



CARBOGEN®

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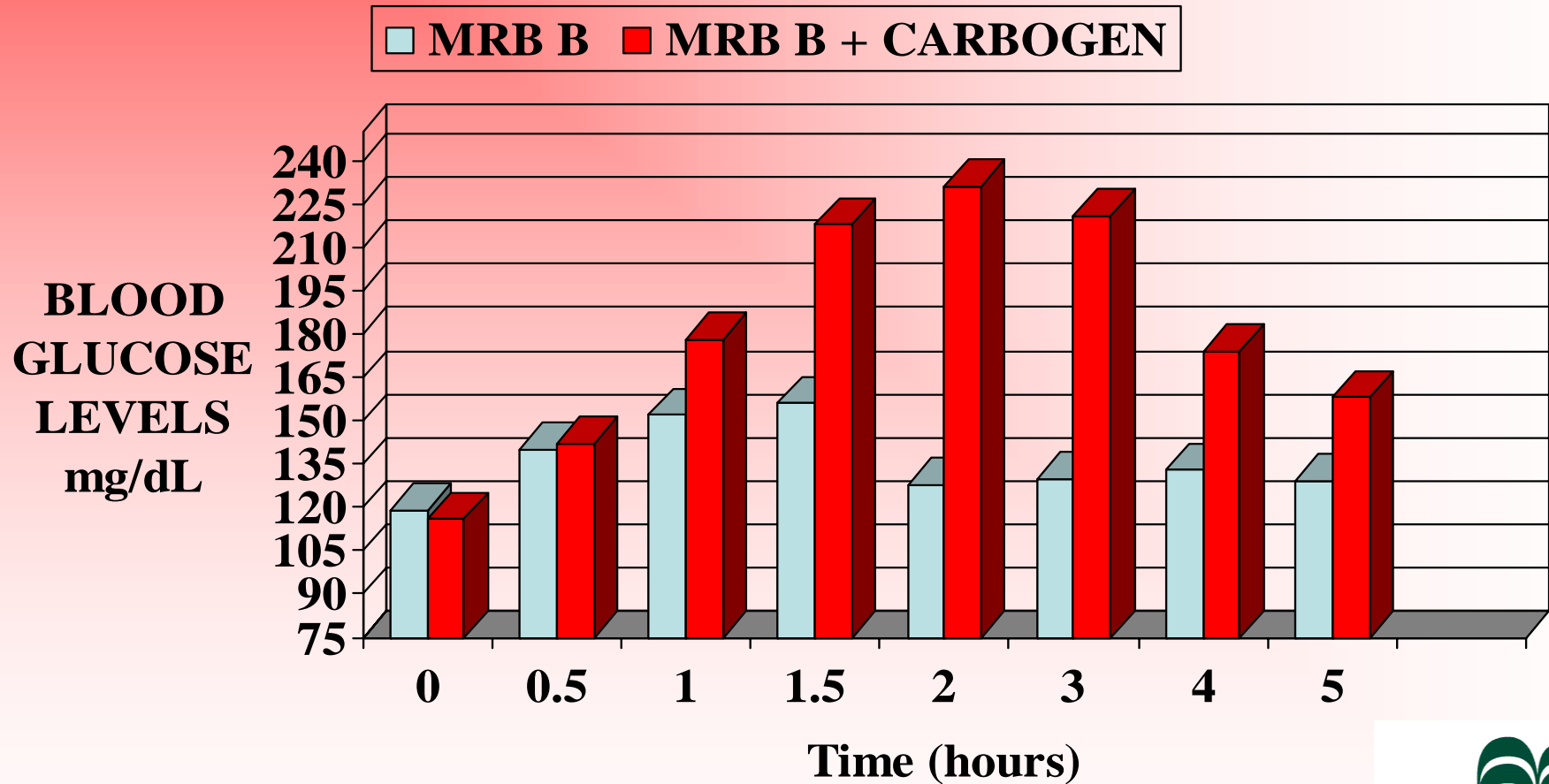
- » **A Patented Enzyme System**
- » **Non-Animal/Non-GMO/Food Grade Source**
 - » *Aspergillus oryzae* and *niger*
- » **Slow, Sustained Release of Energy From Complex Carbohydrates**



