

# MAXIMIZING

## Athletic

## Performance

using

## ImmunoCal



**John Molson**

*Vice President, R&D*

**Dr. Jimmy Gutman**

*Senior Medical Consultant*

# John Molson

Vice President, R&D  
Founding Shareholder





Immunotec

---



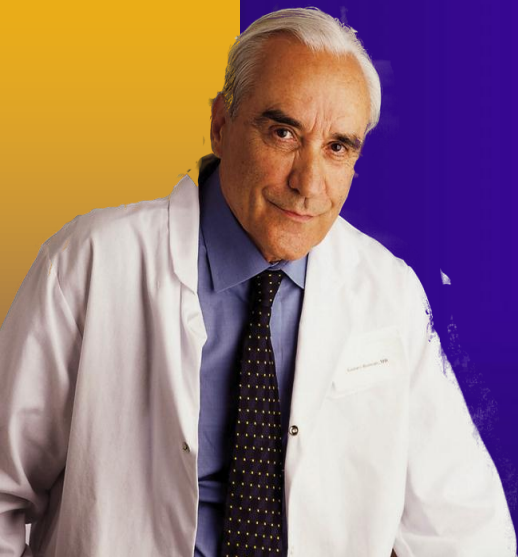


# Dr. Gustavo Bounous, MD, FRCSC(C)

Formed company in 1996 to commercialize the discovery of Immunocal

Dr. Bounous - world authority in the field of whey protein research - 1<sup>st</sup> in the world to publish the association between whey protein (Immunocal<sup>®</sup>) and glutathione.

Extensive research and development program at that time looking at the effect of Immunocal<sup>®</sup> in different pathologies.

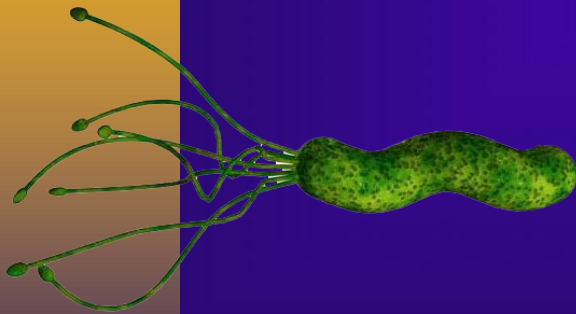


# Dr. Wulf Droge



World authority in aging and cancer research – 1<sup>st</sup> person in the world to study glutathione in a living organism – made important contributions in cancer research and aging while at Immunotec.

# Evolution of our Scientific Platform



1980's

1990's

Now!

Immunotec's

# "WELLNESS PARADIGM"

Athletic Performance



Anti-Aging

Immune Function

*Powering the ultimate version of you!*





# IRCM (Institute de Recherches Cliniques de Montréal, U de M)

*The effect of whey protein isolate rich in cysteine (Immunocal®) combined with physical exercise on muscle function, body composition and inflammatory cytokine levels in the elderly: a randomized, double-blind study.*

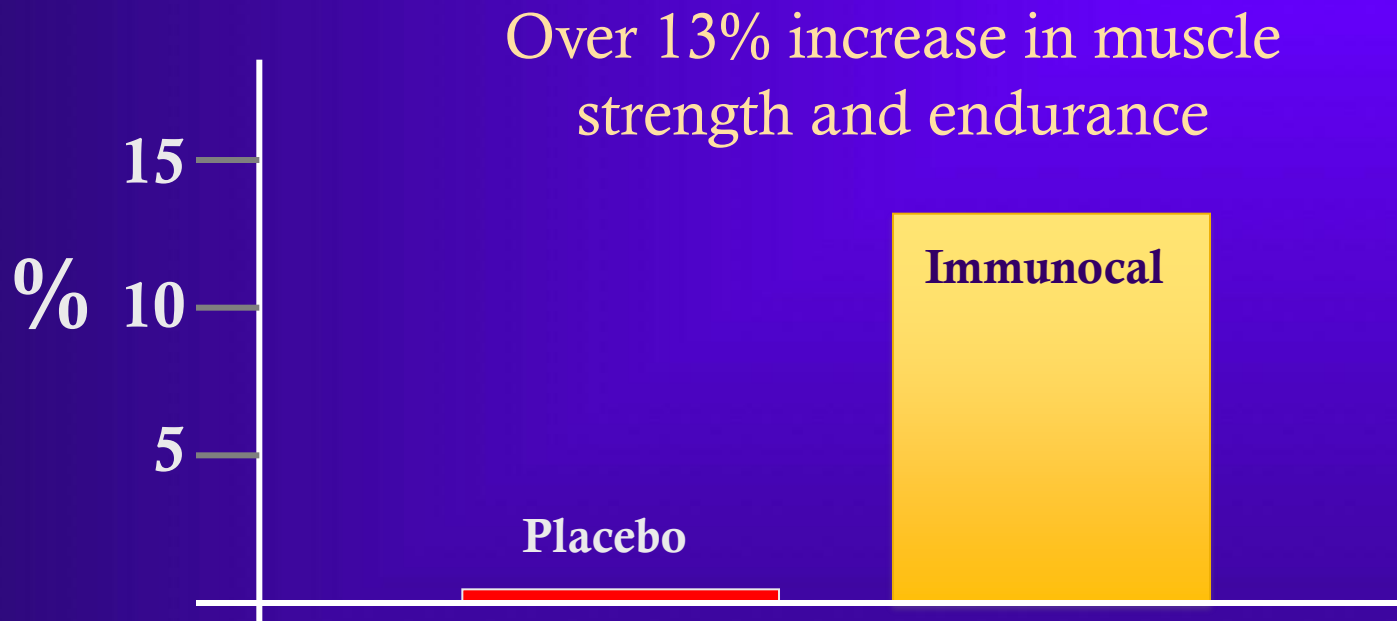




# University of Kentucky

*The effect of Immunocal<sup>®</sup> in elite cyclists and triathletes.*





Effect of supplementation with a cysteine donor on muscular performance.

