

# THE LANDRUNNER

OFFICIAL NEWSLETTER OF THE OKLAHOMA CITY RUNNING CLUB

Landrunner Mission: To support health and fitness of all ages through recreational running

July 2012

Issue No. 195

## Running Blind

By Karl Rysted

The smell of honeysuckle in the moist, warm air was intoxicating. It was a magical run.

But when I got home and ate, a wave of abdominal pain came over me like never before. I went to bed early and went about life normally.

Two weeks later, I lined up with over ten thousand other runners at the Oklahoma City Memorial Marathon, sporting a shiny new pacer singlet. Something was off that morning, even when a cool rain came down on us. At about mile 8.5, I had to fall back and let the other half of my 2:15 Half Marathon pace team go ahead while I sought help at a medical tent. I recovered and got back out there. I wanted to DNF but never have and couldn't anyway because of that darn pacer singlet!

Runners know the course gets tough near the end. There's a hill on Hudson that's a killer even though you only have about half a mile to the finish after that. A young lady latched on right before that hill. She didn't know the course so I warned her about it. She was already struggling.

She made it just fine but then on the easy stretch coming into the finish on Broadway she looked like she could puke. I let her finish ahead of me and then she bent over but only had the dry heaves. I'm sympathetic to that because I get those at the end of almost every 5k I race. I gave her my water bottle and she thanked me so much for everything. She said she really needed me and that gave me redemption.

The horrible stomach pain grabbed hold of me later that day and I wondered what was going on but still felt a little guilty that I hadn't managed my

hydration well on a warm, humid morning. After all, I still had very little, dark urine after drinking water all day. Two days later the pain brought me to my doctor's office.

I found out from the diagnosis I wasn't a bad pacer. I ran the half with a bad gallbladder and was forming stones, confirmed the next morning by an ultrasound.

When you have mystery pain, don't ignore it! Don't keep running blind. Although a high-fat diet is a risk factor, don't assume that because you have a healthy diet like most of us runners, that you're not going to have gallbladder problems.

Two days later I had my gallbladder out, and two days after that, a large stone I had passed earlier was removed from the bile duct. It was causing the bile to back up and make me as yellow as a banana. The liver was temporarily contaminated, and you need your liver. Before that, even the gastroenterologist didn't know whether I had hepatitis or maybe even a "mass" (cancer-my word, not theirs) blocking the flow of bile.

The next day, I was taking the dog for a walk and planning my return to running, losing less time recovering than with some of my running injuries.

Risk: Family history is a risk factor and was the only cause of my gallbladder problem so keep that in mind. If you're a woman, you're generally more at risk than a man. Whether you've run 24 marathons like me or prefer 5k's, you don't want to miss time running or put your health at risk, right?

# President's Letter

This summer has begun. Thank goodness for that breeze, huh?! This is turning into a very extreme summer and it's full of all kinds of fun events. We will have our Summer Social at the home of Steve and Deb Johnson on July 7. This is one of my favorite Landrunner traditions. Thank you to the Johnson's for inviting us to their wonderful home. Did you know that Steve Johnson is a past president of our club?

Be sure to check the Landrunner website for a list of the series races. We are half-way through the summer, do you have enough points for the Series Awards in February? Have you earned the volunteer point required to get your award? Go to [www.okcrunning.org](http://www.okcrunning.org) and check out the race calendar and your Series points. The jacket last year sure is nice; don't wait until it is too late to earn this year's award.

Here is something different: The Du Draper Twice Duathlon is one of the multisport events this summer that you shouldn't miss. If you like running and biking and then running again, this one is for you. Be sure to check this out on the [TriOkc.org](http://TriOkc.org) site. There are several options of distances, on-road or off-road, or both.

Marathon training will be starting July 28 for the fall season. Come one, come all, you don't have to run marathons to join in the fun. The marathon and half marathon suggested training schedules are on the website now. Not wanting or ready to run the distances yet? Come out and volunteer to ride or drive the course to help out your fellow runners. Many of our bicyclists, during spring training, told me how much fun they had helping and that they will be back for fall training.