Carbogen® Pre-Clinical Study 5

1mg/g Carbohydrate

Meal Replacement Bar **GI = 58**





Clinical Study Design

Determine exercise performance in male, competitive cyclists using Carbogen®, 3 mg/g, and a meal replacement bar (MRB) or placebo and MRB one hour prior to exercising.

Subjects performed a 60-min cycling bout at 80% VO_2 max followed by a time-to-exhaustion (TE) ride at 100% VO_2 max.



Clinical Study Parameters

Baseline, 30 and 60 minutes of exercise:

- » **Glucose**
- » **Insulin**
- » **Lactate**

Post Sprint:

- » **Time to Exhaustion**

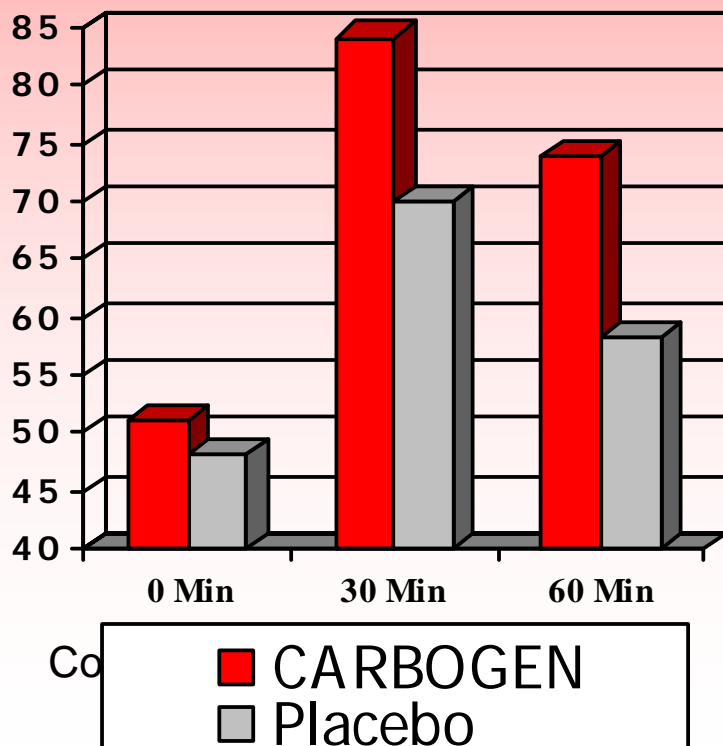


Clinical Study

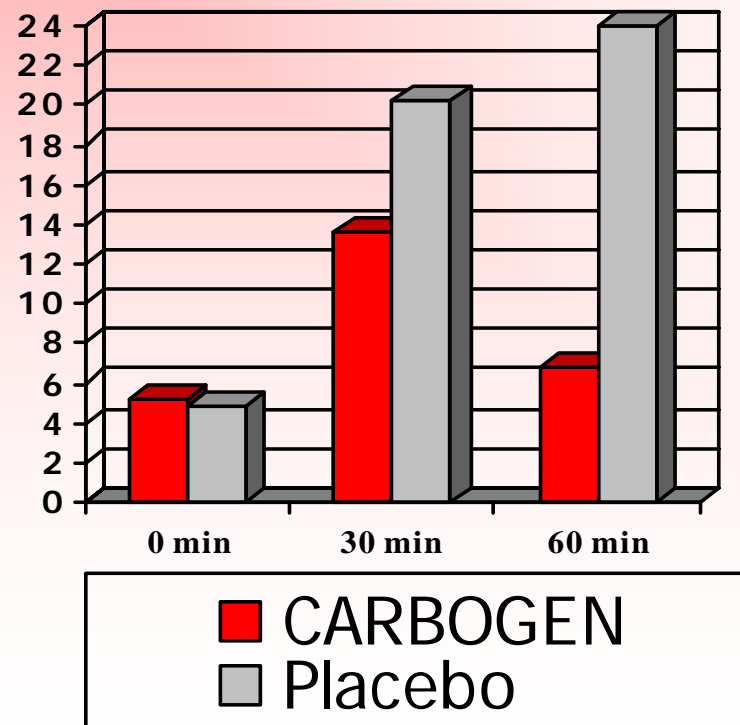
Significant Increase in Blood Glucose Levels During High Intensity Exercise