*Lands LC, Grey VL, Smountas AA.*

*Journal of Applied Physiology 87(4): 1381-5, 1999*

# Testing



HFL SPORT SCIENCE



ORRECO

Game Changing Analytics

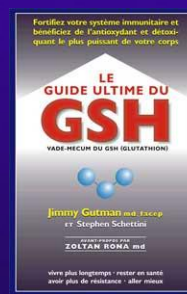
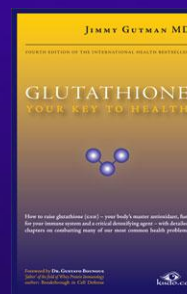
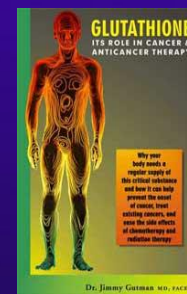
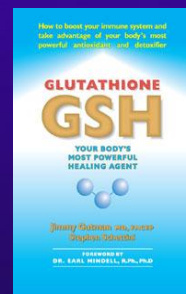
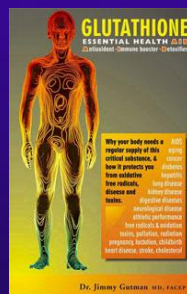
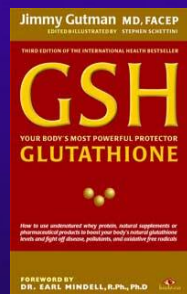


# Jimmy Gutman MD

*Senior Medical Consultant, Immunotec*



- World's leading author on glutathione (GSH)
- Books in five languages
- International lecturer and media personality
- Board certified physician
- Former director of training Emergency Medicine, McGill University, Montreal, Canada



# ImmunoCal

*Key to Optimal Performance*





# Immuncal

*Key to Optimal Performance*

**Improves your DEFENSE**

(boosts the immune system)

**Improves your OFFENCE**

(boosts physical and mental performance)

# ImmunoCal

*Key to Optimal Performance*



The richest source of natural  
glutathione precursors



# GLUTATHIONE (GSH)

???



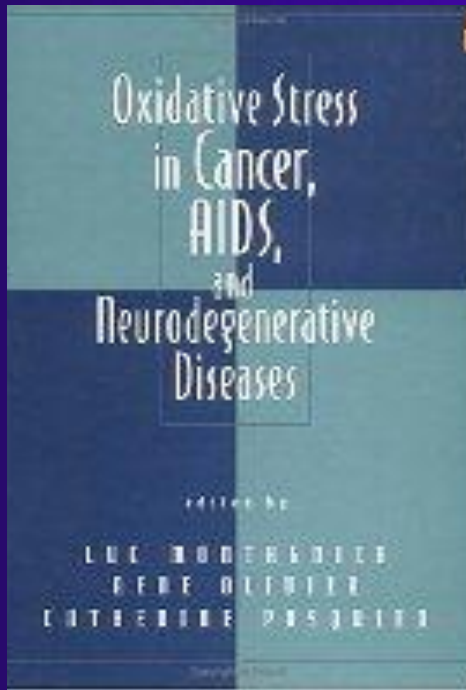


# GLUTATHIONE (GSH)

Soon to be a  
household word!

- ◆ *1980 4,000 Medical References*
- ◆ *2023 175,478+ Medical References*

## ◆ Medical Visibility



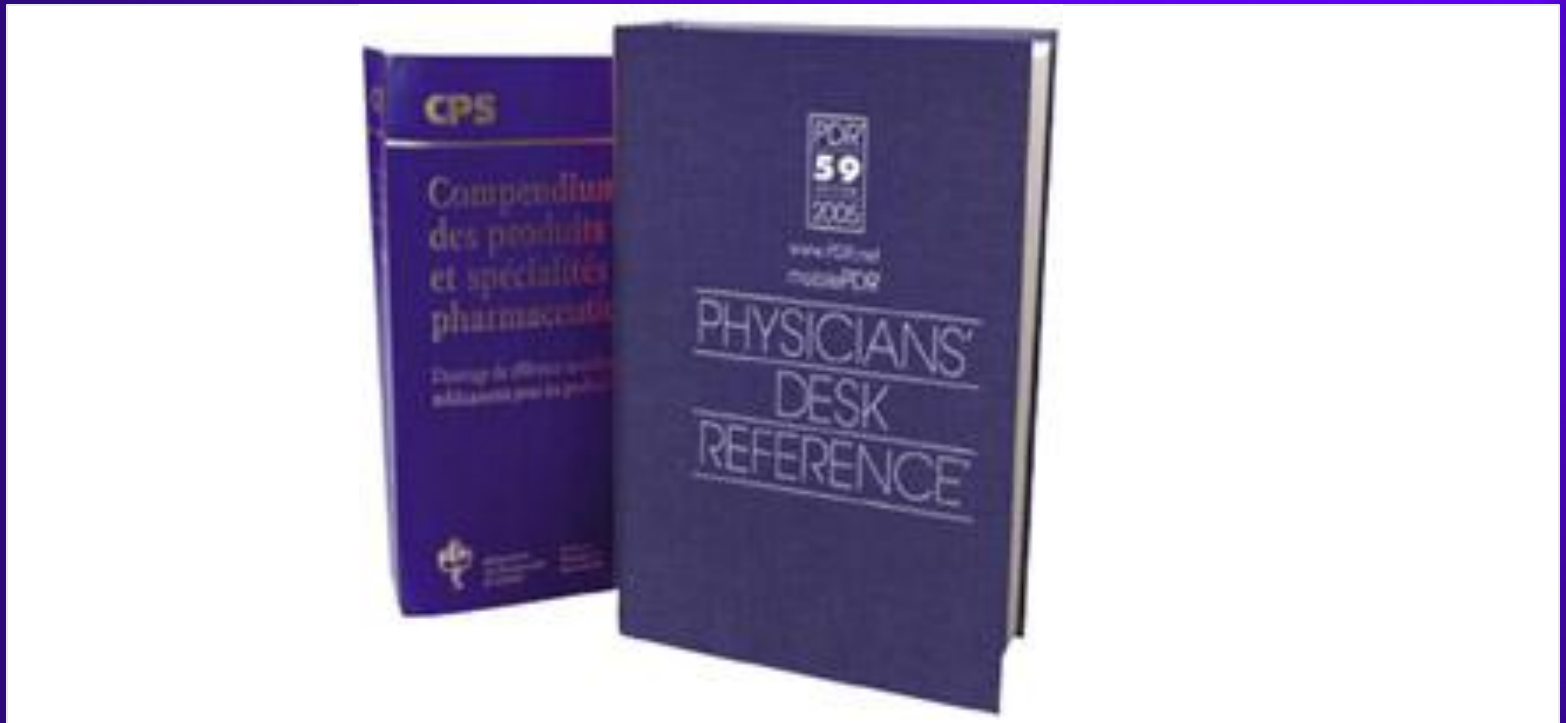
**Chapter 42:**  
Nutriceutical  
modulation of  
glutathione with a  
humanized native  
milk serum protein  
isolate,  
**Immucol.**  
Application in AIDS  
and cancer



**Luc Montagnier**  
***Nobel Prize for Medicine***  
**2008**

PDR (Physician's Desk Reference)

CPS (Compendium of Pharmaceutical Specialties)



