



The Spinal Column

The Fat War Myths – Part 2 of 4

By Dr. Alfin Mitha, Hons. B.Sc., D.C.

Special points of interest:

- Did you know for every one pound of muscle that is gained, an additional 100 calories can be burned at rest per day.
- Did you know larger muscle groups should be worked out at 65-75% of your total work-out to burn the most amount of fat.
- Did you know if you run at an intensity that is 75-90% of maximal heart rate for short periods at a time you will be performing one of the most efficient fat burning activities .
- Did you know Smaller muscle groups can be trained more frequently than larger muscle groups.
- Did you know that exercises should be performed for the full range of motion at relatively slower pace.
- Did you know the elongation (Eccentric) phase of the muscle contraction should be performed at a slower rate because most of the microscopic damage incurred in muscle happens at this time.
- Did you know Cardiovascular training should be performed after weight training or separately upon awakening for best fat burning results.

In order to mold a lean muscular physique you must build muscle and lose fat. The hormones responsible for both of these roles can be released at the same time. Here are the basic rules to unleashing the muscle building fat-burning hormones.

1. Lift heavy weights for short periods of time.

By lifting what you consider heavy weights a person can decrease body fat composition, and increase the amount of lean muscle mass they have. The more muscle a person has, the more energy he or she will burn. For every one pound of muscle that is gained, an additional 100 calories can be burned at rest per day. But this is just the beginning. In order to burn more calories...

2. You must use as much of your body during exercise as you can.

The more muscle fibers a person involves in a workout the more signals are sent to the brain which produces more fat burning and muscle building hormones. Testosterone, Growth Hormone (GH) and Catecholamines all help to build muscle, increase the use of fat for energy, make protein more available for muscle building, lower blood pressure, increase contraction forces and rates, improve the immune system, and reduce weight.

The best way to get at these hormones is to:

3. Do exercises that utilize many muscles at the same time as well as the big muscles such as the legs, and back muscles.

Exercises such as the chest press, lat pull downs , squats or leg presses are primarily large muscle group exercises that are superior to the leg extensions and concentration curls.

4. Periodize.

Having said this you cannot lift heavy weights all the time without the risk of injury. The use of progressive resistance (gradual increase in loads over time) is necessary for improvement but can lead to injury. In other words, you cannot bring your training intensity up linearly; you must have periods of high intensity training followed by periods of medium to low intensity for the best results in the long term.

To release testosterone, a resistance that is 85- 95% of a one repetition (rep) maximum is best to do at 5 reps and then rest for three minutes. For growth hormone release, a resistance at 60% of your maximum for 10-25 reps and then resting for one minute can increase GH levels up to 20 times normal. So you can see by doing periods of heavy workouts low-reps and then changing to light weights, hi-reps are the best way to get results. You do not need to go heavy all the time.

5. Keep workouts to no longer than 45 minutes.

Weight training sessions should be limited to approximately 45 minutes because after this time your body begins to breakdown muscle faster than it can build it. Therefore, the number of sets you do should be determined by the chosen rest intervals. For example a one minute rest interval will allow more sets to be done but a three minute interval will allow less sets but higher resistance.

6. Generally larger muscle groups require greater number of sets than smaller groups (triceps, biceps).

Therefore larger muscle groups should be 65-75% of your total work sets.

7. Rest.

Determining the number of days between workouts of the same body part varies with training experience, age, intensity, diet, and exercises. Beginners, individuals doing high intensity workouts, or larger muscle groups will require more rest.

8. Cardio.

Intense running or a decreased rest interval between sets of weight training has proven to be very effective at maximally stimulating fat burning hormones which improves with experience of workouts. Specifically, a running intensity that is 75-90% of maximal heart rate for short periods. This type of training burns calories at a higher rate than other activities. With strenuous training there is a significant rise in fat burning at rest and a shift toward using fat for energy during recovery. Cardiovascular training should be performed after weight training or separately upon awakening for best fat burning results. A person should also drink 8-12 glasses of water per day for sufficient muscle hydration when working out.

9. Experience.

The more experience you gain; the higher the ability your body has at burning fat. You can increase this efficiency by up to 50-80%. This may be due to a build up of lactic acid in beginners that goes away as a person becomes more fit. Beginners should do at least 6 weeks of training at 8-12 reps to allow tendon strengthening and familiarity with the exercises before going into an intensive training program. Training to failure is not recommended for beginners and of course ask your Chiropractic Doctor or medical Doctor before starting any fitness program.