I hope everyone is enjoying the Facebook page. Be sure to post upcoming organized or casual runs you might have. There are several groups doing runs all across the Metro. Our wonderful running community is the Best!

As Jack Rector would say "Come run a few steps with me," this is the best invitation a runner could have. Be sure to wear your Landrunner shirt and invite all runners and potential runners to join us.

Sincerely,  
*Cara Nance*  
*OCRC President*

# WILLIAMS ROUTE 66 MARATHON

PRESENTED BY BLUE CROSS AND BLUE SHIELD OF OKLAHOMA

11.17-18.2012/ TULSA, OK

AWARD WINNING  
**BLING!**

Voted in the top 3  
marathon finisher  
medals in North  
America the last  
three years.

**2009 2ND PLACE**  
by Marathon & Beyond



**2010 3RD PLACE**  
by Marathon & Beyond



**2011 1ST PLACE**  
by Marathon & Beyond

Be the first to see  
the 2012 designs  
when they are  
released.

**Like us on facebook.**

[FACEBOOK.COM/ROUTE66MARATHON](https://www.facebook.com/ROUTE66MARATHON)

[ROUTE66MARATHON.COM](http://ROUTE66MARATHON.COM)



BlueCross BlueShield  
of Oklahoma



# Landrunner Calendar of Events

<u>Date</u>	<u>Event</u>	<u>Location/Time</u>
7/4	Stars & Stripes 5K*	S&S, Lake Hefner @ 7:00am
7/7-8	Du Draper Twice Off / On Road	Lake Stanley Draper @ 7:00am
7/7	Blazing Sun 5K, 10K	S&S, Lake Hefner @ 7:30am
7/7	Landrunner Club Social – Pot Luck	Deb & Steve Johnson’s @ 6:30pm
7/14	Landrunner Trail Sweep	S&S, Lake Hefner @ 10:30am
7/16	Club Meeting	TBA @ 6:30pm
7/28	Tatur Mud Run	Tulsa, OK @ 2:00pm
8/11	Twilight Fox Trot 5K*	S&S, Lake Hefner @ 7:00pm
8/18	OCU Back to School 2 Miler	OCU @ 7:30am
8/25	5K to Monet*	Edmond Fine Arts @ 8:00am
8/25	Cop & Robbers 5K*	Edmond @ 7:00pm
9/1	Brookhaven 5K*	Norman @ 8:00am
9/1-2	Race the Reaper	Sparks, OK

\* Denotes Series Races

## Landrunners In Action

6/3 COMRADES MARATHON, SOUTH AFRICA	
MAURICE LEE	11:34:02 (56 MILES)
6/9 HATFIELD-McCOY MARATHON, WV	
LARRY RUBENSTEIN	4:58:12
6/9 SANDHILLS MARATHON, NE	
MARCIA RIGNAULT	5:50:00
6/9 HELVETIA HALF MARATHON, OR	
ROGER LEMMONS	1:30:10
COURTNEY LEMMONS	1:47:02
6/10 WOUNDED WARRIOR HALF MARATHON, TX	
RACHEL HECHT	2:11:51
KARL KORKSTROM	2:25:20
GAILE LOVING	2:29:35
CHRISTY BATTERSON	2:40:14

6/16 GRANDMA’S MARATHON, MN	
CAMILLE HERRON	2:40:18
DAVID BALL	3:08:52
JOHN GIGNAC	3:13:50
KATIE KRAMER	3:41:19
BILL McMANUS	3:46:27
ANGELA MORRIS	3:51:19
BRIAN JACOBSON	3:58:15
AMY PANNELL	4:26:14

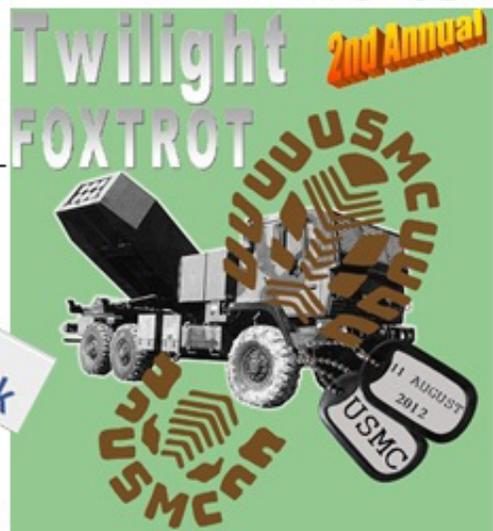
If you don’t see your results it could be you forgot to report them so send your results, photos and stories to news@okcrunning.org

# Join us for the 2<sup>nd</sup> Annual Twilight Fox Trot!

5k run/ or 1 mile fun run/walk!  
 \$25 for adults  
 \$10 for kids 15 and under.