- ◆ On the desk of every Physician and every Pharmacist in North America



What can Immunocal do for  
**ME?**

# Key Parameters of ATHLETIC BENEFITS





# Key Parameters of ATHLETIC BENEFITS

- Immune Function



# Key Parameters of ATHLETIC BENEFITS

- Immune Function
- Recovery





# Key Parameters of ATHLETIC BENEFITS

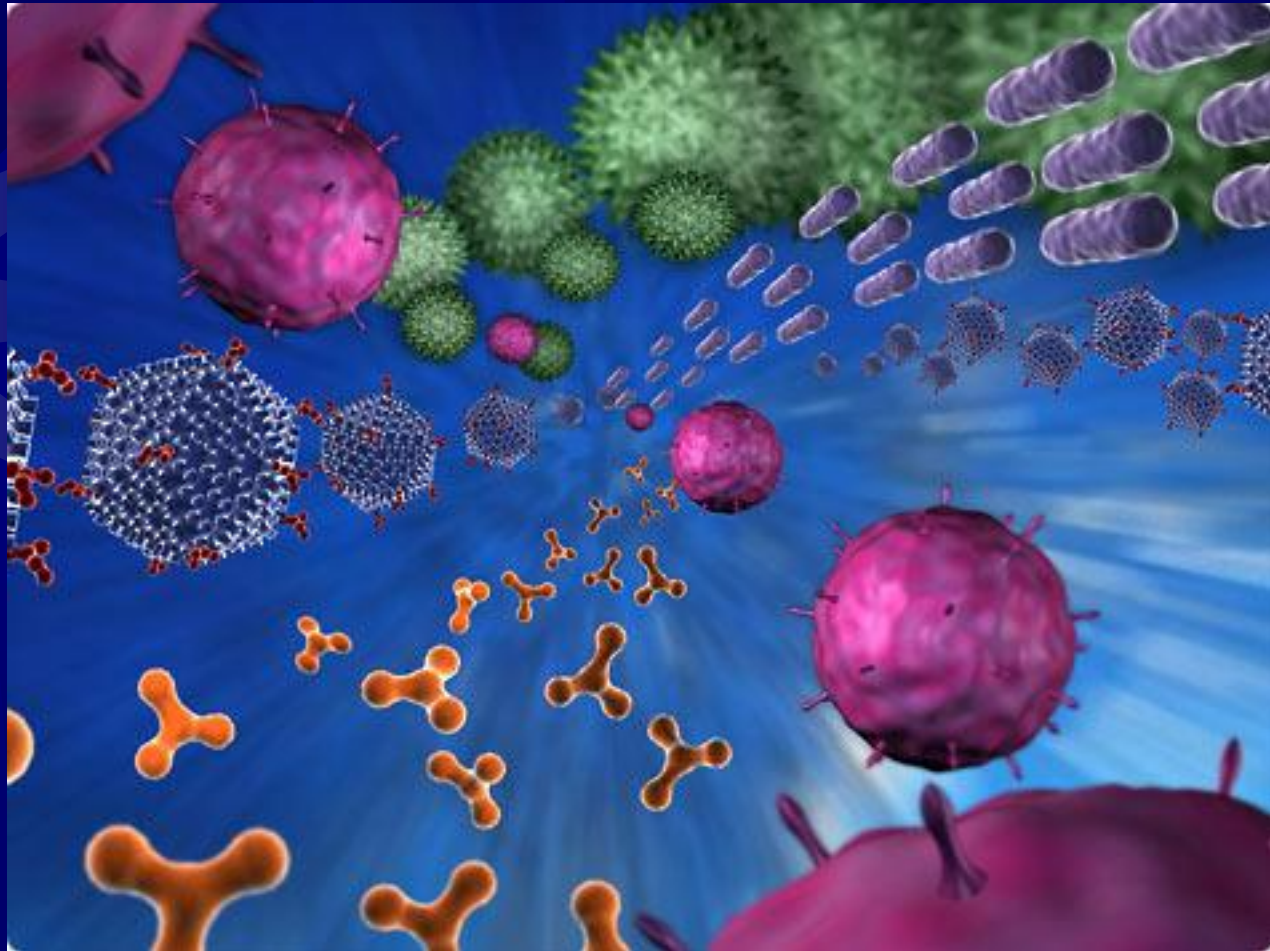
- Immune Function
- Recovery
- Muscle Mass

A vintage key with a circular head and a notched bit, resting on a textured, light brown surface. The key is positioned vertically on the left side of the slide.

