

Keeping Pace

City of Palo Alto Recreation

The Palo Alto Run Club

The Athlete's Kitchen

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Fluid Facts for Runners

If you are a serious runner who works up a good sweat, you might have wondered how much you should drink before, during and after a hard workout. According to the American College of Sports Medicine's latest update on fluid needs for athletes (1), only you can determine that answer because fluid needs vary greatly from person to person. Here's what ACSM has to say—

- Sweat rates commonly range between 1 to 4 pounds (0.5 to 2 quarts) per hour, depending on your sport and environmental conditions. Sweat rates for a 110-pound slow runner might be one pound (16 oz) of sweat per hour, while a 200-pound fast runner might lose about four pounds (a half-gallon) per hour. Triathlon training? Even fast swimmers sweat—almost a pound per hour.
- Few runners actually make the effort to learn their sweat rates; they simply drink according to thirst throughout their workout. This can be OK if you are jogging gently for less than an hour. But if you will be sweating bullets during long hard runs, you really should know your sweat rate. Otherwise, you are likely to repeatedly underhydrate, become chronically dehydrated and hurt your performance.
- To determine if you are adequately hydrating on a daily basis, weigh yourself nude each day in the morning after having emptied your bladder and bowels. Your weight should be stable and not creep downwards. This weight assumes—
1) you are not restricting calories to lose fat-weight.
2) you have not eaten abnormally high amounts of sodium the night before, such as a water-retaining Chinese dinner.
3) you are not experiencing 2 to 4 pounds of pre-menstrual bloat.
- There's no need to try to super-hydrate pre-run; your body can absorb just so much fluid. If you overdrink, you then may have to (inconveniently) urinate during the run; the kidneys can only make about 1 quart of urine per hour. A wise tactic is to tank-up two or more hours pre-exercise; this allows time for your kidneys to process and eliminate the excess. Then drink again 5 to 15 minutes pre-exercise.
- Some runners can tolerate exercising while dehydrated better than others. But most runners who lose >2% of their body weight in sweat losses lose both their mental edge and their physical ability to perform well, especially if the weather is hot. Yet during cold weather, you are less likely to experience reduced performance even at 3% dehydration (4.5 lbs sweat

loss for a 150 lb athlete). Dehydration (3-5%) does not seem to impact either muscle strength or anaerobic performance. Yet, sweat loss of 9% to 12% body weight can lead to death!

- If you become more than 7% dehydrated (either by sweat losses, diarrhea or vomiting), you will likely end up with a doctor introducing intravenous fluid replacement. In most cases, there is no advantage to taking fluids by IV, unless for medical necessity. But please, stay out of the medical tent by knowing your sweat rate and drinking accordingly!!!
- If you become significantly dehydrated and have to exercise again within 12 hours, such as with double workouts or triathlon training, you need to aggressively rehydrate. This means drinking 50% more fluid than your sweat losses (to account for the water you lose via urine.) Sipping fluids for several hours after you exercise maximizes fluid retention and is preferable to gulping one big drink.
- Sweat contains more than just water; it has electrically charged particles that help keep water in the right balance inside and outside of cells.

| Electro-lyte | Avg. amount/ 2 lbs (1 liter, ~1 quart) sweat | Food reference |
|--------------|--|----------------------------------|
| Na | 800 mg (range 200-1,600) | 1 quart Gatorade = 440 mg Sodium |
| K | 200 mg (range 120-600) | 1 med banana = 450 mg Potassium |
| Ca | 20 mg (range 6-40) | 8 oz yogurt = 300 mg Calcium |
| Mg | 10 mg (range 2-18) | 2 Tbsp peanut butter = 50 mg Mg |

- Dehydration is more common than overhydration, but overhydration to the point of hyponatremia (low blood sodium) is very dangerous and can escalate into seizures, coma and death. The symptoms (that become increasingly severe), include headache, vomiting, swollen hands and feet, undue fatigue, confusion (due to progressive swelling of water in the brain) and wheezing (due to water in the lungs).
- In general, hyponatremia that occurs during exercise that last for less than 4 hours is from overdrinking water before, during and even after the event. Don't drink more than you sweat; learn your sweat rate!
- Hyponatremia that occurs in ultra-endurance events that last for more than four hours is often related to extreme sodium losses. Hence, with extended exercise, be sure to replace sodium losses with more than just sports drinks. (Sports drinks

