The Elite Training Group track club

Expanding the area of what is possible
In Track & Field Distance Running & Competent Self-Care in medicine and psychology

www.theetgtrackclub.com

TheETG vision training

A major part of TheETG mission is to expand the area of what is possible in competent self-care in medicine and psychology. TheETG’s primary method of achieving that is to proliferate applied science based information by way of free packets containing plain language info for anyone seeking to move themselves or others forward in these areas.

As you continue to acquire and apply more information you continue to expand the area of what is possible.

Data-less conclusions founded upon faulty assumptions are the mother of all screw-ups. They lead to human belief systems that quickly get set in stone.

Put data ahead of dogma. Follow the data - not - the crowd.

TheETG packets attempt to address the following;

"......the benefits that US health care currently deliver may not outweigh the aggregate health harm it imparts."
[Journal Of The American Medical Association...Volume 302 #1...July 1, 2009...page 89 - 91]

"Not enough doctors adapt appropriately to new scientific findings.....An insufficient number of medical faculty members are well prepared, effective educators, and too few medical schools prepare their students for a lifetime of learning and change."

".....takes an average of 17 years to translate 14% of original research into benefit.....average of 9 years for interventions recommended as evidence-based practices to be fully adopted."
[M.Tinkle, et al. -- Dissemination and Implementation -- Nursing Research and Practice -- Volume 2013]

"......1.5 million U.S. residents are harmed or killed each year because of medication errors, according to an Institute of Medicine report."
[Nature Medicine -- Volume 12 #9 -- September 2006 -- page 984 - 985...News In Brief]

"It is estimated that more than 700,000 individuals are seen in hospital emergency departments for adverse drug events each year in the United States."
[Centers For Disease Control -- 2015]

"Most drugs are only effective for a small percentage of people who take them."
[Michael Leavitt -- U.S. Secretary of Health & Human Services 2005 - 2009]

".....A recent study for example, found that only half of all cardiac guidelines are based on scientific evidence."<p>
[President Barack Obama -- Speech to the American Medical Association -- June 15, 2009]

"All the good things.....they don’t teach us in medical school, because the drug companies pay for our education."
[Dr. John Sessions M.D.]

You may copy any and all contents of this packet, with exception and exclusion of using such copies for purposes of producing revenue, profit, or any direct or indirect compensation.
# The ETG Vision Training

**one day each week**

| **Eye Chart** |  
|---|---|
| chart on a lighted wall 20 feet away. | do 2 x 4 minutes  
--- rest between each rep; a few seconds of eyes closed, and eyes wide  
--- as vision improves, progress to attempting to see smaller lines |

**Long Distance**

| objects a mile or more away | do 4 x 4 minutes  
--- rest between each rep; a few seconds of eyes closed, and eyes wide  
--- as vision improves, progress to attempting to see smaller things |

**Short Distance**

| objects 200 - 400 meters away  [objects, signs, etc] | do 4 x 2 minutes  
--- rest between each rep; a few seconds of eyes closed, and eyes wide  
--- as vision improves, progress to attempting to see smaller things |

**several days each week**

- **Nose distance**...2 minutes  
  tiny print held at the nose, do one eye at a time
- **Eyes Wide**...2 minutes  
  open eyes as wide as possible and hold that position
- **Print Reading**...4 minutes  
  writing on a computer screen, newspaper, or book; place it or yourself far enough away where you can barely read it
Tools for nose distance vision training. 
Use a copier machine to reduce size of writing or letters. Place it on something that allows you to hold it. 

For nose distance training, place it at the tip of your nose.
"...training of the ciliary muscle..."

"After training visual acuity without correction improved in 71.5% of cases....."

L.K.Dembskii
The efficacy of training the accommodation muscle using the AT-1
Vestnik Oftalmologii -- Volume 115 #5 -- Sept-Oct 1999 -- page 36
Nearsighted = can see near, problems with seeing far
Farsighted = can see far, problems with seeing near
myopia = Nearsighted = can see near, problems with seeing far
hyperopia = Farsighted = can see far, problems with seeing near
Presbiopia = problems seeing up close

ciliary muscles have 2 divisions
--- longitudinal muscles
--- circular muscles

"Myopia is especially common in Asia. For instance, in Taiwan, Hong Kong, and Singapore, 60 - 80% of young adults have myopia."

"The causes of myopia........"
"....suggest that lengthy periods of close work are probably a contributing factor...."

"the study of the cellular biology has focused on the fact that fibroblasts are the only cell type found in the sclera. The activity of fibroblasts is affected by many factors....signals from the matrix and iris ciliary body..."

"The finding that proliferation of fibroblasts in the sclera declines during development of myopia but increases during recovery...."

"Fibroblasts secrete collagen, the main structural component of the sclera."

"....during development of myopia, collagen degradation is accelerated and collagen synthesis is reduced...."