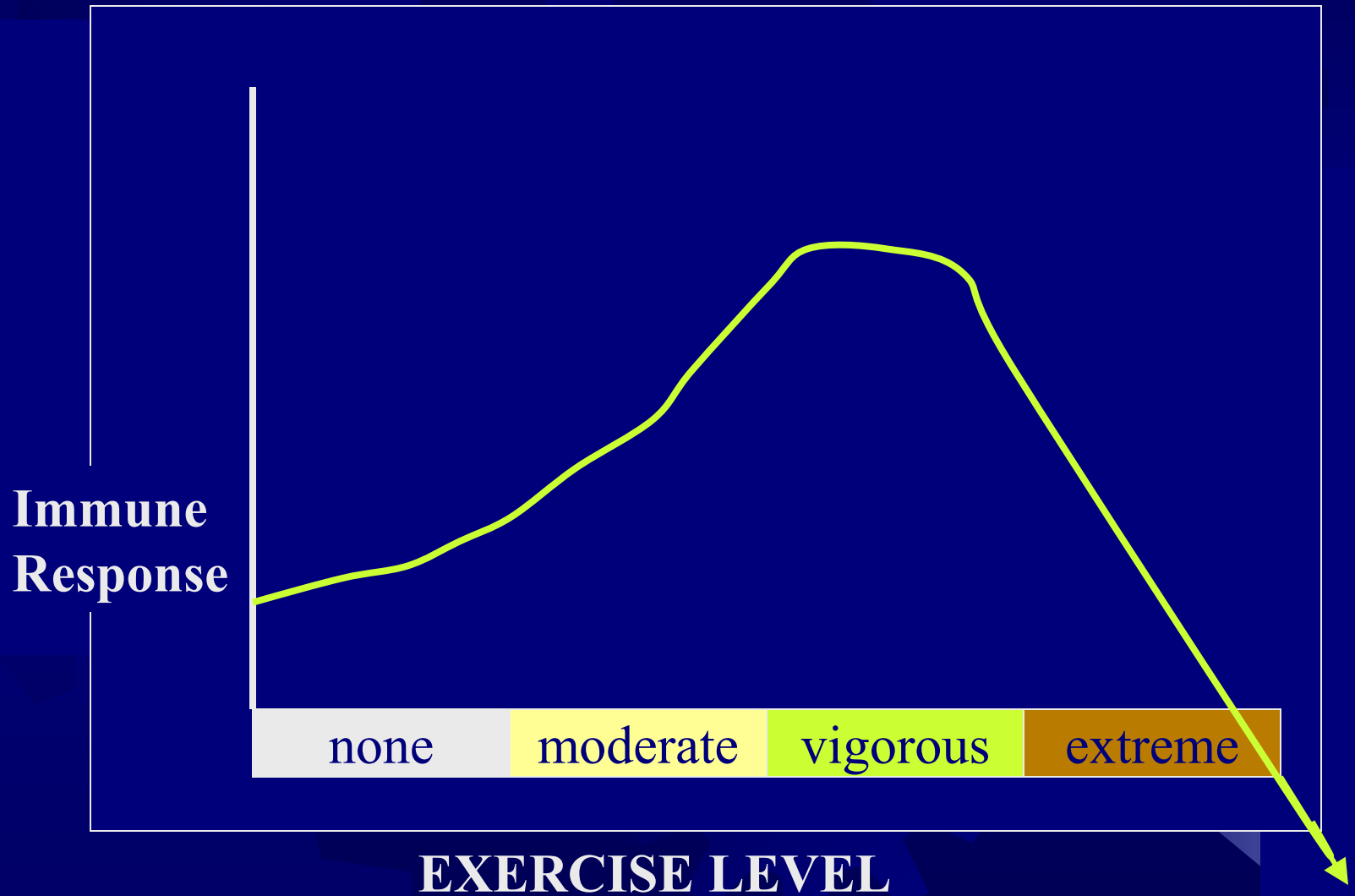
# Key Parameters of ATHLETIC BENEFITS

- Immune Function
- Recovery
- Muscle Mass
- Performance

# Immune Function



# Exercise and Immune Function



# IMMUNE SYSTEM

☀ “GSH/cysteine deficiency is at the root of most wasting states”

*W. Droge*

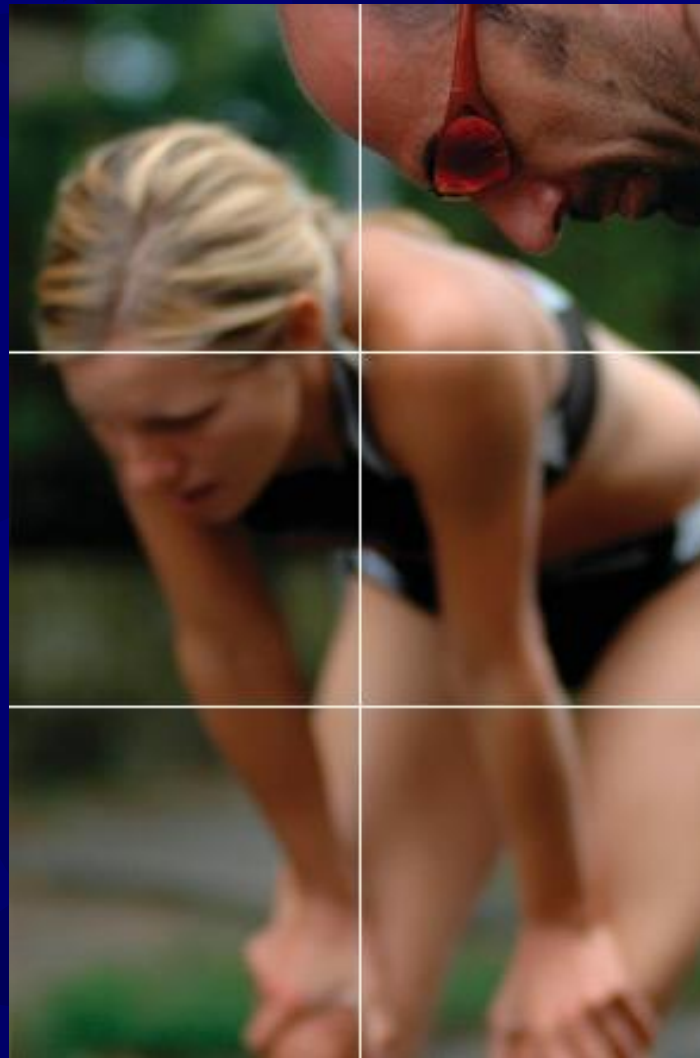
☀ “The limiting factor for the function and clonal expansion of lymphocytes is the availability of glutathione”

*G. Bounous*

☀ “Food for the Immune System”

*J. Gutman*

# Recovery



# Recovery in Athletes

- ✦ Acute injury
- ✦ Delayed muscle soreness
- ✦ Chronic stressors
- ✦ Surgical recovery
- ✦ Training frequency
- ✦ Training intensity