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Calendar Notes

Monthly Trail Run

An informal group meets once a month for a long trail run. Distances and destination changes every month. For more info contact Peter Zepter or Ron Wolf: pwjzep@hotmail.com or ron.e.wolf@ieee.org

Monday Evening Run

The club meets every Monday at 6 p.m. for a 5.5 mile run through campus. Meet at Angell Field track, corner of Galvez and Campus Dr., near Stanford Stadium. For more information, contact Dave Ahn at dahn@stanford.edu.

Tuesday Track Workouts

The club meets every Tuesday at 6:30 pm for some speed work at the Stanford Stadium. For more info please contact Dave Wibbelsmann at djw67@att.net

Wednesday Evening Run

The club meets every Wednesday at 6 p.m. for a 5-6 mile run through Palo Alto. Meet at Lucie Stern Community Center, on Middlefield Road near Embarcadero. For more information, contact John Stannard at jstannard67@yahoo.com.

Saturday Long Runs

An informal group meets at the scenic Sawyer Camp Trail for a long run on Saturday mornings. The trail runs along upper Crystal Springs Reservoir, near I-280 and highway 92. Contact Rita Comes at RavRita@aol.com for more info.

2007 PARC Board

The 2007 PARC Board of Directors is comprised of the following volunteers:

- President**.....John Stannard
- Vice President**.....Dave Ahn
- Secretary**.....Stan Jensen
- Treasurer**.....Doug Burns
- Membership**.....Stan Jensen
- Marketing**.....Rita Comes
- Events**.....Steve Reagan, David Flexo
- Webmaster**.....Joe Murphy
- Newsletter**.....Vanessa Lordi
- At Large**.....Andrew Fong
- Run Coordinators:**
- Monday Night**.....Dave Ahn
- Tuesday Night**....Dave Wibbelsmann
- Wednesday Night**.....John Stannard
- Saturday Morning**.....Rita Comes
- Monthly**.....Peter Zepter, Ron Wolf

Joining the Run Club

Reasons for joining the Palo Alto Run Club (PARC) include the annual club T-shirt, a bi-monthly newsletter and announcements of community running events, races, seminars, lectures, parties and other special events. For more information on the Club, contact Stan Jensen at : StanJ@Run100s.com

How To Join

Dues are **\$22 per individual, \$37 for family per year**. To get an application, or if you have questions, please contact Stan Jensen at : StanJ@Run100s.com or visit the PARC website at www.parunclub.com

New Address?

Send change of address notices to Stan Jensen at the above address (see How To Join).

E-mail Discussions

New club members who provide an email address on their club member application are automatically invited to join the club's discussion group. Club members who wish to join at a later date, must have an email address "on file" with the club. If you are a club member with an on-file email address, you can join the PARunClub Discussion Group by sending an email to: p a r u n c l u b - subscribe@yahoogroups.com. PARunClub Discussion Group access is restricted to club members. There are two ways to access the discussion group, by email distribution and by using the discussion group website. You can join the discussion group as either an **email-only** member, or as a **regular** member.

Email-only discussion group members do not need to have a Yahoo ID. As an email-only member, you can choose an email delivery option, but you can not log in to the discussion group web site. **Regular** discussion group members must have a Yahoo ID. As a regular member, besides choosing an email delivery option, you can log into the discussion group web site where you can view new messages, search the message archive, and access additional features. More information on how to join is available on page 4 or you can visit

Visit the PARC
website at
www.parunclub.com

The City of Palo Alto Recreation division requests that club members be safe and considerate as we share the road with cars, bikers, and rollerbladers.



