

# A Personal Perspective: Sportsmen's Values, Excessive Physical Exercise, and Antioxidant Status: Review

## Kişisel Bir Bakış Açısı: Sporcu Değerleri, Aşırı Fiziksel Egzersiz ve Antioksidan Durum

Bing H. TANG<sup>a</sup>

New York College of  
Traditional Chinese Medicine,  
Mineola 11501 New York, USA

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Yazışma Adresi/Correspondence:  
Bing H. TANG  
New York College of  
Traditional Chinese Medicine,  
Mineola 11501 New York, USA  
prof.bing@gmail.com

**ABSTRACT** This is a personal perspective, which should not be misunderstood as a Review Article. The aim of this article was in building an open dialogue about protecting traditional Sportsmen's values in light of ethical aspect, and also about why Hunting cannot be regarded as a type of SPORT. What might protect cell damage during exercise? In this article, as well, a concept of Excessive physical exercise relating to antioxidant status was introduced. Briefing on the current research results in Grape Extract (GE) as an effective antioxidant was presented from the research work of this author and his coworkers. Since this article is a personal perspective with descriptive statement, the result appear to be identical with the section of Discussion in the fulltext. A correct concept of sportmen's values has been provided. This author, as well, encourages studies to confirm the efficacy and mechanisms of action of GE on elite and occasional athletes.

**Key Words:** Antioxidant status; ethics; excessive; oxidative stress; physical exercise; sportmens' values; steroid

**ÖZET** Bu kişisel bir bakış açısı olup derleme makalesi olarak yorumlanmamalıdır. Bu makalenin amacı, etik bakışın ışığında geleneksel sporcuların değerlerini koruma üzerine ve aynı zamanda avcılığın neden bir spor türü olarak kabul edilmemesi gerektiği üzerine açık bir diyalog oluşturmaktır. Egzersiz sırasında hücre hasarını ne koruyabilir? Aynı zamanda bu makalede, antioksidan durum ile ilgili olarak aşırı fiziksel egzersiz kavramı tanımlanmıştır. Etkili bir antioksidan olan üzüm ekstresinin mevcut araştırma sonuçları hakkında yazar ve arkadaşlarının araştırma çalışmalarına dayanarak bilgilendirme yapılmıştır. Bu makale, kişisel bakış açısından tanımlayıcı bir açıklama olduğundan sonuç, metinde yer alan tartışma bölümü ile aynı gibi görünmektedir. Sporcu değerlerinde doğru kavram getirilmiştir. Yazar, üzüm ekstresinin etkinlik ve mekanizmasının etkililiğini seçkin ve nadir sporcular üzerinde doğrulanması çalışmalarını desteklemektedir.

**Anahtar Kelimeler:** Antioksidan durum; etik; aşırı; oksidatif stres; fiziksel egzersiz; sporcu değerleri; steroid

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*"Of all the questions which can come before this Nation, there is none which compares in importance with the great central task of leaving this land even a better land for our descendants than it is for us."*

*the US President Theodore Roosevelt*

Generally speaking, to ensure that sportsmen's values are represented in the extensive decisions. For example, an expert springboard driver, beaten by his/her competitor in the final game for champions-

hip, aims congratulations to the champ in a warm hugging, and cannot help but bursts into a tearful farewell to the audience. An exceptional fencer losing in a final set instead of being under the attack of her rival's vigor, but, as a result of a able-bodied entrée of her own.

## DISCUSSION

The aforementioned matters are accepted occurrences but there are still scenes of unfavorable courage causing tears to the eyes of the friendly heroes, as well, to that of the audience. Sportsmen, especially boxers, indeed contribute the best allocation of their lives in boxy training and look forward to greater and obviously better records any time. When it becomes obvious that they are on the abatement, they still achieve laborious efforts according to their best, in order to accomplish an acceptable conclusion in their blazing profession. Though chances to attempt for championship are little.

For another example, an old handed springboard driver, overcome by his/her fellow citizen in the final games of global finals, presenting congratulations to the winner in a friendly hugging and begging a weeping send-off to the spectators. An excellent fencer declining in a important setting not beneath the strike of her competitor's blade other than consequently of a muscle spasm of her own. In the athletic globe, the aforementioned are merely ordinary incidences.

