

PHASE IV

SCIENTIFIC HEALTH & PERFORMANCE CENTER

Issue: 14

March 2010



The time to invest in your future is now! The era of get fit quick gimmicks and weight loss fads is over. Science now has the answers to achieve your health, fitness and body goals and create the lifestyle you desire!

Phase IV has the **highest credentialed** staff in fitness and health. At Phase IV, **Physical Therapists** evaluate your body from head to toe and design your personal strength and flexibility program, **Exercise Physiologists** evaluate your fitness and create precision daily workout plans and **Registered Dieticians** optimize your nutrition to achieve all your health, fitness and body goals.

Phase IV has **thirty years of experience** getting the results you desire. Whether your goal is to **reduce health risks, drop excess body fat, compete in the marathon or triathlon, become a scratch golfer or simply play with the kids** we design health and fitness programs that achieve long lasting results. We have worked with people of **all ages and abilities** but we honed our skills working with some of the **world's most accomplished athletes**. We apply the same principles used in the results driven arena of elite athletics to create an **effective and safe** individualized program of **exercise and nutrition** to re-engineer your body from the inside out. We **empower** you to with the knowledge to understand the mysteries of your body and achieve the healthy lifestyle you've always desired.

March Specials & Promotions

Achieve Your Goals With The Phase IV Sustainable Programs

Save 10% on all Phase IV Sustainable Weight Loss, Fitness or Performance Programs in the month of March! (expires 3.31.10)

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Phase IV is a proud sponsor of the

Take the guesswork out of achieving your weight loss, fitness or performance goals with our Phase IV Sustainable Weight Loss, Fitness, or Performance Programs!

Have you hit a plateau with your weight loss, fitness, or performance program? If so, it's time to jump-start your metabolism by establishing all the necessary components of an effective scientific fitness and weight management program and eliminate the frustration.

Whether your goal is to lose weight, improve your level of fitness, or take your athletic performance to the next level, having a comprehensive plan rooted in science is essential to sustainable success. At Phase IV, Exercise Physiologists work with you to re-engineer your physiology, Physical Therapists design and oversee your strength and flexibility program, and Registered Dieticians dial in your nutrition, empowering you to achieve your health, fitness, and performance goals.

This program includes a comprehensive initial assessment and customized program design followed by ongoing testing, training and instruction by an exercise physiologist who will serve as your own personal body coach.

[Learn more about the Phase IV Sustainable Programs](#)

What's Happening at Phase IV

Phase IV Scientific Lecture Series And Events

The Phase IV Scientific Lecture Series is the original and best attended lecture series for health and performance in Southern California. With a ten year history of helping people of all ages and abilities achieve their health and performance goals, our lectures are always free, always informative, and open to the public.

Strength Training For Cyclists

Wednesday, March 10th @ 7:00 pm

Injury Prevention Clinic

Saturday, March 13th @ 1:00 pm

Last Minute Tips for the LA Marathon

Tuesday, March 16th at 6:30 pm

Weight Training 101

Wednesday, March 24th @ 7:00 pm

following organizations and events:

[Los Angeles Tri Club](#)

[Los Angeles Running Club](#)

[National AIDS Marathon Training Program](#)

[AIDS Lifecycle](#)

[Bike MS](#)

[Team In Training](#)

[Team Challenge Crohn's & Colitis](#)

[Arthritis Foundation](#)

[Malibu Triathlon](#)

[Playa Del Rey Triathlon](#)

[Malibu Marathon](#)

[Real Medicine Foundation](#)

[View Our Lecture Calendar For More Information](#)

To RSVP for one of our lectures or events: Email us at info@phase-iv.net or call 310.582.8212