To register, go to [www.signmeup.com/83521](http://www.signmeup.com/83521)

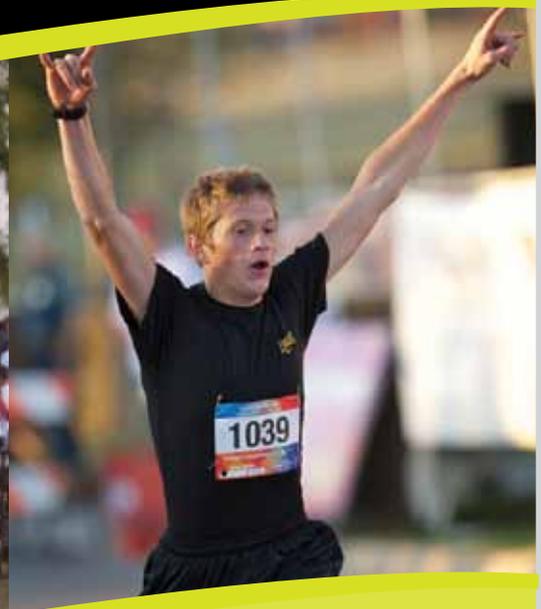
Look for us on Facebook @ twilight fox trot!





**10.07.12**

ELMER THOMAS PARK • LAWTON, OK



**CONNECT WITH US!**

[www.spiritofsurvival.com](http://www.spiritofsurvival.com)

580.585.5406

[facebook.com/spiritofsurvival](https://facebook.com/spiritofsurvival)



**HOPE ★ COURAGE ★ CURE**

**BE A SUPERHERO IN THE BATTLE AGAINST CANCER!**

**USATF Certified Events**

- Hulkin' Half Marathon**
- SuperTwins Half Marathon Relay**
- Superhero 5K**

**Other Family Events**

- Superhero Kids Marathon**
- Leah M. Fitch Spirit Walk**

All proceeds will be used to fund cancer research and clinical trials being conducted at the Cancer Centers of Southwest Oklahoma.

Check out this year's  
**COOL FINISHER'S  
MEDAL and TECH  
SHIRT** on our website!



Altus • Lawton • Duncan  
**CANCER  
CENTERS**  
*of Southwest Oklahoma*

# ACCLIMATION to HEAT

By Tom Coniglione, MD

The occasion was my granddaughter's soccer game at 4 PM one Saturday last August. The sun was high and hot. There was no breeze. In the shade it was 106 degrees: who knows what the temperature was on the field. Having had enough experience with heat injuries in athletes to last a lifetime, I sat under an umbrella and watched with some concern.

This game was similar to other games and practices they had: all in the hot sun and at temperatures that were in this same range.

My granddaughter was the center midfielder. In soccer, center midfield is the most demanding position on the team: moving the ball forward, joining the "strikers" on offense then falling back to help the defenders. The game was close so she never was replaced by a substitute. She drank water and sat briefly during the half-time break.

For that one hour game those little girls raced up and down the field. After the game they were all red faced, hot and weak. Not one girl fainted or was overwhelmed by the heat.

When thinking of exercise in the heat, another extreme example that comes to mind is the Redman of a few years ago. The triathletes started the half or full marathon run with the temperature between 85 and 92 degrees. Every athlete struggled, many became dehydrated and required medical care. Yet, not a single one developed a serious heat injury.

Yes, exercising in the extreme heat can cause serious heat injury or heat stroke; heat stroke can be fatal. Each year, there are marathons and distance events where athletes suffer serious heat injuries. Think Boston 2012, Chicago 2011, Green Bay 2012, the OKC Memorial 2010, etc. Almost all of those events occurred in the spring. However, those heat injuries never occur in the fall.