### THE OUTGOING HEROES' TEARS

Nevertheless, there are panoramas of sad bravery bursting into the outgoing heroes', as well, the audience's tears. In difficult training and intense rivalries, sportsmen use up the best fraction of their precious lives struggling or increasingly improving their records. At what time it turns out to be obvious that they are on the weakening stage, they even at this time try tiring attempts to give their best in an effort to bring an acceptable conclusion to their luminous vocation.<sup>1</sup>

At any rate, the likelihood to race for championship are hardly any and distant. Life is brief. Still briefer is the time for an athlete frustrating to win

games. Nothing other than an athletic contestant senses so eagerly about the rarity of opportunity and the fleeting of time. He/She cherishes every minute, makes full use of it and tries to catch any chance coming his way. He gets as much as he gives, winning honours not only for himself but also for his own country.<sup>1</sup>

### THE OLYMPIC SPIRIT

To contribute and to win—that is the Olympic spirit. It finds manifestation in the weak being brave to challenge the strong, and the strong determined forever better presentation. Ever better—the ideal lures a sportsman onward. He will do everything he can for it not only never relax, but also never give up. It is said that none of the competitors can do without being defeated; even the best is compelled to be exceeded by whoever even now is stronger. This is the regime of sports.

However, fearless by the predictable disappointment, the athlete is for ever and ever determined lastly successes as she can when time comes and she knows when she cannot, she as well, bows out with enthusiasm to give place to the younger victors, be responsive cheerfully of the truth that she has done her tad for the “ever better” accounts of the Olympic Games. She will state proudly that she has not lived her youth to no purpose.<sup>1</sup>

That discussed, the importance of any natural health substances that can increase the physical performance appears obvious.

### WHY HUNTING CANNOT BE CONSIDERED AS A TYPE OF SPORT?

The word “sport” appears to denote an equal balance such as Tennis and Skuba diving. Hunting is cruel and selfish. Why should we put up with beautiful animals be slaughtered just so some Joe Normal can hang up his deer's antlers to make himself feel like a man and try to impress others (who usually think he is a wanker anyway)?

Why do non-hunters claim hunting is NOT a sport? Probably because their concept of sport includes some semblance of fair play between competitors, who have exercised some kind of free choice about whether to participate in the sport.

Hunting is not a sport since there is no competition between the hunter and the hunted. Now if it were possible to train a deer to hold and fire a gun or bow, then I would consider it a sport. That would be a GREAT sport. A bit more interesting as well.

Dates back to ancient times, when and where people hunted for food; hunting was not considered as a sport. Nowadays, because non-hunters see it for what it is. An ambush by a superior predator, armed with outrageously unjust technology, and probabilities both are against animals.

In order to call *hunting* a 'sport', then one must go out into the woods and hunt a deer with one's bare hands. No weapons such as guns or knives, nothing but teeth and claws. Then one will be qualified to be called as a *hunter*. Until then, one is not a *sportsman*!

Since deer are well trained in the use of antlers and hooves, one might say that with a knife for fighting against a deer would probably can make for even ground, only if one insists to say so. Nonetheless, this author has heard that part of a computer program where the computer controls an actual gun; so anyone can hunt elk even from his own home. And the elk are driven into the range by copters so that one in one State of the U S can hunt the other State's elk from his living room. The elks are quite real. It would be nice if it were only a video game!

The killed animal's body is usually turned into elk stakes and/or trophies, depending on the wish of the hunter. The sad part is, at least, to this author is sad that one could pay to do that type of hunting without leaving his own home. As well, to this author, it is no risk on the hunter's part, but no defense for the elk itself either!

Noticeably, one might get oneself ready as going to shoot a deer with a bow or an arrow, but he could not find the desire to shoot the deer when he realizes the uselessness in killing an innocent animal.

#### ONE OF THIS AUTHOR'S FRIENDS' PERSONAL EXPERIENCE OUT OF HIS HUNTER-COWORKER

One of my friends during his college days used to work with a man who was an avid bow hunter. To

this hunter, the skill of the sport was all about the thrill and skill of stalking the animal through the forest, waiting long hours and finally making a very clean (single) kill shot with a bow-and not an overly fancy bow. To this hunter, the prey was thought of almost as an equal adversary, and he wanted to keep the playing field between hunter and prey even out of a sense of fairness. Some other hunters appear to go one more step further in the same thought process.<sup>2</sup> To actually eat what you kill, as this some other hunter<sup>2</sup> apparently does, can be thought of as being closer to the "natural order" of things and even to "honor" the animal killed whose spirit lives on, in a sense, in the body of the consumer-just as it would in the body of any other animal that had killed it. My friend's co-worker also scoffed at people with very high tech, long distance weaponry, bait and traps, which he considered unfair to the animal and certainly dishonorable ways of obtaining the kill with little or no skill used in the hunting. In hunters' eye, often they are not alone in the opinion of how hunting 'should' be.

My friend's co-worker thought of hunting as a sport because his weaponry was so primitive that he felt the animal had a fair chance to escape him so, in his mind, successfully stalking the animal was a battle of wits with an 'equal'.

My friend who is a lawyer in his practice now, has personal viewpoints only as following: 'I think if you are going to kill an animal, you should have a greater justification for the act of killing than mere 'sport' (which is a test of skill). Eating what you kill (and killing only enough to eat) provides some, small justification for the act in my mind, although I am sure a vegetarian would disagree with me.'