Phase IV Monthly Spotlight

Audra Lalley - Phase IV Sustainable Performance Client - Ironman Triathlete

In September 2008 Fannie Mae and Freddie Mac were nationalized, Lehman Brothers filed bankruptcy, AIG was bailed out and Morgan Stanley and Goldman Sachs became bank holding companies. In October 2008 I decided to train for the Ironman. I had been in the investment business for ten years and I had never experienced the negativity that I did in the fall of 2008. I needed a distraction that was as strong as the negative news, reports and phone calls that I was getting every day. The Ironman seemed up to the task. I knew I needed help to get there and my first call was to Phase IV. I was an athlete from the time I was a child, focusing on soccer, basketball and softball during the school year and swimming during the summer. I swam in college, moved to running when I graduated, then started in triathlon in 2002. I was an "age grouper" who trained seriously for several weeks before each race, and rather moderately in between. I became aware of Phase IV through my membership in the LA Tri Club. I liked Bob Forster's scientific approach to training, and with 6 months until the Coeur d'Alene Ironman, I signed up for a training program. Breaking my arm with 5 months until the race was not part of the program, but between Bob, Aishea (my head trainer, psychologist and cheerleader), Ron, Scott, Nate, and the very important physical therapists Kent and Cosette, I not only made it to Coeur d'Alene in top shape except for a slightly inept left arm, but I got to hear Mike Reilly, "Voice of Ironman," say, "Audra Lalley. You. Are. An. Ironman!" I don't credit my success in the race with curing the markets, but the stock markets and the economy are on much more solid footing. So am I, and I am on my way, with the Phase IV team, to my second Ironman. I will race Florida on November 6th with dual goals of reaching a PR and Kona. I learned more about training than I knew there was to know. The scientific process is one that I respect and believe in, and the interaction of aerobic, anaerobic, strength and mental training are fascinating. Nutrition is something that I knew the very least about, and I now understand the crucial role it plays in driving performance. In my first 14 months of working with Phase IV and Forster PT I have completed 2 sprint triathlons, 2 Olympic distance triathlons, 1 Ironman, 1 marathon (sub 4 hours) and 1 half marathon (PR). My 2010 goals are to complete the LA Marathon with a PR and a Boston qualifying time, the Honu Half Ironman, and the Florida Ironman. I'm sure there will be a few Olympic and sprint triathlons in between, and maybe a few road races. One of my greatest achievements through Phase IV is the inspiration of others. Many friends, colleagues and acquaintances have told me that I encouraged them by my efforts and discipline to tackle challenges that they had been afraid to try. Fitness is the greatest gift that anyone can give themselves, and I am very thankful to Phase IV for allowing me that gift, and for allowing me to share it with others. Despite all of my time training and racing I remain an investment professional, working far more than 40 hours per week. What I consider a balanced lifestyle is a bit more extreme than most, but I am more fit and happier than ever.



Phase IV Partners:

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[Suunto](#)

[Top To Top](#)

[Cynergy Cycles](#)

[Triathlon Lab](#)

[Sonki Fitness](#)

[YAS](#)

**Achieve Your
Health
and Fitness
Goals**

**Schedule
Your FREE
Consultation**



Ask The Experts

Have A Question About Training, Injury Prevention, Or Nutrition?

Phase IV's Staff of Physical Therapists, Exercise Physiologists, and Nutritionists look forward to answering the questions regarding a variety of training, injury prevention, or nutrition topics you may have.

Each month in this section we will post an interesting, common, and thought provoking question along with the answer from our professional clinical staff. So, if you have a question please don't hesitate to ask! We look forward to providing you with professional scientific advice!

Ask the Experts at Phase IV

Here's This Month's Q & A:

Q: I currently work out in the evenings but often find myself lacking in energy, coming up with an excuse, or working later than expected. When I do make it to the gym, more often than not I struggle to fall asleep early enough to get a full nights rest. I've considered working out in the mornings, but I'm not sure if I can drag myself out of bed while it's still dark out! Any motivational tips or advice for helping me break the evening workout cycle?

