10 times. For severe dryness symptoms, consider using an over-the-counter artificial tears eye drop as needed. Avoid using the “gets-the-red-out” drops as these are not formulated for long term use.

## **Take rest breaks**

In addition to your blinking breaks, give your eyes a focusing break about every 30 minutes by looking away into the distance either down a long hallway or out the window. Do this for about 10 seconds. You may also want to get up and stretch or walk around to prevent muscle or back aches.

## **Modify your workstation**

Choose a good quality chair and be sure to set your chair, keyboard and monitor at a height that is just right for you. If you need to work from written copy, think about getting a copy stand that can mount on the side of your screen – this will allow you to quickly scan your eyes from the copy to the screen without having to move your head a lot. Also, use an adjustable desk lamp to be able to aim the light just onto the copy, not into your eyes or on the screen.

By following these simple suggestions, you’ll make your work much less stressful on your eyes and, as a result, you’ll be much more productive!

## **Thank You For Reading This Special Report!**

Dear Friend,

I'd like to personally thank you for taking the time to read this special educational material. This report gives you much of the information you need to help protect your most precious sense – your eyesight. Now all that's left to do is for you to take action.

If you haven't had an eye exam in a while, I know that would be a great place to start and I'd appreciate it if you would consider our office for your eye care needs. As an optometrist, I have helped many people not only see as clearly as possible, but look great in their fashionable new glasses. I also help people achieve clear, comfortable vision with custom-fit contact lenses, and determine if they are a good candidate for the new corneal reshaping therapy you may have heard about. Best of all, I offer my patients the peace of mind of knowing that their eyes are being well cared for.

Perhaps my staff and I can provide this same fine service for you. I'd like to make you a special offer so you'll give us a try. If you call our office and tell Melissa or Heather you received this report, we'll give you 20% off your first pair of glasses, along with a free Eyeglass Upgrade package consisting of a Scratch-Resistant Coating and an Anti-Reflective Coating (if you desire).\* This service, valued at \$79, will enhance the durability and appearance of your lenses and maximize the clarity of your vision.

We are committed to your complete satisfaction. Our #1 goal is to give you the best eye care experience possible. If you're not pleased with our service or the glasses you receive, let us know and give us a chance to make it right. I know this about the great people who work with me: They will do their best to meet and exceed your expectations.

So if you or someone you love is ready to keep your vision sharp and your eyes healthy – now is the time to act. Call my office at (937) 606-2772 and schedule an appointment today! Or if you have any other questions, we will be happy to answer them for you.

Thank you again for reading our special report. I look forward to seeing you soon!

Sincerely,

David Littlejohn, O.D.

\*Not available with some vision benefit plans