The soccer players and triathletes struggle but do fine. What is happening? The difference is related to several factors but primarily "acclimation" or "acclimatization." Acclimation is the process whereby the body adapts to the environment. The

environment can be temperature (hot or cold), altitude, light/darkness or even the economic times.

When we expose ourselves to a warm environment, our bodies learn how to deal with the temperatures: perspiration starts earlier and it is more efficient at keeping us cool. There is less salt in the sweat. The heart rate is lower.

A few tips on warm weather running:

To acclimate, run in the warmer parts of the day for two weeks. When the weather is really hot try to run in the cooler parts of the day. Wear light colored "dry" clothes. Apply sun screen. Wear sunglasses. Wear a mesh and light colored hat.

You can acclimate to the heat. The only problem you will have is to keep up with your fluid losses. From the sweat study we did last summer, some runners have to drink lots of fluids compared to other runners.

**Ride and Run with the OKC Landrunners**



*All runners, walkers, and friends  
are invited to travel with us to the*



**When:** Sunday, October 7, 2012

**What:** Same day, round trip bus for the  
Spirit of Survival Races in Lawton, OK  
Half Marathon / Relay / 5K / Kids Marathon / Spirit Walk

**Cost:** \$20.00pp, nonrefundable but transferrable.  
Landrunner Members also get a race fee discount for the  
Half Marathon!

**We take care of the details – you  
take care of the running!**

Visit [www.okcrunning.org](http://www.okcrunning.org) for more details.

# RACE THE REAPER

EXTREME 6 MILE OBSTACLE RACE  
SEPTEMBER 1ST AND 2ND 2012



PRE LABOR DAY BASH, GAMES ON BIG SCREEN TVS,  
LIVE BAND AND FREE TENT CAMPING

AN EVENT PRESENTED BY ALL-TERRAIN EVENTS  
SPARKS AMERICA, SPARKS, OKLAHOMA



[RACETHERREAPER.ORG](http://RACETHERREAPER.ORG)



# Racing in the Heat

By Camille Herron

We are in June now, which means.... Racing in the heat is inevitable! I recently read an excellent article on Competitor.com about "Biggest Mistakes When Racing in Heat". I thought I'd summarize the article, plus throw in a few things I've personally learned.

## 1. Neglecting sodium leading up to the race.

I could write an article just on sodium. In fact, that was my original plan. You've likely read or heard Dr. Coniglione talk about salt and possibly got to be a human guinea pig last summer in the sweat study. Getting extra sodium in the summer isn't something to consider just for racing, but rather every day with training. Why is sodium important? Because it makes you retain water, basically making you like a camel. However, consult with a doctor first on whether you have any known health risks for taking extra salt. In general, most athletes need more salt than sedentary people, and especially in the summer.

Conventional wisdom advises to "eat a low sodium diet." If you eat mostly natural foods, you likely do eat a low sodium diet. This can be a problem if you're an athlete. I didn't realize this was a problem for myself until recently. Since moving back to Oklahoma I couldn't figure out why I was struggling in the extreme heat/sun/wind. I consulted with the Chief Physiologist at the Olympic Training Center, Randy Wilber, who suggested getting more sodium on a daily basis through use of the salt shaker on foods, beverages, and trying chicken bouillon (a trick I learned from ultra-runners). I've been focusing on getting more sodium the past one or two months, and I have felt significantly better -- I don't get excessively thirsty on runs, and I feel like the sodium forces me to drink more fluids throughout the day.

According to the article, they advise consuming electrolyte drinks throughout the day (having at least 200mg per 8 fl. oz.) and getting 3500-4000 mg for the 18 to 24 hours leading up to a race. It suggests drinking water with meals, but otherwise drinking electrolyte drinks outside of meals.

## 2. Sticking to your typical warmup

When the temps are warm, you don't need to "warm up" as much, as the warm temps will naturally heat up the muscles faster. Rather, your focus pre-race should be on keeping the core temperature down. I've been experimenting with my sponsor, Hyperwear's, cooling vest to try and lower my body temperature before races and workouts. I'll put it on about an hour before a race/workout. I find the effect to last 60-90 minutes during a run/race and don't feel as thirsty/hot during runs. Whether you want to try something like a cooling vest, or even pack yourself down with ice, it's worth trying, especially if you're prone to heat issues.