A:

For many people the thought of morning exercise is just too much to take on. Most people opt for the evening under the guise that they are unable to get out of bed earlier. However, there are some genuine benefits that may make you consider building morning exercise into your routine.

1. Higher Metabolism = Higher Fat Burn

The first good reason to exercise in the morning is that it will increase your metabolism. Studies have found that by working out in the morning, you can increase fat burn by two to three times compared with exercising at other times of day.

2. Increase Energy Levels and Alertness

When you exercise in the morning, you will start to see an improvement in your energy level and alertness throughout the remainder of the day.

3. Less Likely To Have Your Routine Disrupted

When you exercise during the day or in the evening, it is a lot easier to be distracted by other parts of your life. For most people, there is time in the morning to exercise; you are just not accustomed to waking up a bit earlier. It takes a bit of getting used to, but if you can start waking up earlier on a regular basis, it starts to become normal. You are far less likely to face disruptions or distractions from exercise in the morning. You can just get up, do it and then get on with your day.

4. Better sleep

Exercising in the morning is also proven to improve your quality of sleep meaning you will sleep more soundly throughout the night. If you exercise in the evening, you are too alert and energized afterward to be able to fall into a restful nights sleep.

[Have Phase IV's experts help you with your training](#)

Training & Performance

Aerobic Exercise: Top 10 Reasons To Get Physical

By Aishea Maas, Exercise Physiologist

Make Fat the Fuel of Choice!! Be a "better butter burner"

Aerobic base training enhances your fat burning abilities!

Research shows exercising in your target heart rate zone is the best way to improve cardiovascular health prevent both under training and over training, and reduce the risk of injury or burnout.

"Aerobic exercise" also known as fat burning exercise is the process of combining oxygen with the nutrients in your body to burn fat as fuel. During aerobic exercise your body learns to utilize fat in favor of carbohydrates in order to spare muscle glycogen. Fat is a much more efficient fuel providing more energy than carbohydrates per gram, it is abundantly available, and it does not produce lactic acid. The best way to find out your optimal fat burning zones is to undergo a (Metabolic test VO₂ or Blood Lactate Test). These precision metabolic tests will produce an exact personalized heart rate prescription from which to design your training program for optimal results. Because each person's metabolism is unique to their personal physiology, Phase IV metabolic testing is the only way to accurately determine your proper heart rate training zones. Eliminate the guess work and frustration by training with science!

Working to maximize your Aerobic Base is a process of educating your muscles to utilize fat as a resource.

Top 10 Benefits to aerobic training:

1. Decreased Respiratory exchange ratio: You are burning the same amount of calories for a given activity, but now more of that energy is coming from fat, and less is coming from carbohydrates
2. Increased Vascularization: Develop a stronger network of blood vessels called capillaries, which carry waste products from the working muscles and deliver nutrients and oxygen to promote recovery.
3. Increased mitochondrial density: More lipids are used to generate ATP as a result of the increased mitochondrial density in response to exercise. Research suggests that the enhancement of

mitochondrial density in skeletal muscle is a key component in the development of performance in endurance sport allowing an athlete to function closer to their maximum potential.

4. Decreased blood lactate levels: As your body adapts you will start to produce less lactate because it will be using more fats than before, and your body will be more efficient at removing lactate. Your body will make more transporters to remove the lactate and transform it into a more usable source of energy (pyruvate).
5. Training aerobically will teach your body to make more transporters to transport fat to the mitochondria. Spares muscle glycogen by using FAT!
6. Increase stroke volume: Prolonged aerobic exercise training can increase stroke volume, which frequently results in a lower (resting heart rate). A reduced heart rate prolongs ventricular diastole (filling), increasing end-diastolic volume, and ultimately allowing more blood to be ejected.
7. Increasing your Aerobic base by training in the right heart rate zones increases the utilization of fat relative to carbs at rest.
8. Aerobic training will decrease lactic acid production and increase lactic acid removal.
9. Glycogen super-compensation: After reducing glycogen stores to minimal with long slow distance (LSD) work in your aerobic zone a 150% increase in stored glycogen occurs
10. You will lose weight more efficiently because you will be burning the fat that is already stored in your body. Can't get better than that!!