#### HOW ABOUT EXCESSIVE PHYSICAL EXERCISE OVERPRODUCES REACTIVE OXYGEN CATEGORIES?

That discussed, Excessive physical exercise during sports overproduce reactive oxygen categories, even if elite sportsmen increase their antioxidant status by usual physical training, during the competition period, the improvement is not sufficient to control free radical production, which could be detrimental to the body.

## ANTIOXIDANT STATUS OF 11 NATURAL HEALTH SUBSTANCES

With regard to antioxidant status, there have been 11 natural health substances under study. There are following 11 natural health substances:

Quercetin dihydrate, Astaxanthin, Ginsenoside Compound-K (CK-1), Cordyceps Sinensis (TCS-W), Caffeic acid, Bilobalide, Caffeic acid, Eugenol, Rutin hydrate, wheat grass extracts, resveratrol, proanthocyanidin (grape extract, GE), and Graderma lucidum.<sup>3-7</sup>

These 11 substances were as well used in our other study of Natural Killer cells as shown in the reference<sup>6</sup> listed in this article.

Among them, the crude extract of grape seed was studied, and introduced in one of our studies. This author and his coworkers in 2007 published as following:

The Effect of Grape Seed Extract on hemopoietic Stem cells in the Umbilical Cord Blood. in *Vivo*, Vol. 29 (1)10-15.<sup>7</sup>

Grape seed, proanthocyanidin, contains resveratrol, which facilitates oxidant-induced VEGF-expression in keratinocytes. It, as well, can up-regulate hydrogen peroxide, and advancing stem-cell maturation.

## WHAT MIGHT PROTECT CELL DAMAGE DURING EXERCISE? AN ANTIOXIDANT FUNCTION OF THE GRAPE EXTRACT (GE)

Nevertheless, recently, Lafay et al reported their randomized, double-blind, placebo controlled, and crossover study on 20 elite sportsmen (handball =

10, basketball = 5, sprint = 4, and volleyball = 1) during the competition period was to determine if the consumption of a grape extract (GE; *Vitis vinifera* L.) was able to improve the parameters related to (i) anti-oxidative status and oxidative stress and (ii) physical performance. Specific biomarkers of anti-oxidant capacity, oxidative stress, skeletal cell muscle damage, and other general biomarkers were determined in plasma and urine before (D0) and after one month (D30) of placebo or GE supplementation (400mg-d-1).

Their study is suggesting that GE administration might protect cell damage during exercise. The high unpredictability between sport disciplines did not allow us to observe the differentiation of the effort test. Their further analyses showed that CPK and Hb were the only biomarkers correlated with the increase in performance. In their conclusion, GE restructures the oxidative stress/antioxidant status balance in elite athletes in the competition period, and enhances performance in merely one category of sportsmen (handball). Hence, it suggests that the enhancement in performance might be caused by the protective action of GE during physical exercise. These findings encourage the conducting of further studies to confirm the efficacy and mechanisms of action of GE on elite and occasional athletes.<sup>8</sup>

## CONCLUSION

Sportsmen's Values have been adequately discussed. Conversely, athletes' performance in light of their antioxidant consideration with grape extract has been introduced, and further studies on it are recommended.

## REFERENCES

1. Yi Yun. Sportsmen's Values Essay's 108, 2<sup>nd</sup> ed. 2005, Oct. 152-154 Nanking, China ISBN 7-80567-971-1.
2. Beck Tom. Hunting : Loaded for Bear Denver westword News 14 1996 11 p. 1
3. Tang B, Chen S T et al. Stimulating angiogenesis: Oxidant-Induced vegf-Expression of stem cells augmented with the extract of grape seeds poanthocyanidins. International Intracranial vascular Surgery Conference, Taipei, Dec, 3, 2006
4. Tang B. et al. 2007, Vascular endothelium Growth Factor of Stem Cells Enhanced with Proanthocyanidins. International Symposium of Pediatric Neuro-Oncology, Taipei, October, 21, 2007
5. Tang B. et al, 2007, Vascular endothelial growth factor (VEGF) in Neurosurgery: in association with the effect of grape seed extract on hematopoietic stem cells in the umbilical cord blood. Neurosurgery Society Conference, Taiwan, November 24
6. Tang B, Chen S T et al. In vitro Maturation of NK Cells In The Human Umbilical Cord Blood Treated With Wheat Grass Extract: A Pilot Study In Vivo, Vol. 29 (3) 9-20
7. Tang, B, Chen S., et al. The effect of grape seed extract on hematopoietic stem cells in the umbilical cord blood. In *Vivo*, Fall 2007, vol. 29, No. 1 pp 12-15
8. Lafay Sophie, Caroline Jan 1, Karine Nardon 1, Benoit Lemaire 1, Alvin Ibarra 2 Marc Roller et al. Grape extract improves antioxidant status and physical performance in elite male athletes. *J. of S S M*, 2009 8:468 -480.