Credits:

- Editor** Vanessa Hanley Lordi
- Events** Rita Comes, Michael King, Steve Reagan
- Staff** Steve Reagan, Kevin Wilkinson, Stan Jensen, Dave Wibbelsmann, Ron Wolf, Dave Ahn
- Writers** Nancy Clark, Ron Wolf
- PA Recreation** Eric Christensen

Don't Forget to Write

We welcome all articles, photos, suggestions, etc. Please send submissions (in electronic form, if possible) to Vanessa Lordi at hanleylordi@gmail.com by the end of the month for the following month's issue (submissions may be edited for length or clarity).

The Athlete's Kitchen...

(Continued from page 1)

generally contain too little sodium to balance sweat loss.) Choose *endurance* sports drinks and salty snacks such as pretzels, V-8 juice, soup, olives, salt sprinkled on foods, and even salt tablets.

- You are likely to maintain better hydration if you have easy access to good tasting beverages before, during and after exercise. "Good tasting" means:

- a cool temperature (most athletes prefer between 60-70° F)
- a little sodium

- an appealing flavor. (What makes a flavor "appealing" varies greatly between people, cultures).

- Muscle cramps are believed to be associated with dehydration, electrolyte deficits and muscle fatigue. If you sweat profusely, are left caked with salt, and experience cramps, take extra care to drink plenty of sodium-containing fluids while exercising. Because of the high salt content of the standard American diet, you can likely replace sodium losses during meals without sodium supplements. But consuming extra salt on your food if you had high sweat losses can be a smart way to enhance recovery, retain fluid and stimulate thirst.

- If you enjoy a pre-run caffeine-boost to enhance your performance, rest assured caffeine (in small doses; <180 mg/day, a 12-oz mug) is unlikely to increase your daily urine output nor cause you to become dehydrated. Enjoy it, if desired!

- Alcohol, on the other hand, does have a diuretic effect, particularly in large amounts. After exercise, consume alcohol only in moderation, if at all, with lots of extra water (plus some carbs to buffer the alcohol and refuel the muscles).

- When you are running hard for more than an one hour (or doing several hours of less intense running), adding 120 to 240 calories of carbohydrates (30-60 g) per hour to your water can help you perform better. These carbs help maintain normal blood glucose levels so you are able to enjoy sustained energy. Sports drinks are an easy way to get carbs + water; for example, 16 ounces of Gatorade offers 25 g carb; 16 oz, Powerade, 140 cals, 35 g carb.

The bottom line

For runners, the saying "Drink responsibly" holds true for all fluids (alcohol-containing or not). Don't let dehydration—or overhydration—hurt your ability to enjoy exercise and perform at your best.

Reference:

American College of Sports Medicine Position Stand: Exercise and Fluid Replacement. *Medicine and Science in Sports and Exercise*, 39 (2):377-390, February 2007
 Nancy Clark, MS, RD, CSSD (Board Certified Specialist in Sports Dietetics) counsels casual and competitive athletes in her private practice at Healthworks, the premier fitness center in Chestnut Hill MA (617-383-6100). Her *Sports Nutrition Guidebook* (\$24), *Food Guide for Marathoners* (\$20), and *Cyclists's Food Guide* (\$20) are available by sending a check to PO Box 650124, West Newton MA 02465 or via www.nancyclarkrd.com.

PARC 2007 Monthly Trail Run Schedule

by Ron Wolf

Peter & I have planned an adventurous and varied PARC Monthly Trail Run schedule for 2007. The schedule and details for each run can be found on our website at <http://www.parunclub.com/trailrun.htm>. For each run we include driving directions, coordinate a carpool, include pointers to maps and other relevant information, and detail trail directions for both a long run and a 'short' run. For the long runs we find a route between 10-13 miles and for the short run between 5-7 miles. After each run we hang around for a potluck snack where each runner brings something to share. The potlucks are a great time to share the adventures of the morning of running and make plans for future runs.

Apr 7, Saturday - Sanborn County Park - A seldom visited treasure.

May 5, Saturday (Cinco de Mayo) - Montara Mtn - Our first time running Montara Mountain. I'm planning an epic run from the coast to Pacifica and back.

Jun 3, Sunday - Huddart Park/Phleger Estate - Amazingly soft and well maintained trails in the cool shade of the forest.

Jul 14, Saturday - Purisma Creek Redwoods OSP - We are inviting other local running groups to join us on this run for a trail runner's schmooze fest.