In summary, by training aerobically you will not only be able use fat as fuel but you will be able to work harder for a longer period of time before fatigue sets in. Remember to work in a recovery day each week and one week a month, so to avoid overtraining and injury. The key is to TRAIN SMARTER NOT HARDER!

Your Physical Health

Treating Common Injuries and Inflictions

Each month our expert Physical Therapists at Forster Physical Therapy will outline home and clinical treatment methods for treating common injuries and inflictions. With over 30 years of experience in treating active people and athletes of all abilities, FPT's highly credentialed staff has helped thousands get back on their feet and enjoying the active, healthy lifestyle they desire.

Carpal Tunnel Syndrome:

Although it is commonly thought carpal tunnel syndrome is a condition born from long hours spent working on a computer keyboard, it is actually most often a result of an accumulation of stress from a variety of common repetitive movements.

Located on the palm side of your wrist the carpal tunnel is a narrow passageway bound by bones and ligaments, about as big around as your thumb. This tunnel protects a main nerve to your hand and nine tendons that bend your fingers. Strain on these tendons causes swelling and a resultant pressure placed on the nerve produces the numbness, pain and eventually hand weakness that characterize carpal tunnel syndrome.

Fortunately, for most people who develop carpal tunnel syndrome, conservative non-surgical treatment will usually relieve the pain and numbness and restore normal use of their wrists and hands.

Symptoms:

Carpal tunnel syndrome typically starts gradually with a vague aching in the wrist area that can extend into your hand or forearm.

Other common symptoms include:

- * Tingling or numbness in the fingers or hand, primarily in the thumb, index, middle or ring fingers, but not the little finger. This sensation often occurs while grasping a steering wheel, phone or newspaper or upon awakening. Many people "shake out" their hands to try to relieve their symptoms. As the disorder progresses, the numb feeling may become constant.
- * Pain radiating or extending from your wrist up your arm to your shoulder or down into your palm or fingers, especially after forceful or repetitive use. This usually occurs on the palm side of your forearm.
- * A sense of weakness in your hands and a tendency to drop objects.

When to seek help:

If you have persistent signs and symptoms that might be due to carpal tunnel syndrome that interfere with your normal activities - including sleep you should call for a physical therapy evaluation to confirm the diagnosis and begin treatment. If you leave the condition untreated, nerve and muscle damage can occur.

Treatment:

Treatment will focus on the specific causes of Carpal Tunnel Syndrome with the goal of decompressing the nerve traversing the wrist and restoring function.

Physical therapy treatment for Carpal Tunnel Syndrome consists of:

- 1) Manual therapy: including joint mobilization, and advanced massage techniques to improve function of the forearm and wrist
- 2) Stretching and Strengthening Exercises to improve the bio-mechanics of the joints
- 3) Ergonomic and Postural training and education to reduce stress on the wrist in home and work environments. This includes the computer workstation and addressing any repetitive motions in work, hobbies and recreational activities.
- 4) Wrist splinting in a neutral position if necessary

Physical Therapy Modalities:

- a. Ultrasound to increase tissue extensibility, improve blood flow and to administer medication through the skin.
- b. Electrical stimulation to decrease swelling, inflammation and pain.
- c. Ice or ice massage to decrease inflammation at the carpal tunnel.

