



TheElite 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](http://www.theetgtrackclub.com)

# TheETG Warmup

### TheETG Training Packets

**Mission:** Expand the area of what is possible for human performance in distance running. 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.**

The functioning of brain cells, muscle cells, blood cells, -all cells- are governed by the laws of nature, -not- your chosen belief system.

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.**

".....cellular development must be governed by a variety of factors outside the scope of genetic inheritance. "  
B.L.Stauffer -- Epigenetics: An Emerging Player In Health And Disease  
Journal Of Applied Physiology.....Volume 109 #1....July 2010....page 230 -231

".....elite athletes are still made and not born, though perhaps some may be made elite in one discipline more easily than others."  
A. Jones, et al -- Human Performance: A Role For The ACE Genotype?  
Exercise & Sport Sciences Reviews -- Volume 30 #4 -- October 2002 -- page 184

"Scientifically speaking, altitude training has no effect."  
Dr. Nikolai Nordsborg -- University of Copenhagen

"...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."  
EPO [erythropoietin] doping in elite cycling: No evidence of benefit, but risk of harm -- Science Daily -- December 5, 2012

"Many of these compounds in a highly-trained individual do absolutely nothing from the point of view of enhancing performance....."  
"....Athletes think if it's on a list, it works."  
S.Devi -- Overhaul of global anti-doping system needed -- Lancet — Volume 387 #10034 — May 28, 2016 — page 2188

"....investigate the effects of supposedly enhancing drugs in sport. If, as is expected, many substances in current use are found to be ineffective  
it will help keep our athletes safe and improve confidence in sporting results."  
Adam Cohen -- Centre for Human Drug Research in Leiden -- The Netherlands

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# TheETG warmup

## objectives.....

- prepare brain and nervous system for high frequency electrical output to muscle and other tissues.
- increase conversion of PDH [pyruvate de-hydrogen-ase] from its in-active form to its active form such that more energy [ATP] will be produced aerobically during the early portions of the workout/race, regardless of the workout/race distance or running velocity.

### progressive pace warmup.....

- 100m.....start at trot, progress to jog  
100m trot back to starting line
- 100m.....start at jog, progress to run  
100m trot back to starting line
- 100m.....start at jog, progress to run  
100m walk back to starting line
- 100m.....start at run, progress to fast run  
100m walk back to starting line
- 100m.....start at run, progress to fast run  
100m walk back to starting line
- **rest**
- **start workout**

“The aim of the study was to **compare the effects of a long warm-up** (general + specific) **and a short warm-up** (specific) on intermediate running performance (3-minute run).”

“Thirteen experienced endurance-trained athletes.....conducted 2 types of warm-ups in a crossover design with 1 week in between...”

“....a long warm-up (10 minutes, 80% maximal heart rate, and  $8 \times 60$  m sprint with increasing intensity and 1 minute rest in between)....”

“....and a short warm-up ( $8 \times 60$  m sprint with increasing intensity and 1 minute rest in between).”

“Each warm-up was followed by a 3-minute running test on a nonmotorized treadmill.”

“Total running distance, running velocity at each 30 seconds, heart rate, blood lactate concentration, oxygen uptake, and rate of perceived exertion were measured.”

“No significant differences in running performance variables and physiological parameters were found between the 2 warm-up protocols, except for the rate of perceived exertion and heart rate, which were higher after the long warm-up....”

“It was concluded that a short warm-up is as effective as a long warm-up....”

“....to increase efficiency of time for training or competition, these short, specific warm-ups should be performed instead of long warm-ups.”

## 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."  
EPO [erythropoietin] doping in elite cycling: No evidence of benefit, but risk of harm  
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...."  
"....there is 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, androstanediol, 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, androstanediol, 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