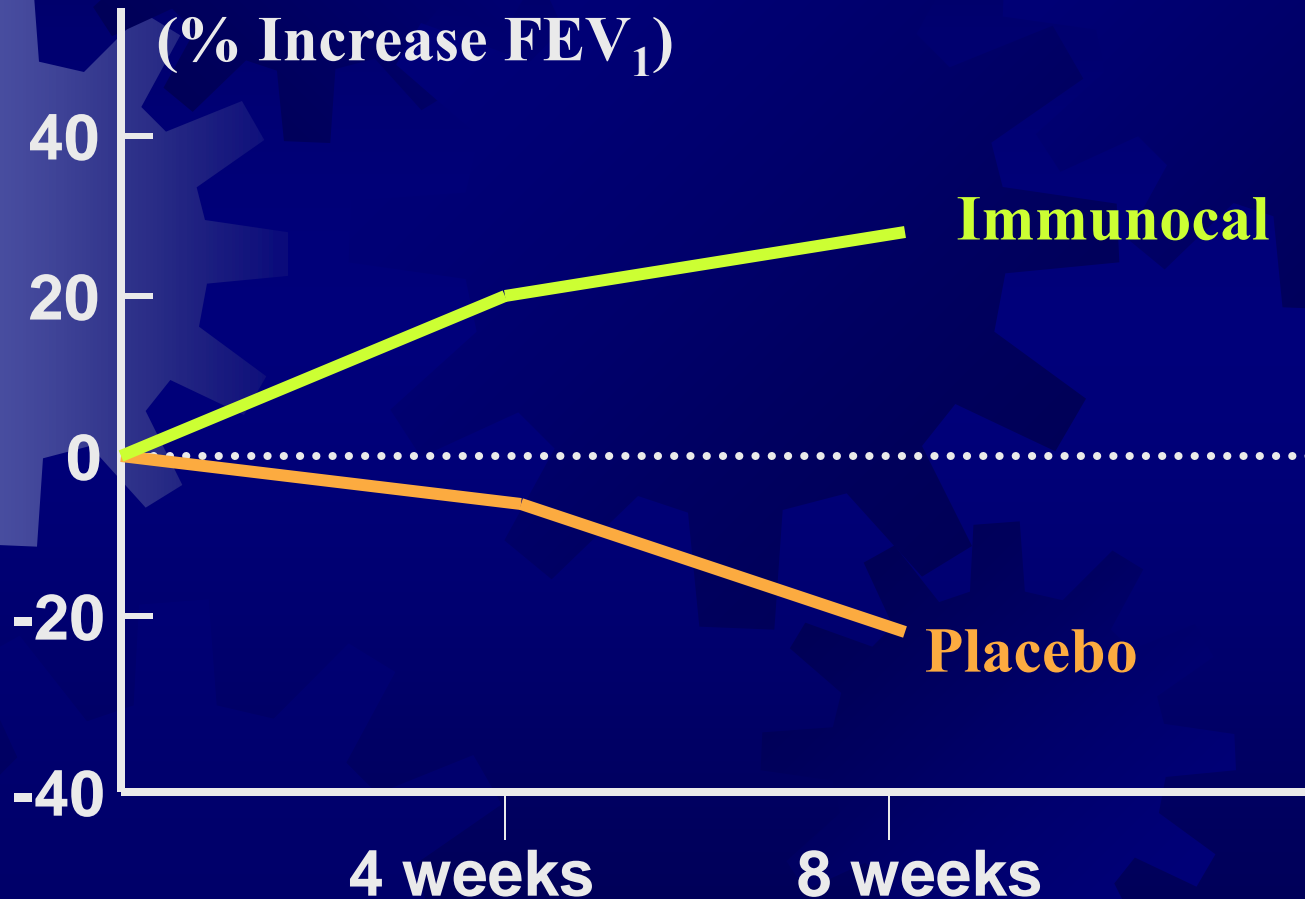


# Baumann Study

*Effects of a cysteine donor supplement on exercise-induced bronchoconstriction. Med Sci Sports Exercise 37: 1468-1473, 2005*

## PULMONARY FUNCTION in E.I.A.

(% Increase FEV<sub>1</sub>)





# Muscle Mass



# Maintenance of Lean Mass

- ✱ Problematic in overtraining
- ✱ Problematic in endurance sports
- ✱ Problematic in anaerobic exercise
- ✱ Problematic in mis-nourished athlete

**Cachexia / Lean Muscle Mass lost  
as season progresses**

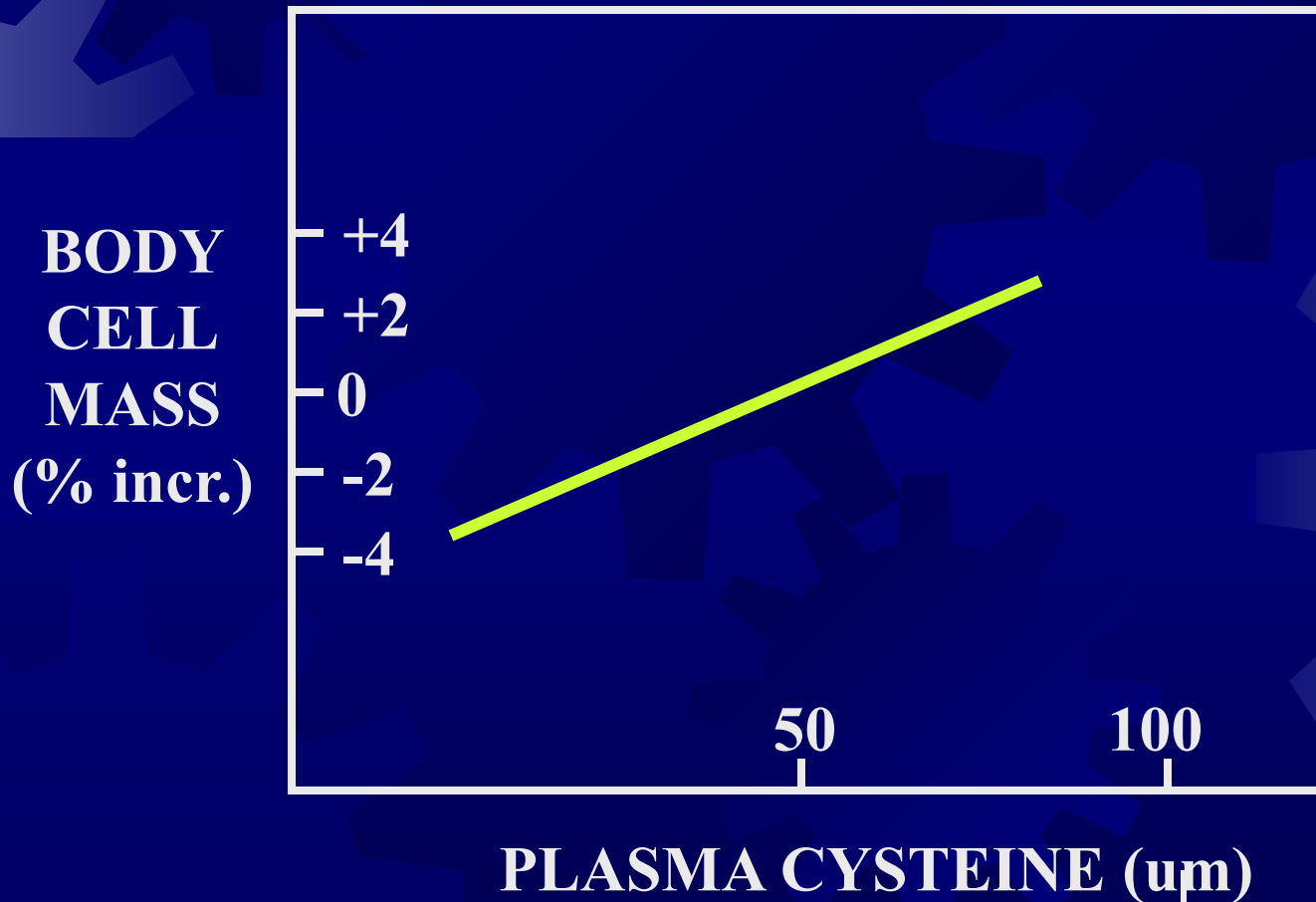
# NHL Hockey



5 – 20 pounds lost over season

# Kinscherf Study (J Mol Med 74:393-400, 1996)

Using the glutathione precursor N.A.C.