[Schedule a Free Injury Evaluation](#)

Nutrition

Soy Protein vs. Whey Protein

From Livestrong.com

Protein is a macronutrient found in meat, dairy, eggs, tofu, some whole-grain products and vegetables like legumes, nuts and seeds. Your body needs protein to build muscle, and protein is a part of every cell, tissue and organ in your body. When you eat protein, it is broken down into amino acids. There are 20 kinds of amino acids; our bodies can make 11 amino acids, which means we do not need to get them from food. The other nine amino acids are called "essential" amino acids because we must get them from the food we eat. Animal proteins, like whey protein, are complete proteins because they contain all nine essential amino acids, while most vegetable proteins are incomplete proteins because they do not contain all nine essential amino acids. The National Research Council recommends that you consume about .4g protein per lb. of body weight, although research by the American Dietetic Association and the American College of Sports Medicine has shown that endurance and strength-training athletes may need more protein; up to .8g of protein per lb. of body weight.

Read the rest of this article @ <http://www.livestrong.com/article/17876-soy-protein-vs.-whey-protein/>

Phase IV Efforts For Haiti

**Real Medicine and Phase IV are Helping Haiti through the LA Marathon:
Get Involved!**

[The Real Medicine Foundation](#), an official charity of the LA Marathon, has joined Phase IV in

building a dedicated team of strong hearts willing to dedicate their race to raising awareness and funds for the people around the world.

Thanks to a grant received by our partner organization in Turkana, immediate food, water, and medicine needs for the Lodwar Hospital have been met by a new Maternal and Child health initiative. In the wake of the Haiti disaster, this could not have come at a better time as we are now able to open up the LA Marathon team to help Haiti recover and rebuild.

Haiti needs long term help and Real Medicine will be there every step of the way. Thanks to our partners on the ground we have already opened one of two permanent clinics in Port-au-Prince that is treating over 200 a day and feeding over 1000 with regular food shipments. From the first day we went on site to begin cleaning, the people of the community came to help--moving debris, painting, building exam tables, moving boxes. Over 50 people came to lend a hand and when the clinic opened even more people came just to sing!

Clinic details:

*two-story building in Pernier 19, Port-au-Prince, opened Feb. 3rd 2010

*It has: 6 examination rooms (One room is handicap accessible), waiting, triage area, kitchen and lab

*We will be providing pediatric care, internal medicine, minor surgery, OB/Gyn including deliveries and day beds as well as offering rehabilitation, physical therapy and prosthesis outreach for the many amputated earthquake victims.

*Following our global model, we will employ a Haitian Medical Staff and provide support through our volunteer network of international physicians and nurses

We have made a promise to be with Haiti for the long term and you can help us keep this promise by participating in the LA Marathon and 5K as a runner, walker, or volunteer at our Cheer Station @ 21st and San Vicente.

There is no fundraising minimum--every little bit counts. All we ask is that you create a team member fundraising page, email it out, and spread the word. In a place where people have nothing, any contribution large and small will go a long way to save lives and keep families together.

Register us as your official charity in the LA Marathon <http://lamarathon.com/page.php?id=15>

Join our team page and "become a fundraiser."www.active.com/donate/realmedicine

Find out more about the Real Medicine team and our "Hall of Faces" Cheer Station

www.changeyourselfchangelives.org

Learn more about our chosen causes: Haiti, Turkana, Peru, LA programs (to choose from other cause, please visit: www.realmedicinefoundation.org)

Haiti: Earthquake relief

<http://www.realmedicinefoundation.org/initiatives/in1-3-4.html>

Kenya: Maternal and Care

<http://www.realmedicinefoundation.org/initiatives/IN1-13.asp>

<http://www.merlin.org.uk/Where-we-work/Kenya.aspx>

Peru: Long-term earthquake relief

<http://www.realmedicinefoundation.org/initiatives/IN1-16.asp>

LA: Downey Medicinal

http://www.realmedicinefoundation.org/initiatives/downey_la_ca.asp

Phase IV Scientific Health & Performance Center designs exercise and nutrition programs empowering people of all ages and abilities to reach their health and fitness goals, injury free. Regardless of your current health and fitness, we have a program to help you achieve success!

The Phase IV expert staff is available for private group clinics and lectures. If your club, team, group or business would like us to provide an educational session on health, wellness or performance training topics, please contact us.

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