V. Choo
A look at slowing progression of myopia.
Lancet...Volume 361 #9369.....May 10, 2003.....page 1622 - 1623.
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"Reading [number of books per week] may be associated with higher myopia in Chinese school children."

S.M. Saw, et al
Near-Work Activity, Night-Lights, and Myopia in the Singapore-China Study
Journal Of The American Medical Association......Volume 288 #6.....August 14, 2002.....page 682
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"Estimates based on the 1999 - 2004....vision examination data indicate that clinically important refractive error affects half the U.S. population...."
Sometime around 1999, I became curious as to why so many people in the United States have to wear glasses or contact lenses. I know that when someone claims that something that occurs on a massive scale is "genetic", they're likely to be wrong. It didn't make sense to me that so many people could have a "genetic" problem with their eyes. When I started looking into this subject, I started with an anatomy book. I knew that the ability of the lens of the eye to change shape is what determines one's ability to see well, either close-up or at a distance. The anatomy book showed that a muscle [called a ciliary body] changes the shape of the lens so you can see well.

Being a track coach whose job is to train nerves and muscles, the first thought that went through my mind is that the muscle of the lens must be atrophying over time, to cause such a large number of people to have gradually worsening vision.

As a track coach I know that muscle atrophy is not "genetic", its due to a lack of use, dis-use atrophy ["use it or lose it"], or what we call in sport…..de-training. It seemed reasonable to assume that training the muscle would not only stop the gradually worsening vision, but would also reverse the process, and restore one's vision to a high level. After researching that subject matter, I discovered an area of information that eye doctors, lasik surgeons, etc don’t or won’t tell you.

Sometime around 2000, after I had worn either glasses or contacts for about 35 years, with gradually worsening eye vision, I decided to begin some informal vision training on my own, while wearing my contact lenses. My lens prescription was fairly outdated at the time, so if the training worked, I knew that it would be noticeable. After a few weeks of doing nothing more than looking off into the distance at various times during a day when I passed long streets [simply looked down toward the end of the street], my vision improved rather dramatically. After a few months of this informal, training that I did every once in a while, my vision, with my contact lenses on, improved to a level that was beyond where my vision was on the day I bought the lenses, which was some 7 - 8 years earlier.

Obviously, this was encouraging, especially when this personal experience was combined with what I was learning from reading published research, and information about the existence of "vision training" centers around the country. Over the course of a year or two, my vision continued to improve, reaching a point where I could read very small writing on small signs located 40 - 50 yards away. I was fairly confident that my vision had moved well beyond the norm of the "20/20" population. I was somewhat hesitant though to engage in vision training without my contact lenses, since I could only see blurs of things that were held more than a few inches from my face. So attempting to go without my contacts was sufficiently discouraging to keep me from pursuing that particular type of training. Thus, I continued training from time to time, but doing so with my contacts lenses on. But then a day came in July 2002, when I lost one of my contact lenses. My lens prescription had lapsed many years, and the eye doctor I had seen before had moved or went out of business. Thus I had a choice, of either getting more serious about vision training, or paying $200 for a new eye exam, prescription, and contact lens.

Choosing to replace the lens would also require that I explain to the eye doctor how it can be that my required lens prescription would be weaker, rather than stronger, since my last prescription, nearly a decade earlier. I chose to keep the $200 and the explanation, and just focus on developing a more formal vision training program for myself….for free.

This time obviously, the training would have to be done without the contact lenses. I did hold on to the contact lens that I had not lost. It served mainly as a crutch. Without my contact lenses, at that time, I could not make out the face of someone standing in front of me, if they were more than half an arm's length away from my eyes. I couldn't read a newspaper if it was more than a few inches from my eyes. A few days after doing some minimal degree of vision training, my sight improved significantly. After a couple weeks, a reduced level of vanity allowed me to stop wearing the other contact lens. I left it in the case, but carried the case around in my pocket just in case.

July 22, 2002 was my first full day without wearing contact lenses.

On October 7, 2002 after having a few months to design, tinker with, and improve the structure of a formalized vision training program, I began the training in earnest.
In early December 2002, I finally threw away the contact lens. I had already thrown out the lens cleaner and soaking solutions a few weeks earlier.

Having acquired an eye chart in October 2004, looking back in retrospect, my vision in July 2002 without my contact lenses, was likely to have been a bit worse than 20/800 [in the United States, generally speaking, 20/200 is considered to be legally blind], was likely around 20/1200 as determined by another eye chart I eventually acquired. By October 2004, with 2 years of following my somewhat structured vision training program [which I continued to tinker with and improve upon in 2004, my vision reached a bit better than 20/80 in each eye. In mid-December 2004, my vision was 20/60 in each eye. By late 2006 things gradually improved to 20/40.