## 3. Dressing inappropriately

Wearing white/lighter-colored clothing and a white hat will certainly help to reflect the radiant sunlight during a warm race. The Competitor.com article recommends trying "arm coolers," which I personally haven't seen or tried, but sound interesting (Zoot and Craft make them). They're made with a special cooling fiber that supposedly lowers the body temperature. Another cool suggestion (done by an Ironman athlete) is wearing latex gloves with ice in them, as the palms apparently emit more heat than your head.

## 4. Shooting for a PR

It's more important to focus on perceived effort rather than time when racing in warm conditions. Readjust your goals. Go out slower, run reasonably, and mentally don't let the likely slower pace impact your mindset.

## 5. Trying a new fueling strategy on race day

This is a very tricky point, as it can be hard to exactly simulate your race plan in training, especially for marathon training, where you're likely not going the full 26.2 miles AND at race pace. However, you need to have practiced somewhat with taking fluids/gels/etc. in training. The best advice is to not do anything new on race day. Test out the race beverage in training, "drinking as needed." You'll likely get thirstier in warm conditions.

My choice beverage is Gatorade Endurance Formula, which has extra sodium and minerals. At the OKC Memorial Marathon, they served Powerade. Assuming there would be no harm in taking it (since I've had it before), I thought I'd be okay. However, I developed bad acid reflux, as if my body was rejecting it. I became dehydrated and had to stop (for the first time ever in a marathon) to down a bunch of cups of water. I learned my lesson and will definitely have to figure out AND practice a better fueling and hydration strategy for next year's Memorial Marathon!

## 6. Overhydrating or only drinking water in the race

As mentioned in the article, a lot of runners go into panic mode when a race is warm, thinking "must hydrate as much as possible". It is very easy to drink too many fluids, especially water, and end up with hyponatremia, where there's too much fluid and not enough sodium in the blood.

My general strategy is to only drink water with my gels, and otherwise get a few gulps of sports drink, alternating water with gels versus sports drink every three to four miles. If I feel I need anything more, I'll grab an extra cup or two. You should really tune into what your body is craving and "drink as needed." It takes practice drinking from cups too (grab from top of cup, pinch, and gulp).

According to the Competitor.com article, the dietician recommends 800-1000 mg of sodium per hour, in some combo of sports drinks, salt tablets, gels, etc. As mentioned in the article, "*....do an at-home sweat test in similar conditions to those you'll be racing in. Weigh yourself nude. Work out at race pace for an hour. Empty bladder and weigh yourself nude again. If you lost two pounds (32 ounces), your sweat rate is 32 ounces per hour and you should aim to replace 60-80 percent of that.*"

Camille Herron, a native Oklahoman, is a 2-time Olympic Marathon Trials qualifier with a personal best time of 2:37:14; 6-time marathon winner; and, recently represented the US Team at the 2011 Pan American Games. She's coached by her husband and OCU Head XC/Track Coach, Conor Holt. She holds B.S. and M.S. degrees in Exercise and Sport Science. She currently runs professionally for Marathonguide.com, Powerbar, Inov-8, 2XU, and Oakley, and serves as a volunteer assistant coach at Okla. City University. She can be contacted / followed via Facebook, Twitter, or through: [www.camilleherron.com](http://www.camilleherron.com)





**SATURDAY, SEPTEMBER 1, 2012**

1 MILE FUN RUN • 5K WHEELCHAIR • 5K • KIDS RACE

**REGISTER FOR AS LOW AS \$16!**

**NOW UNTIL 7.15**

With T-shirt: \$20

Without T-shirt: \$16

**BETWEEN 7.16 - 8.31**

With T-shirt: \$22

Without T-shirt: \$18

**RACE DAY**

With T-shirt: \$25\*

\*If T-shirt still available

\$3 discount for Landrunner members when registering in person at either OK RUNNER store before August 26. Packet pick-up and pre-registration will be August 30 & 31 from 10 AM to 7 PM at the OK RUNNER store in NORMAN.

