



# THE CENTRAL INSTITUTE FOR HUMAN PERFORMANCE

RESULTS. NO EXCUSES.

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## Lose Weight? Fast!??

By Clayton Skaggs, DC – Medical Director

At this time of year, we hear all kinds of health improvement and fitness claims. A standard rule holds true: if it sounds too good to be true, it probably is. The same holds true of medicinal advertisements, if the 20 second list of side effects sounds scary and contrary to good health, it probably is.

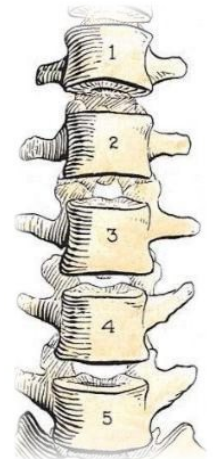


The truth sometimes is difficult to accept. To reach your desired health goals, it will take time and constant effort. To make these changes, and more importantly, maintain these changes, you have to commit to a program for an extended period of time. For most, that would be around two years!



In a recent Wall Street Journal article, scientists make a strong case for the importance of body fat percentage as a measure of good health versus weight or body mass index (BMI). In fact, they actually suggest that you can be relatively low weight and still be at high risk of health problems due to body fat distribution. At CIHP, we evaluate body fat and fitness with the Biosignature Method. This method can tell us where people store their body fat and is an indication of their hormonal profile. With this information, we can better plan your diet, exercise, supplement program and lifestyle modifications. To shed the unwanted fat and to gain muscle, your program will not only include a targeted resistance program, it will be *dominated* by resistance training.

Another acknowledged aspect of good health is strong bones, muscles and nerves. Studies clearly identify that appropriate tension or “load” is necessary to develop or maintain strength for bones, muscles and the nervous system. In fact, studies also identify that appropriate tension or “load” is good for spinal discs. It is important to define ‘appropriate load’ as it relates to these concepts. Appropriate load or tension is defined as the sufficient amount of stress to cause positive physiological adaptation. Too little load will not provide any benefit, too much load can harm. More on what a difference the right load makes in an upcoming article.



If we take into account the above concepts, it becomes apparent why time and commitment are the keys to success in building good health and why two years is a reasonable target. To prime positive body composition changes (i.e. replace fat by muscle) you have to work at a high intensity and load. For most of us, our bone, muscle and nerve strength has to be improved. In other words, you have to train yourself to be able to train hard enough to effect change. Program design, diet, age and genetics can vary your progress and needs, but the basic equation of time, commitment and work remains.

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Does this sound like fun? No. Nobody likes leg day or six sets of Bulgarian split squats. But it is great when you are finished. The fun is; standing around the soccer field with other parents and feeling really good about how you stack up, feeling ok taking off you shirt at the pool, wearing those skinny jeans, killing it on the court or course without being sore the next day.

There is no free lunch. There are no short cuts to good health and performance. But it sure feels good when you have it. Just ask some of our clients.

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## The Importance of Post-Workout Nutrition

By Stephane Cazeault, B.Sc. – CIHP High Performance Director

In 1991, Dr. Scott Connelly founded the supplement company Met-Rx and created the first high protein meal replacement powder. The taste was better than all the protein powders on the market and the product became popular very quickly. Fitness enthusiasts finally had a tasty and practical shake they could consume anywhere and anytime... it could be blended very easily with just a water bottle. In 1992, the company partnered with Bill Phillips and the publication Muscle Media 2000, which appealed to the bodybuilding market. Many articles referred to the importance of replenishing your body after a training session. By the mid 90's almost every bodybuilder and hardcore lifter used a post-workout shake.



With the years, research and development in the workout supplement industry has exponentially increased the quality of post-workout nutrition. Higher quality protein processing and the addition of other key nutrients enable the trainee to reach a much better state of recovery than previously possible. Gone are the days of pre-made, one-size-fits-all, ready-to-drink protein shakes. Even though they provided a boost in recovery, results are greatly superior with nutrient individualization. Different protein, amino acid and carbohydrate combinations can do a multitude of different physiological responses. It is for this reason that we, at CIHP, prescribe post-workout nutrition according to your goals and current physiology.