10. Workout and then eat a full meal.

A decrease in sugar levels like when you awaken would allow the body to tap into fat tissue for energy instead of utilizing carbohydrates. Morning workouts are ideal for burning fat. Your body is a machine that struggles between building and storing fat and muscle and breaking down muscle and fat. The objective of exercise is to enhance the

body's ability to build muscle and breakdown fat. However, if you over do it in the gym you will injure yourself, breakdown muscle and even begin to store fat again. This is why it is important to decrease the weight, intensity and even take a break on a regular basis to get those long term muscle gains and fat losses.

The unhealthy facts about Slim Fast

Most North American diets are either too abundant or too deficient in fat consumption. As stated in part one of this article, neither method is a successful tactic for weight (fat) loss.

It was once thought that even if a person used more energy than was taken in by his or her body; fat taken in through the diet would be very efficiently burned. Scientific studies now show that the amount of fat a person eats is not as significant as was once thought to the process of weight loss. In other words, a person can lose the same amount of weight even if he or she has 10% of his/her diet content from fat or 50% of his/her diet content as fat as long as the amount of energy or caloric intake was the same. So all of these low calorie, low fat, hi carbohydrate diets we have been hearing about do not work.

Extreme low calorie diets like the Slim fast diet result in the loss of vital muscle tissue and a major decrease in your body's ability to burn energy from carbohydrate, protein or fat stores. The Slim fast drink in essence is a glass of milk with lots and lots of sugar. You already know how I feel about milk, but the sugar, very little protein and no fat will cause your body to hold onto every ounce of fat it has, not to mention an unhealthy craving for real food and a healthy life.

Did You Know?

One pound of fat can supply the body continuously for over 10 hours.

About the Author:



As a life-long resident of Brampton (34 years), Dr. Alfin Mitha endeavors to provide this city with reliable, informative Chiropractic care. He lives here with his 2 kids, Aura and Zen, and his wife Rupi. Having completed his Bachelor of Science degree in both Biology and Pharmacology at McMaster University, Dr. Mitha had the opportunity to work with Eli Lilly pharmaceuticals in their Research and Development of Non-Small Cell Lung Cancer and Prozac. Deciding that the private sector in medicine was not for him, Dr. Mitha then took one year off to work in Ixtapa, Mexico as a land sports G.O for Club Med. Having considered Chiropractic in the past, it was only confirmed while having the chance to meet many Chiropractors during his time in Ixtapa.

The next part of his journey took him to the Canadian Memorial Chiropractic College in Toronto, Ontario. During his education, he still maintained an active physical lifestyle while working as a personal trainer. His internship year provided him the opportunity to work at 2 very different and unique places. The first part of his internship was at Anishnawbe Health and Native Wellness Center which serviced much of Toronto's aboriginal and homeless community. The second part of his internship allowed him the chance to treat players of the Canadian National Soccer Team, and other elite Canadian athletes. Both of these placements allowed Dr. Mitha to understand many aspects of illness, injury and health. A focus which remains in his clinic; In GoodHands.

Having returned back to Brampton (a resident of 34 years, he has since become an active member of the Rotary Club, Brampton Tennis Club, Brampton Volleyball League, Yoga instructor and more recently the Health Practitioner Advisory Committee for the city. Dr. Mitha wishes to become a more integral part of Brampton's community. "It is imperative that we take care of our body and mind, it is our most valuable asset. The first step is education and if anything else, we provide that for our patients".

Main and Franchise Clinics:



In GoodHands Rehabilitation & Wellness Centre

Bramalea City Centre – Inside GoodLife Fitness
Unit 50A - 25 Peel Centre Drive, Brampton, ON L6T 3R5
Phone: (905) 453-5858 Fax: (905) 453-8995
Email: info@ingoodhandswellness.com

Services:

- Acupuncture
- Chiropractic Care
- Massage Therapy
- Naturopathic Medicine
- Orthotics
- Physiotherapy

Products:

- Athletic Braces & Splints
- Compression Stockings
- Memory Foam Pillows
- Custom Made Orthotics
- Health Supplements

Clinic Hours:

Mon. and Wed.: 9:30 am - 8:30 pm
Tues. and Thurs.: 10:00 am - 9:00 pm
Fri.: 9:30 am - 7:00 pm
Sat.: 9:30 am - 2:30 pm
Sun.: Closed

In GreatHands Chiropractic & Wellness Centre

Inside Oshawa Centre Mall
C/O Goodlife, 419 King Street West, Oshawa, ON L1J 2K5
Phone: (905) 433-9520 Fax: (905) 433-8144
Email: oshawa@ingreathands.com

Services:

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- Dry Blood Analysis
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- Irridology
- Massage Therapy
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- Orthotics
- Psychology
- Reflexology
- Rehabilitation
- X-Rays

Products:

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Fri.: 9:00 am - 7:00 pm
Sat.: 9:00 am - 5:00 pm
Sun.: Closed