# Performance



# Performance



# Performance



Three Pillars of Performance

# Three Pillars



Anaerobic  
Performance



# Three Pillars



Anaerobic  
Performance

Aerobic  
Performance

# Three Pillars



Anaerobic  
Performance

Strength

Aerobic  
Performance

# Three Pillars

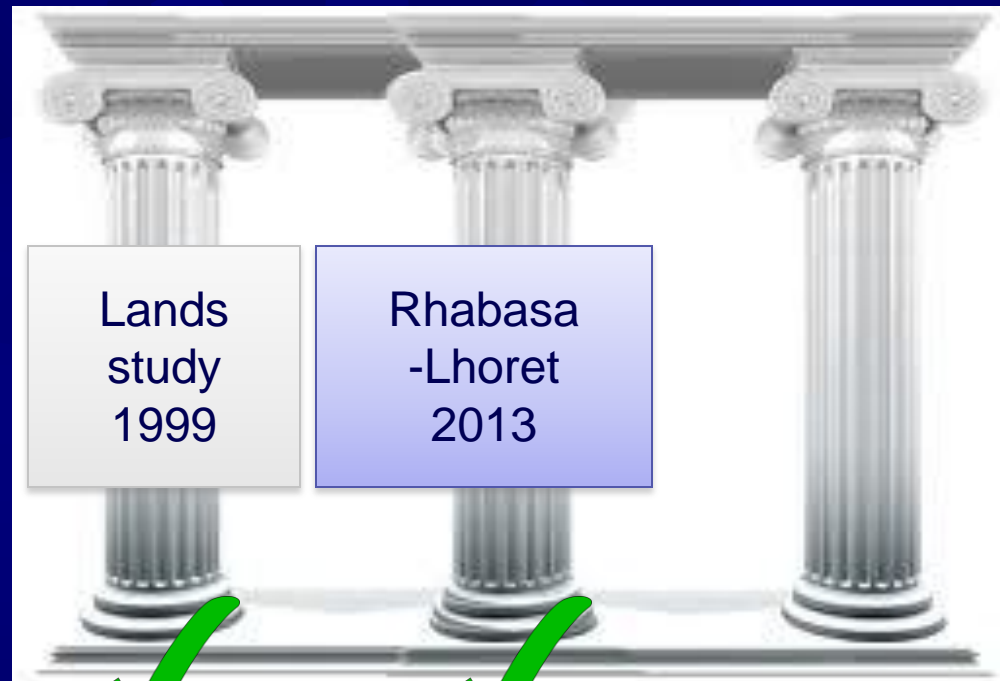


Anaerobic  
Performance

Strength

Aerobic  
Performance

# Three Pillars

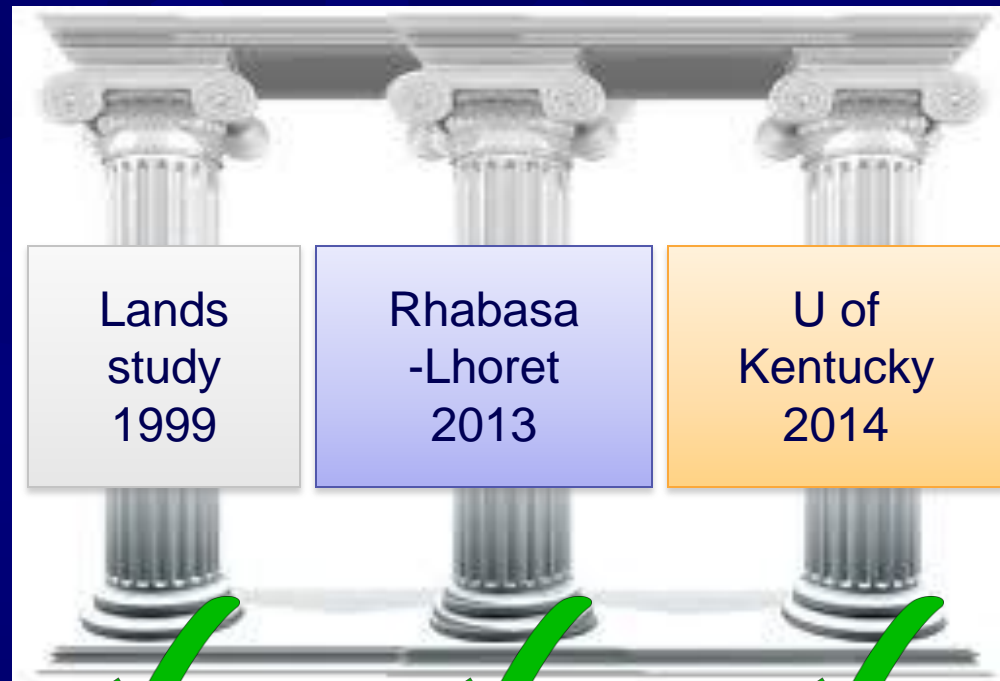


Anaerobic  
Performance

Strength

Aerobic  
Performance

# Three Pillars

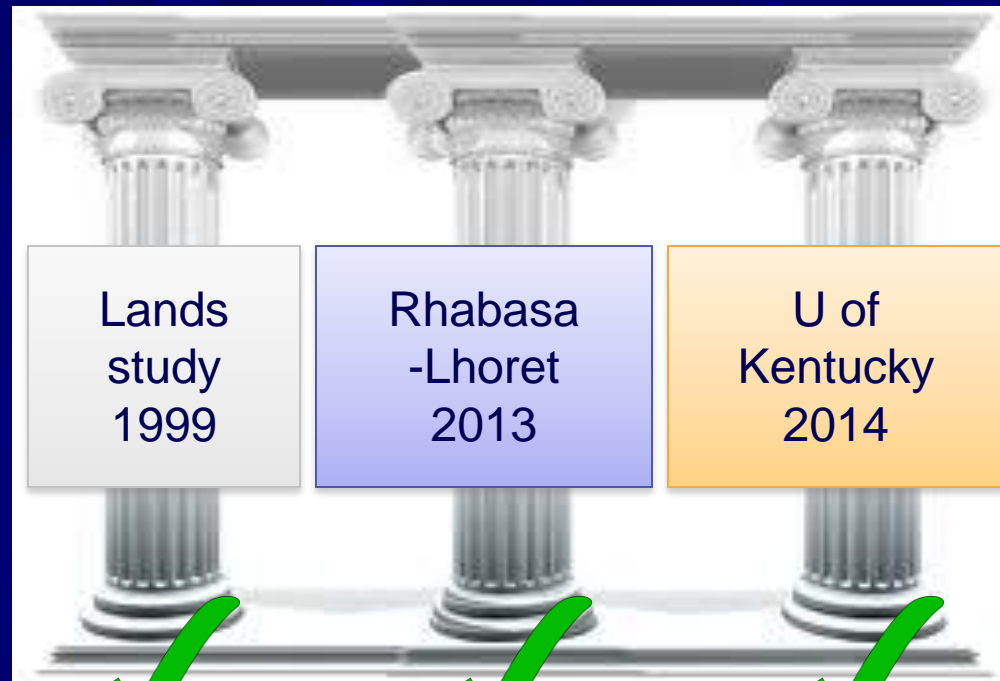


Anaerobic  
Performance

Strength

Aerobic  
Performance

# We've got you covered!



Anaerobic  
Performance

Strength

Aerobic  
Performance

# Some of our Athletes



# Myriam Capes

- ◆ *Canadian fitness Champion.*





# Justyna Kowalczyk

- ◆ *Olympic Champion*
- ◆ *Double World Champion*
- ◆ *Triple winner of the FIS Cross-Country World Cup.*
- ◆ *She is one of only two female skiers to win the World Cup three times in a row.*



# Crystal Emmanuel

- ◆ *2011 Canadian National Champion 200m, 100m*
- ◆ *2010 Canadian Junior Record 4X100m relay*



# Jeff Frisch

- ◆ *Canadian Downhill Champion 4 times*



“I am feeling confident and amazing on my skis these days – Injury and pain-free, which is something very strange to me!

I am more healthy than ever and feel like I have energy all day long.”

# Morgan Chaffin

- ◆ *Iron-Man Champion*
- ◆ *Triathlon Champion*



# Robbie Wade

- ◆ *Powerman Florida Champion*