Aug 4, Saturday - Wunderlich County Park - A favorite run, shaded and close to Palo Alto.

Sep 8, Saturday - Windy Hill OSP - My favorite, gently graded climbs, with a fabulous view of the mid-peninsula at the top.

Oct 7, Sunday - Long Ridge OSP - At the top of Peninsula spine with well-traveled trails and interesting sights.

Nov 3, Saturday - Stevens Creek County Park

Dec 2, Sunday - Grant Ranch - Our only East Bay run this year, Grant Ranch is dramatic in its wide open spaces.

Typically about 7-20 runners of varying interests and abilities join in these runs making these runs a great way to get started with trail running. Or, for those who have already discovered trail running, come join us to meet some new running buddies and experience new trails.

PA Run Club Race Results

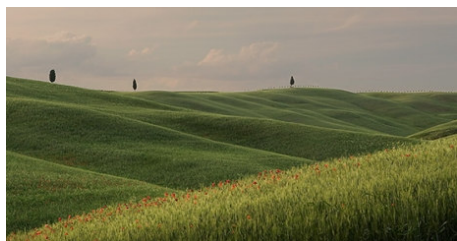
February 4, 2007:

John Madden ran a fast 1:19:22 time for the San Francisco Kaiser Half Marathon. He finished 12th in his age group at a speedy 6:04 min/mile pace!



March 11, 2007:

Janet Lafleur ran 56:18 at the Marin Trails 10K and placed 5th in her age group. The scenic course had a beautiful 360-degree view of the Bay Area, and of course, lots of rolling hills!



March 24, 2007:

Don Lundell ran 5:42:42 and Chuck Wilson ran 6:23:20 at the Pirates Cove 50K. The 50K had a 6,180 foot elevation gain!



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Palo Alto Run Club Members

March and April Birthdays!!

March



Michelle Danley.....3
 Erin Wilson5
 John Madden6
 Heather Seifert.....7
 Amy Yu.....9
 Frank Johnston... ..9
 Carl Faulkner.... ..11
 Steve Reagan.....12
 Mary Baich.....13
 Jennifer Nyman.....15
 Ira Wygant17
 Tracy Longacre17
 Vincent Lefebvre19
 Robin Davis20
 Alex Sox-Harris21
 Michael Gilfix.....21
 Morris West22
 David Hodson23
 Martin Bernstein23
 Rachel Repka.....24
 Mammen Jacob25
 Joshua Silver.....26
 Niveen Ismail.....26

April

Karen Hickey2
 Jessica Goldberg.....3
 Kathy Boyer.....3
 Rachel Johns4
 Emmie Thomas.....5
 Tom Eng6
 Amanda Schoenberg9
 Sarah Ngola.....13
 Andy Bupp15
 Vijay Tella.....15
 Charles Lai.....17
 Derek Hofmann.....18
 Chemika Chivapornthip22
 Maisy Samuelson24
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Palo Alto Run Club, Inc.

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Palo Alto, CA 94302-1301

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PARC Events Calendar— April 2007

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|---|------------------------|----------------------|--|----------|--------|---|
| 1 * See Calendar Notes on Page 2 | 2 6:00 pm—Stanford | 3 6:30 pm—Track* | 4 6:00 pm—Lucie Stern Edgewood | 5 | 5 | 7 8:00 am—Trail Run |
| 8 | 9 6:00 pm—Stanford | 10 6:30 pm—Track* | 11 6:00 pm—Lucie Stern St. Francis | 12 | 13 | 14 8:00 am—Long Run, Sawyer Camp Trail* |
| 15 | 16 6:00 pm—Stanford | 16 6:30pm—Track* | 18 6:00 pm—Lucie Stern Tree | 19 | 20 | 21 8:00 am—Long Run, Sawyer Camp Trail* |
| 22 | 23 6:00 pm—Stanford | 24 6:30 pm—Track* | 25 6:00 pm—Lucie Stern Lake Lagunita | 26 | 27 | 28 8:00 am—Long Run, Sawyer Camp Trail* |
| 29 | 30 6:00 pm—Stanford | | | | | |