My goal is to eventually reach somewhere between 20/10 to 20/15 in each eye.

Unfortunately, while working on the development of the ETG run training program, I got into some serious overtraining for many months which resulted in a deep state of chronic fatigue, gradually escalating into the early stages of fibromyalgia. Since the overtraining was imbedded in my training program that problem took several years to identify and resolve. This stopped or dramatically slowed any improvement from my vision training since my body wasn’t all that able to bring about much in the way of training adaptations. This issue began in earnest around late 2006. Took a couple years to figure out what was going on, then a couple years more to for my body to get back to where it could adapt to training. So by that time was late 2010. So close to 4 years down the drain.

Time line thus far ------------
--- mid-July 2002, I lost one of my contact lenses [my vision without my contact lenses, was likely to have been a bit worse than 20/800] , was likely around 20/1200 as determined by a second eye chart I eventually acquired

--- July 22,2002, my first full day without wearing contact lenses
--- between July - October 2002, did informal/unstructured vision training

--- October 7, 2002, began formalized vision training program in earnest
--- December 2002, finally threw away the remaining contact lens.

--- October 2004, vision reached 20/80 in each eye
--- December 2004, vision has improved to 20/60 in each eye

--- Late 2006, vision improved to 20/40 in each eye

--- 2014, took several years to get to a point this year where the issues with the run training program no longer negatively impact the forward movement in vision. Working towards getting to the ballpark of 20/15 to 20/10

--- 2018, went way off the rails for several years in failing to train regularly and stick to the training program. Got back into it in early 2018. Mid-year, I can nearly makeout all the letters on the 20/30 line.
"So called "performance enhancing drugs" are prescription drugs.

Some examples of the effectiveness of prescription drugs in sport...........

"The drug erythropoietin, often called EPO.....a new systemic review of existing research reveals that there is no scientific evidence that it does enhance performance, but there is evidence that using it in sport could place a user's health and life at risk."
Science Daily.....December 5, 2012.

"...there is no scientific basis from which to conclude that rHuEPO has performance-enhancing properties in elite cyclists." The use of rHuEPO in cycling is rife but scientifically unsupported by evidence, and its use in sports is medical malpractice.
J.A.Heuberger, et al
Erythropoietin doping in cycling: lack of evidence for efficacy and a negative risk-benefit.
British Journal Of Clinical Pharmacology......Volume 75 #6....June 2013...page 1406

"The over-exaggeration of the effects of growth hormone in muscle building is effectively promoting its abuse...." The question of disinformation on rhGH....Part of this problem may, paradoxically, derive from the anti-doping authorities themselves. By ignoring the evidence the rhGH does not work in normal healthy subjects, the athletic establishment could be accused of effectively promoting its use.

"We must tell athletes the truth: growth hormone does not work" or at least not as they think it does and that its is associated with all kinds of immediate and long term hazards------everything from decreased performance to cancer.
"....none of us scientists, doctors, coaches, or sports bodies should continue to suggest that this dangerous doping practice works." M.J. Rennie
British Journal Of Sports Medicine.....Volume 37 #2....April 2003....pages 100-103

"Testosterone prohormones such as androstenedione, androstenediol, and dehydroepiandrosterone (DHEA) have been heavily marketed as testosterone-enhancing and muscle-building nutritional supplements for the past decade."
"Contrary to marketing claims, research to date indicates that the use of prohormone nutritional supplements (DHEA, androstenedione, androstenediol, and other steroid hormone supplements) does not produce either anabolic or ergogenic effects in men. Moreover, the use of prohormone nutritional supplements may raise the risk for negative health consequences."
G.A.Brown, et al
Testosterone Prohormone Supplements.
Medicine & Science in Sports & Exercise.....Volume 38 #8....August 2006.....pg 1367-1537

"So called "performance enhancing drugs" are prescription drugs.

Some examples of the effectiveness of prescription drugs in American medicine & health care...........

"Most drugs are only effective for a small percentage of people who take them."
Michael Leavitt [U.S. Secretary of Health & Human Services 2005 - 2009]

"...the benefits that US health care currently deliver may not outweigh the aggregate health harm it imparts."
Journal Of The American Medical Association...Volume 302 #1.....July 1, 2009...page 89 - 91

"It is estimated that more than 700,000 individuals are seen in hospital emergency departments for adverse drug events each year in the United States."
[Centers For Disease Control....2015]

"106,000 deaths/year from non-error, adverse effects of medications"
B. Starfield
Is US Health Really the Best in the World
Journal Of The American Medical Association.....Volume 284 #4.....July 26, 2000.....page 483 - 485

".....1.5 million U.S. residents are harmed or killed each year because of medication errors, according to an Institute of Medicine report."
Nature Medicine.....Volume 12 #9.....September 2006.....pg 984 - 985.....News In Brief
Pursue becoming a Master Of Sport