



180: The Magic Number?
 adapted from Runner's World

According to Ed Eyestone, to run faster, you need to minimize your time in one place. That is, you need to move forward as effectively and efficiently as possible. The two determining factors for forward momentum in running are stride length and stride rate.

When you go from jogging to race pace, your stride length naturally increases as you generate more power. Yet despite increasing your stride length nearly twofold, your stride rate -- or how frequently you take each step -- remains pretty constant. That's because stride patterns are hardwired into your natural biomechanics.

However, with the right training, you can develop faster stride rate, which leads to faster times. Increasing your stride frequency will also lessen your vertical bounce, because the quicker steps force your body to stay closer to the ground.

Researchers have determined that most elite distance runners have a stride rate of about 180 strides per minute. A quick perusal of NCAA champions revealed that a steeplechase champion, two cross-country champions, two Olympic marathoners, and a world record 10,000 meter runner all clocked between 178 and 184 strides per minute.

To check your stride rate, go out for a run. Get into your natural running rhythm, then time yourself for 60 seconds as you count your strides. For ease, simply count each time your right (or left) foot hits the ground, then multiply by two.

1. If your stride rate falls below 180, join the club. To boost your stride rate, focus on your cadence during one easy run per week. Stay relaxed and try to glide over the ground. Also pump your arms a little faster and your legs will follow. Check your stride rate a few times throughout the run to see if you can maintain the increased turnover.
2. In addition, try the following downhill strides once a week.
 - Find a very gentle downhill on grass or even dirt that is 50 to 100 meters long.
 - Run two to three easy miles to warm up.
 - Begin at the top of the slight slope and allow gravity to ease you into a controlled acceleration as you descend. The downhill naturally helps you increase your turnover. Jog back to the starting point.
 - Try four to six downhill strides. Cool down with a couple of easy miles. Happy Trails!

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RACE REVIEWS

by Jessi Thompson & Natalie Gallagher

Snake River 1/2 Marathon

The race started at Wawawai Landing about 20 miles from Pullman. Although it was a little chilly, the Tri Fusion members that headed down to do the Snake River 1/2 Marathon lucked out when it came to the wind. Even though the race is quite flat, it is notoriously difficult due to its blustery conditions. Calm conditions and talented athletes led to a plethora of accomplishments to celebrate... Martin Scates - 3rd in his age group, Vicki Scates - 2nd in her age group, Kirk Wood-Gaines - 3rd in his age group (PR), Roger Thompson - 3rd in his age group (PR), Jessi Thompson - 5th in her age group (PR), Steve Rupe - 5th in his age group (PR), Tim Swanson - 6th in his age group (PR), Daryce Wyborney - 6th in age group, and Mark Wyborney - 13th in his age group. Way to go Tri Fusion members!



I'd recommend this 1/2 Marathon for anyone wanting a scenic, flat, and fast race. It was well directed and they had 5-year age increments for group medals. There were about 300 total finishers in the race.

WhitworthTriath-Lite Triathlon

Last Saturday, March 17th, twenty-three Tri Fusion club members either participated in or supported the

Whitworth sprint triathlon at the college. This unique race began in Whitworth's pool for a 400 meter swim, then out the doors over the mud pile and onto the bikes for a 13 loop, 12 mile "criterion" style ride, and finished with a 3k run, over hill and dale and even on the track for 400 meters!

Tri Fusion members placed in the top ten slots for each men and women, and made us all proud to belong to such an awesome and inspiring multisport club. Congratulations to all members that made this either their first attempt at triathlon racing ever, or made this their first triathlon race of 2007.

Classified AdvertisementsFor Sale:

- 2004 Bianchi Veloce 20 spd. Road Bike: size 55, carbon fork & seat post, Campagnolo Veloce Components & 12/25T cassette, 1,000 miles, like new cond., retailed for \$1699, asking \$950 OBO. Call Natalie at 768-4243.
- Shimano 9 speed Ultegra Crankset: cranks FC-6500, 172.5 length, 53/39 for \$50. Contact Kathi Best at kathibest@comcast.net.
- 2006 Specialized Transition Elite bike: no crashes, only used one-season, size 58. \$800. Contact Ben @ elite@pacificfit.net.
- 2006 T1 DeSoto First Wave Wetsuit: top is a size 6 & bottom is a size 5, worn to 7 races + training sessions, retails for \$460, selling for \$275, OBO. Call Ben at 208-883-7705, or e-mail elite@pacificfit.net. ,sizing chart can be found @ www.twetsuits.com/size.html.
- Garmin 301: Brand new factory refurbished w/ 1 yr. warranty. Not what I wanted after all. Asking \$130, contact Tia @ rupesters@comcast.net.
- Tri-spoke carbon front race wheel & 8 speed rear Zipp 440, asking \$100 ea./\$200 both. Contact Steve Rupe @ 868-1884.

