



## EXERCISE and IMMUNOCAL

# It's a numbers game!



Dr. Jimmy Gutman

There was a time when being in shape really did count. Let me take you back a few millennia when men still had fur on their backs. A working day consisted of running down gazelles for food, fighting off bears and saber tooth tigers, wandering miles to collect berries and hauling dry wood back to the cave. Those who did not have the physical capacity to meet these challenges quickly perished. The average life-span was around 20 years and being a grandparent was a rare event. Although I'm sure the boys had the occasional wrestling match to prove who's tougher, the concept of "sport and exercise" did not exist.

Fast forward to the twenty-first century. Men no longer need broad shoulders to last a few decades and mastering a spreadsheet program is way more important than mastering spear-throwing.

Over the centuries, sports and exercise have developed to satisfy certain innate needs. The average Joe or Jane is competitive by nature and enjoys the spirit of competition that sport provides. But more importantly, our bodies are designed to require at least a minimum amount of physical activity or it will eventually deteriorate.

Some people's competitive nature or physical goals go far beyond just maintenance. The professional athlete whose livelihood is linked to his performance, or the serious amateur who wants to see how far he can push his body, may undergo physical stressors that approach those endured by our hairy ancestors. But, typically, too many of us don't even get the minimal amount of exercise to improve or maintain good health.

*What does all this mean to you? Likely it will prompt most readers to want to increase their exercise. Let's see how Immunocal can help!*

Immunocal raises a critical substance that exists in each of our cells, called "glutathione". Glutathione is our body's master antioxidant, it is the key detoxification enzyme in our liver, it sustains optimal immune function, and it is key to maintaining energy levels in our cells. How does this translate into improved physical function?

*(Continued on reverse)*



# Let's look at some numbers.

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**Endurance athletes can use 15 times more oxygen than a sedentary person.** The problem here is that the increase in oxygen consumption and metabolism creates stupendous amounts of oxidative breakdown products and free radicals. Yes, exercise is good but better if you can neutralize these free radicals with glutathione. *Immunocal anyone?*

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**A professional football player's career will last on average 6 years!** What happens to these guys? Do their skills really get worse over this period of time? Not likely. It is the accumulation of injuries and the abuse of their muscles, joints and brain tissue that overtake them and reduce their ability to perform. Aside from avoiding injury, the jocks that recover the fastest from their wounds last the longest. Glutathione speeds up recovery from injury. *Immunocal anyone?*

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**In experiments where glutathione levels were artificially decreased (using drugs) in athletic training, individuals' endurance fell by 50%! Endurance is directly correlated with glutathione levels.** Highly-trained distance runners, through their training, have the ability to rapidly raise glutathione levels on demand. Is this something you can do too? *Immunocal anyone?*

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**In a published clinical trial, Immunocal was shown to increase muscle strength of average healthy young adults by 13%! By-the-way, the difference between the gold medal and last place in the Olympic 100-meter finals dash typically is around 1% to 2%. Room for improvement? *Immunocal anyone?***

100

**Athletes with "over-training syndrome" will suffer immune compromise 100% of the time!** Glutathione maintains and sustains immune function. *Immunocal anyone?*

300

**Many high-level athletes eat as much as 300% more protein than that recommended for sedentary adults.** Superior quality whey protein isolates contain all the essential amino acids we require, are high in BCAA (branch-chain amino acids) such as leucine which are ideal for muscle development, have high levels of arginine and lysine which may stimulate the release of growth hormones which also translate into muscle growth. *Immunocal anyone?*

I give all those who pursue professional or high-level amateur sports a lot of credit! But the risks are obvious – injury, recovery time, appropriate nutrition, oxidative stress, immunocompromise, viral illness, osteoarthritis – the list is long! How do you get the edge, whether you are an elite athlete or a weekend warrior?

**In health as in life, it's a numbers game! Cavemen couldn't count, they didn't need to. We, fortunately can count, and must! Put the numbers in your favor. Count on Immunocal!**

Oh, yes...  
one more number  
to remember!

1

**The number of chances you have to make sure your body lives a long and healthy life!**