- ◆ *NCAA Championship*



“Ever since I have started taking Immunocal, I have been healthier and stronger. This allows me to train harder and recover at levels I could only dream of.”



# Sylvan Adams

- ◆ *Quebec Provincial Master's champion*
- ◆ *Canadian National road Champion*
- ◆ *Pan Am Master's champion*
- ◆ *Maccabiah Games Champion*



# John Grant Jr.

- ◆ *Team Canada Lacrosse*
- ◆ *Colorado Mammoth Pro Lacrosse club*
- ◆ *National Lacrosse League*



# Priscilla Lopes-Schliep

- ◆ *Olympic Bronze Medalist Hurdles*





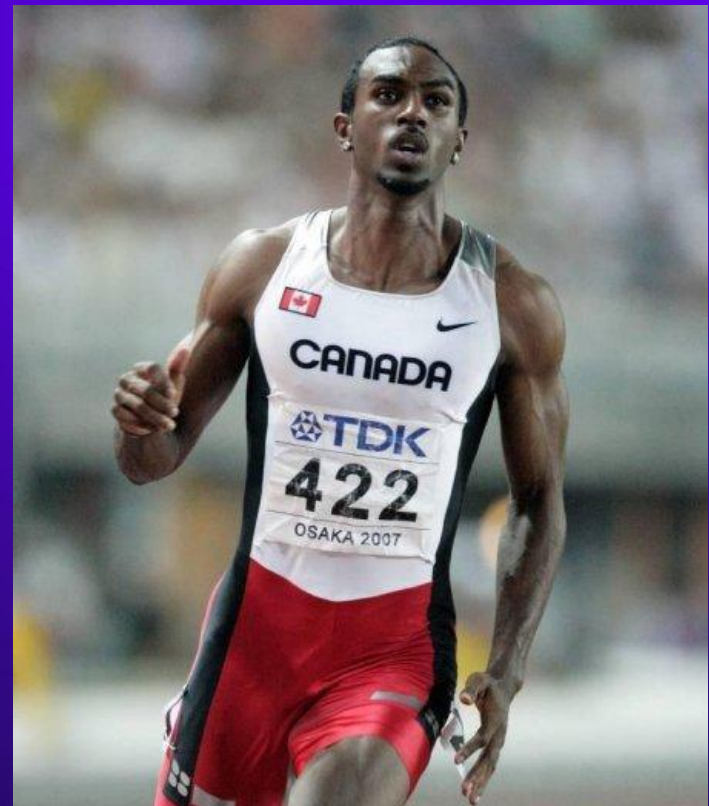
# Desai Williams

- ◆ *Olympic Track Coach*



# Anson Henry

- ◆ *Olympic team 100 m*



# Ingvar Moseley

- ◆ *Canadian Sr. Champion*
- ◆ *Ontario Jr. Champion*
- ◆ *Canadian Jr. Champion*
- ◆ *OFSSA Track & Field Champion*



# Bruno Langois

- ◆ *Two-time National Medalist*



“Every day, I push my limits. Illness has always been my main problem. Immunocal helps me optimize my recovery and boosts my performance. ...Immunotec is crucial for the achievement of my objectives.”

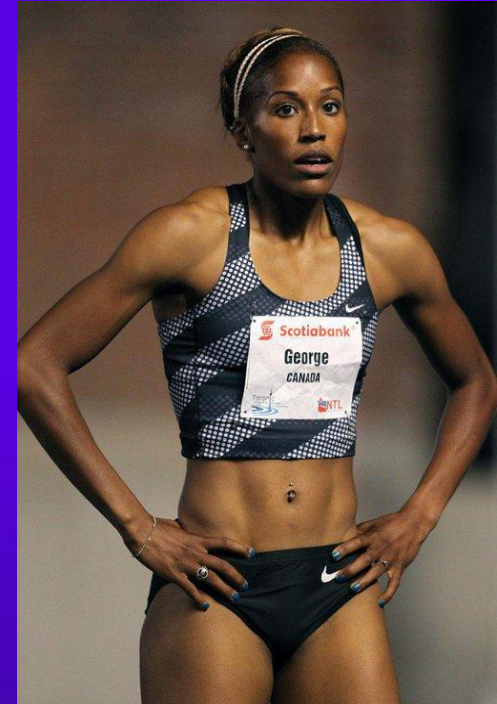
# Ashlea Maddex

- ◆ *IAAF World Junior Track & Field*
- ◆ *Pan Am Junior Track & Field*



# Phylicia George

- ◆ *Olympic Qualifier*
- ◆ *High Performance Group, Toronto*



“As a high performance athlete, we’ re always teetering a fine line between great performances and injury. The Immunocal products are proving to be a great help in my training and recovery.”