Wanted:

- Tri Bike: size 48 with 650cc wheels. Contact Lorie at lorie@colvilletravel.com.
- HR/GPS Monitor: Do you have a used Heart Rate Monitor or Heart Rate Monitor/GPS? Please contact Ben at 208-883-7705 or elite@pacificfit.net.
- Womens triathlon training apparel/gear donations for women sizes S-XL. Please contact Jessi Thompson at jthompson@mead.k12.wa.us.

How to Beat a Performance Plateau
by Ben Greenfield

The following article is written from a swimmer's perspective,
but contains valuable information that can be applied to any sport:

1. Periodize

Periodization is the scientific term for splitting your training year into periods. For example, you should spend the off-season and pre-season periods simply working on technique drills, streamline and enhanced force development in the pull and the kick, and basic aerobic endurance in the water. As your competitive season approaches, typically about 12-16 weeks out, you should begin to phase in more difficult sets at closer to a tempo or threshold pace, with an intensity zone that would be considered anaerobic (typically produces a burn in the muscles, a higher heart rate, and more difficulty breathing). The rest periods between these anaerobic efforts should grow shorter and shorter as your competition approaches. Depending on whether your limitation is endurance or speed/power, once you are 4-6 weeks out from competing, you should begin to include very quick and powerful efforts at the highest possible intensity, gradually decreasing the total volume of your swim training as you do so. Finally, 1-2 weeks from your event, significantly decrease volume, and swim only a few very intense sets, with long rest periods. Remember that it's better to be 5% undertrained than 1% overtrained!

2. Test

I recommend utilizing a consistent testing method to track your progress in the water. Not only are you provided with added motivation as your test date approaches, but you'll be able to track your progress efficiently and compare how changes in your training program affect your speed and endurance. I utilize the T-Pace test with most of my coached athletes. The T-Pace test involves a brief warm-up, then a swim at maximum possible intensity for 500-2000 yards, depending on an athlete's experience. The total time is used to calculate the time per 100 meters, which is called an athlete's T-Pace. Future training sessions are then based on a speed percentage of that pace. If available, a blood lactate test can be even more precise than a T-Pace test. In this test, an athlete swims at gradually higher intensities for 2-5 minute stages, stopping after each stage to test blood lactate. The speed at which blood lactate shows a significant increase is very near to that athlete's anaerobic threshold. Once the heart rate and speed at this value are known, future training sessions can be based on a percentage of the threshold. Since most overtraining occurs when an athlete pushes too hard for too long above threshold, knowledge of where the threshold occurs can ensure that the swimmer receives the most benefit out of every training session, without actually overtraining or hitting a plateau.

3. Dry Land Strength Training

Muscles rarely produce forces during the swim stroke that parallel the forces produced during resistance training. So why train on the weights? Because the muscle fiber utilization, neuromuscular adaptations, lean muscle tissue growth, and resistance to fatigue that occurs in the weightroom result in an energy sparing effect in the water. Basically, your muscular and nervous systems learn how to contract more efficiently, and produce more power per contraction, while also sparing the amount of carbohydrate used, which is important for distance swimmers. There's no doubt about it: there is a strong cross-over training effect from weight training to swimming. Additional advantages of dry land strength training include: 1) the development of core musculature, which can enhance balance while practicing downhill swimming and create a stronger kinetic chain between the hips and the upper back muscles; and 2) more powerful hips, thighs, and calves, which are strengthened during triple-extension movements like the squat and the lunge - very useful for any kick that involves a powerful whipping motion, as well as push-offs from the wall.

4. Rest and Recovery

Often, a plateau simply occurs because the body's energy systems are never given an opportunity to absorb the effects of all those hours and meters in the pool. True training adaptations actually occur while the body is resting, not during the actual swim session. If your current program includes a hard training session nearly every day of the week, week after week, then you should: 1) begin to include recovery swims at an easy pace at least 1-2 days a week and 2) include a recovery week every 3-5 weeks. You will experience a stepwise effect in fitness that prevents the body from hitting a wall, and ultimately, your potential intensity and volume will become much greater.