Int. J. Sports Nut. Exercise Met. 2002,12, 310-317

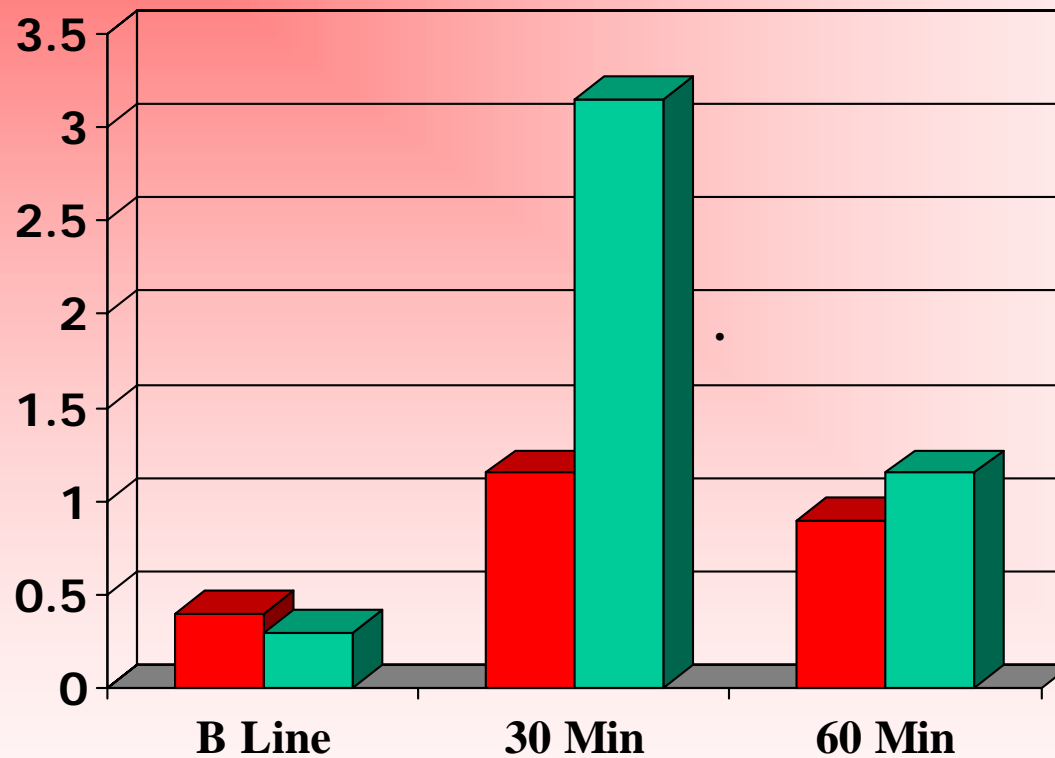
Blood Glucose Levels



Blood Insulin Levels

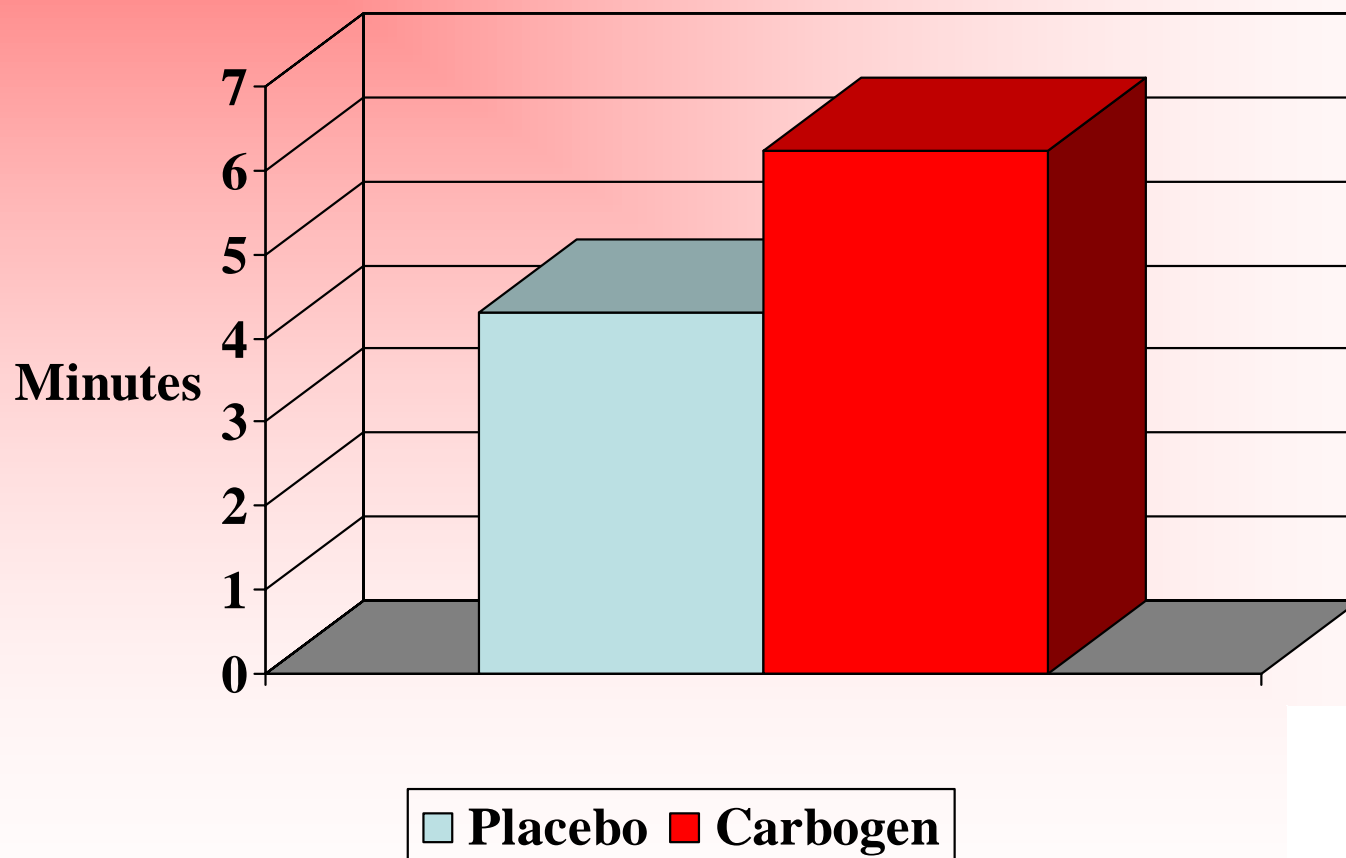


Significant Decrease in Accumulation of Blood Lactate



Carbogen **Placebo**

Significant Increase in Time to Exhaustion





- **NATURAL ENERGY**
- **SUSTAINED ENERGY**
- **INCREASED ENDURANCE**
- **DECREASED FATIGUE**



THANK YOU !