Intense training leads to a disruption of one's internal chemistry. There is a dramatic increase in the breakdown of muscle protein (aka catabolism). The body's glycogen stores become depleted. There is also a pronounced drop in testosterone (an anabolic hormone) and a rise in cortisol (a catabolic hormone). These processes begin 45 minutes into the training session. All of these things combined lead to an extremely catabolic state. If you don't quickly provide the proper nutrients to induce a more anabolic (building) environment, you will hinder the muscle building effect of your workout. You will have less energy for recovery and for future training sessions. The ongoing production of cortisol that comes with intensive training is the main reason why we prescribe training sessions of no more than 45 to 60 minutes. Otherwise, catabolism can reach a point of no return and optimization of the training effect will be greatly reduced. By ingesting a high quality post-workout nutrition cocktail, you will speed up recovery, rebalance hormonal profile and increase nutrient absorption to the muscle. This is great news if your goal is to increase lean muscle mass and decrease fat storage.



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At CIHP, we use two different post-workout shakes. The first one targets the individual whose primary goal is fat loss and the second one targets the trainee who's primary goal is lean mass gain. When trying to lose body fat, the cardinal rule is: minimize great insulin surges in the blood. High blood insulin levels can blunt any chance to oxidize fat for energy. This is why we have a mixture of a high quality whey protein isolate, which is low lactose and rapidly absorbed, with the amino acids glutamine and glycine. This combination will allow the trainee to boost protein anabolism, replenish glycogen stores and increase IGF-1 (insulin growth factor – 1) without the use of highly insulinogenic simple sugars found in most commercial post-workout solutions. It makes for a low calorie but yet very anabolic drink which is crucial for optimal fat loss.

The individual who needs to put on weight, needs a drink that will provide plenty of calories and a huge insulin surge. For this goal, a shake containing whey protein isolate and a blend of different types of carbohydrates will yield the best results. The consumption of slow and fast acting carbohydrates will improve the anabolic response as well as glycogen uptake into the muscle. This high calorie and insulinogenic post-workout shake is extremely anabolic and will lead to significant mass gains compared to the previous post-workout shake. That being said, a high carbohydrate shake is more effective for a lean and insulin sensitive individual. For a person with a higher body fat level wishing to put on quality muscle, I would suggest the mixture of protein, glutamine and glycine to prevent a high ratio of fat to muscle gain.



Clearly, post-workout nutrition has been a staple of elite lifters for some time. The benefits of this time sensitive nutritional strategy are greatly underestimated by the general population. An optimal anabolic environment is as important for the novice trainee as it is for the more advance lifters. Proper post-workout nutrition will not only boost much needed recovery, but it will bring you faster to achieving your training goals. Wasting a hard training session by skimping out on a post-workout shake is definitely not the best way to go.



If you have any questions on how you can optimize your post-workout nutrition, don't hesitate to consult with a CIHP coach.

# CIHP Hosts International Conference in Naples, Florida

CIHP hosted a heralded meeting between two of today's leading experts on sport injury and performance. Over 50 doctors and therapists attended the course with Prof. Stuart McGill of Canada and Prof. Pavel Kolar of Czech Republic. Dr. Clayton Skaggs and Dr. Clare Frank Co-chaired the event.



Above Prof. Kolar evaluates Olympic Sprinter Lauryn Williams during the Naples course.



Above Prof. Stuart McGill evaluates UFC fighter Crafton Wallace at the Naples Conference.

## Janet's Corner

By Janet Stoff

Please welcome Brandon Steele and Dr. Liu to the CIHP staff!

Effective January 1<sup>st</sup>, we have restructured our 2010 pricing for all performance programs.

For all one year client programs; protein shakes will be included in the contracts as well as a new list of amenities for you to take advantage of. >

\*\*If you are currently a one year member and would like your shakes included in your program please call or see Janet

\*\* If you are on Facebook, CIHP and The Karel Lewit Clinic would like for you to join our Facebook groups! We post our St Louis Business Journal ads, have coach and doctor tips for you, and have some great photos you must see!

This month's quote:

“Your purpose must be inseparable from your commitment to achieving it.”

- Leadership Secrets of Colin Powell

### CIHP Amenities

#### 1 Year Clients

- Free Post Workout Shakes
- Locker with Personalized Nameplate
- Laundry Service
- 3 Karel Lewit Clinic Visits
- Comprehensive Laboratory Assessment (blood work)
- CIHP Gym Bag or Laptop Bag
- CIHP Water Bottle

#### All Clients

- Orthopedic/Performance Evaluation (physician and coach)
- BioSignature Analysis
- Nutrition Counseling
- CIHP Shirt
- One on One Performance Training
- State of the Art Equipment
- Locker Room with Sauna
- Towel Service
- 10 Protein Shake Vouchers
- Wireless Internet