5. Lifestyle

The importance of sleep, proper nutrition, and a holistic wellness approach in all aspects of life must be emphasized, and this becomes far more important for athletes and individuals who constantly break their body down and produce free radicals and other damaging metabolites during exercise. Recommendations include: 1) maintaining 7-9 hours of sleep per night, and attempting to follow the body's natural circadian rhythm by hitting the sack before 11 p.m.; 2) eating high amounts of a large variety of fruits and vegetables, preferably organic; 3) avoiding alcohol, cigarette smoke, pollutants, and exposure to large amounts of detergents and cleaners; 4) completely eliminating consumption of refined and processed sugars, alternative sweeteners, and processed or packaged foods with chemicals and preservatives; 5) daily consumption of at least 0.5-0.9 grams per pound from lean protein sources that provide a complete amino acid profile, like egg, animal, or whey protein (for vegetarians, this requires food combinations, like rice and beans); 6) balancing family, hobbies, and non-stressful activities like softball leagues and concerts over the daily strain of work and training.

Obviously, a plateau is multi-factorial. Consequently, you need multiple strategies and smart training for busting through a plateau. It may seem like hard work, both mentally and physically, but the people who make it through the plateau are the people on the podium!

Essential Fatty Acids:

Taken from Triathlon Magazine,
written by Ingrid Skjong

Omega-3 fatty acids are found in oily fish like salmon and flaxseed and canola oils



ADAM

Essential fatty acids, or EFAs, are necessary for proper function of the body's cardiovascular, immune, reproductive and nervous systems. The nutrients also play an imperative role in cell growth and repair. In addition, several studies show that essential fatty

acids aid athletic performance by helping the body conserve carbohydrate stores for energy, prompting the use of fat. Omega-3 fatty acids in particular are purported to decrease inflammation, elevate mood and improve endurance over long-distance aerobic efforts.

EFAs are termed essential because your body can't manufacture them on its own. While both omega-3 and omega-6 acids are essential to a healthy diet, we need more 3s than 6s, and your 3:6 intake should fall somewhere between a 1:1 and 4:1 ratio. We should aim to get 1.5 grams of omega-3s a day, which equals approximately one tablespoon of flaxseed oil. Recent research also

suggests that an even higher intake of omega-3 fatty acids can help protect against coronary heart disease.

Most Americans, however, don't consume enough omega-3s, hence the recent proliferation of omega-3 fortified foods. Western fare provides most Americans with more omega-6s by emphasizing eggs, poultry, and whole grains rather than omega-3 foods, such as cold-water fish (salmon, mackerel, sardines), healthy oils (flaxseed, olive, canola), nuts and certain fruits and vegetables.

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Did you know?

Gold and chlorine do not mix well! According to www.jewelry1.com, local jewelers, and club members, wearing your gold jewelry in a chlorinated recepticle can be hazardous to your gold's health.

Fact: Chlorine reacts specifically with the copper and nickel portions of gold jewelry alloys. Chlorine dissolves the copper, or in the case of a white gold mounting for a diamond, the nickel, and causes perfectly good or new jewelry to break!

Advice: Try to avoid wearing gold jewelry in the pool or hot tub. Rings set with stones, especially prongs, are most subject to damage and hot tub water is five times more damaging due to the heat and increased chlorine concentrations.

A Genuine Thank You to all of Our Generous Sponsors:



Hammer Nutrition



April Calendar

Social Events:

Wednesday, April 18 @ 6:30 pm : Fitness Fanatics discount night!

On the horizon: Climbing at Wild Walls: date & time TBA.

Training Opportunities:

North Spokane --

Tuesdays & Thursdays @ 5-6 am: Spin class @ OZ North.

M-W-F: @ 5:30-7 am: Unstructure pool swim @ OZ North.

Tuesday evenings: BLTs @ 5:15 & 6:15 pm @ KJW-G's house. Bike loop repeats, come for 1, 2, or 3 loops.

Thursday evenings @ 6:15 pm: MEADwork speedwork @ MHS track, various workouts, changes weekly, please check Tri-Forum.

Saturdays: Outdoor ride, meeting location & time posted weekly on the Tri-Forum.

Sundays @7:00 am Mornings with Martin structured swim workout at OZ North and @ 8:45 am: Meet at Hawthorne Starbucks for fellowship, unstructured swim workout follows @ OZ North @ 9:30ish am.

Liberty Lake --

Mondays & Wednesdays: Spin class @ 5:45-6:45 am @ Liberty Lake Athletic Club.

Races:

April 1: Hauser Lake 10K & Lonestar 1/2 IM

April 7: Run for the Stache!

April 14: The Grizzly Triathlon

April 15: Arizona IM & Spring Thaw Duathlon #1

April 22: Spring Dash 5 Miler, Spokane River Run, Play Tri 1/2 IM & Oly, Wenatchee Marathon, 1/2 & 10K

April 29: Lilac Century & 1/2 Century & Mt. Rainier Duathlon

Upcoming Events:

Next Member Meeting: April 25th @ Brentwood Elementary. BoD meeting @ 5:30 pm, followed by General Members @ 6:30 pm.