# Nikkita Holder

- ◆ *Olympic Hurdler*
- ◆ *IAAF World Championship Games*

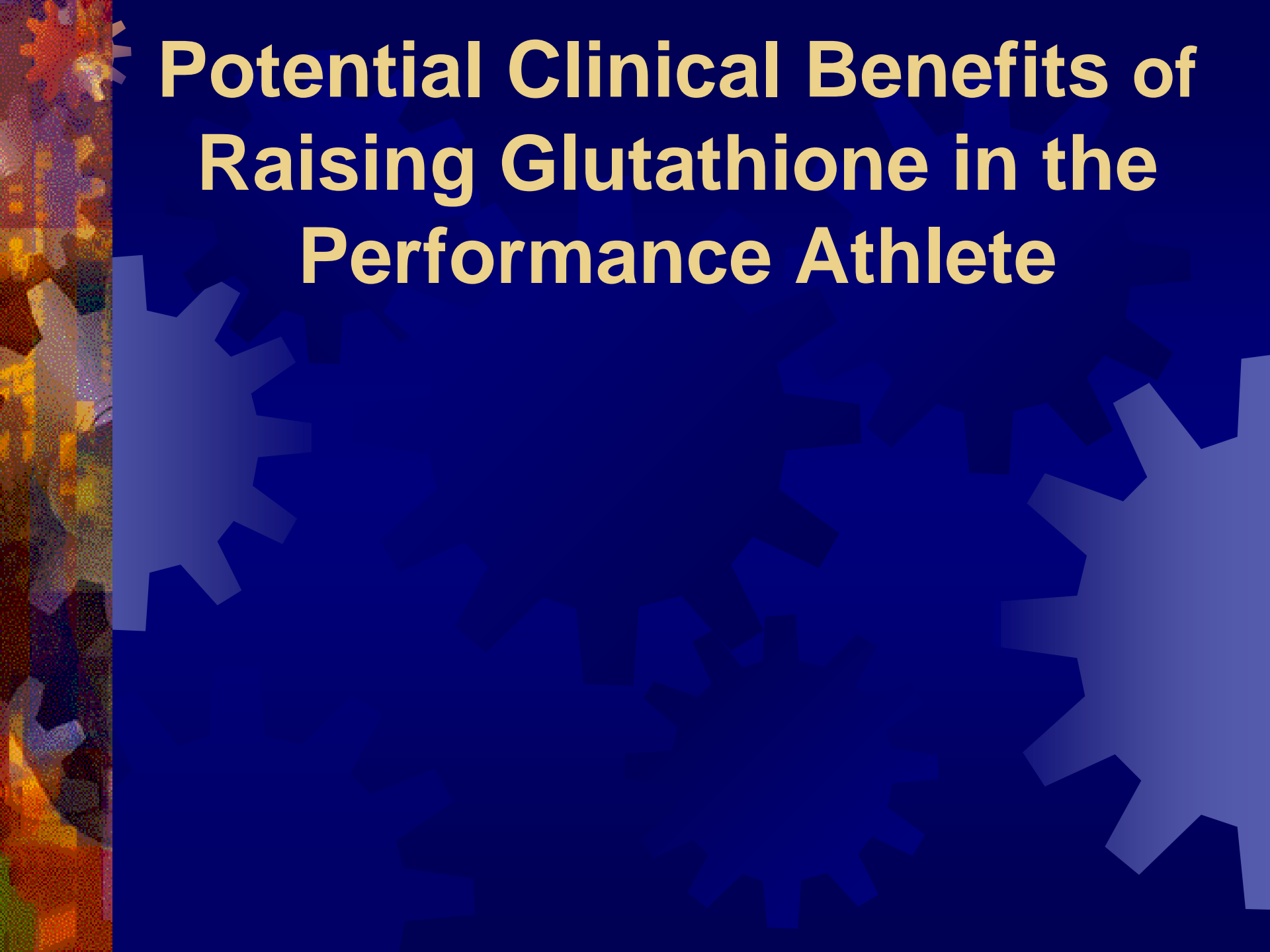


# Kerri Ann Mitchell

- ◆ *Olympic Sprinter*
- ◆ *IAAF World Championship Games*





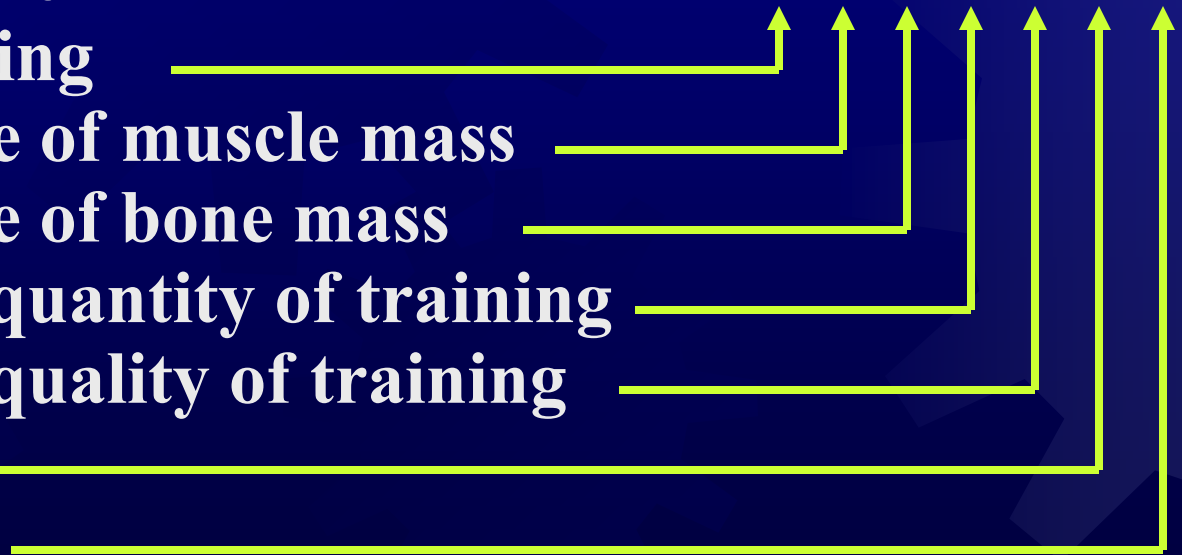


# Potential Clinical Benefits of Raising Glutathione in the Performance Athlete

# Potential Clinical Benefits of Raising Glutathione in the Performance Athlete

- Immunological support
- Recovery time
- Wound healing
- Maintenance of muscle mass
- Maintenance of bone mass
- Optimizing quantity of training
- Optimizing quality of training
- Strength
- Endurance

**PERFORMANCE  
ENHANCEMENT**



# ImmunoCal



*Powering the ultimate version of you!*

# ImmunoCal



*Powering the ultimate version of you!*



Thank  
You