**RACE TIMES:**

1 MILE - **7:30 AM**

5K WHEELCHAIR - **7:55 AM**

5K - **8 AM**

KIDS RACE - **9 AM**

**REGISTER TODAY AT [WWW.SIGNMEUP.COM](http://WWW.SIGNMEUP.COM)**

For more information, call 405.447.8445 or visit [BrookhavenRun.com](http://BrookhavenRun.com).

# SATURDAY!..... LET'S RIDE!!!!

By Kimberly Petty, Watonga OK

On Saturday morning May 19 the Petty family, (Mike, Kim, Faith, Harley & Michaela) loaded up in our white ford passenger van and headed for OKC at 4:30am for a BIG! BIG! Day at the OKC ZOO---not just the ZOO but my daughter, Faith (a triplet and physically challenged) will be participating in the OKC Landrunners' OH!! WHAT A RIDE!!! program with Jim Roblyer, Kevin Lynes and Kirk Dearden. Her music/art teacher, Mrs. Gilliland, made a fabulous sign with Faith's name on it to be carried on the bike. It's 5km (3.1miles) thru the ZOO and finishing up at Remington Park. "Blaze the ZOO" was conducted by and benefits the Limbs for Life Foundation. A big thanks goes to Pam Timmons for her assistance on registration.

Faith said "the ride was awesome and that it was funny that every time they stopped, he'd ask if she was getting tired and it was Kevin doing all the work."

The Petty family extends a big thanks to the OKC Landrunners for helping them have a joyous weekend and lasting memories. RIDE ON!!!!

## Summer Potluck Social

with the

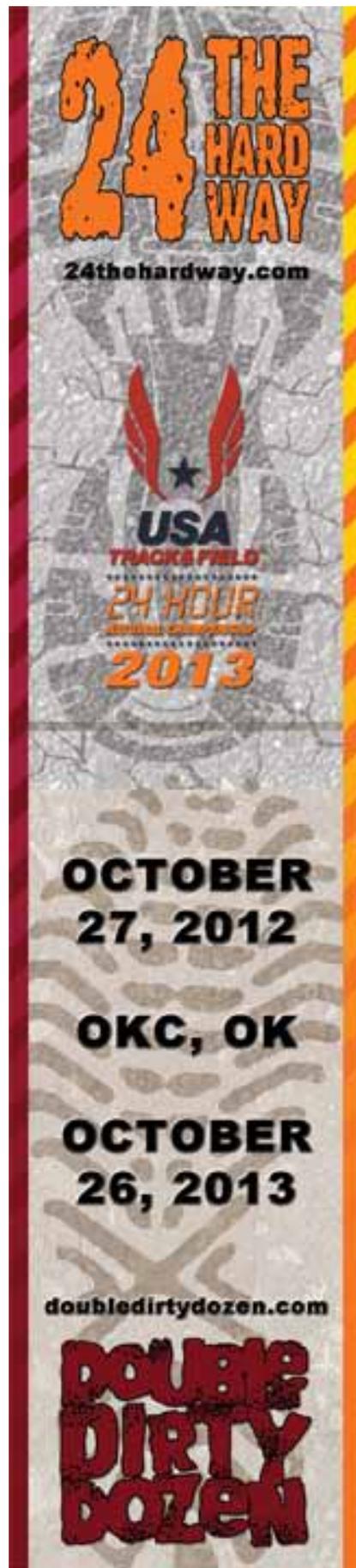


**When:** Saturday, July 7<sup>th</sup> @ 6:30pm

**Where:** Deb & Steve Johnson's house  
5600 NW 103<sup>rd</sup> PI

Steve will be grilling burgers  
– you bring your favorite side dish and  
beverage of choice.

Visit [www.okcrunning.org](http://www.okcrunning.org) for more details.



# HALF MARATHON • 5K RUN • 1 MILE FUN RUN



*Stars & Stripes Park, Lake Hefner*  
*Saturday • September 8 • 8:00 a.m.*



- Oklahoma City's *Only* Fall Half Marathon (finisher medals)
- OKC Running Club *Series* Race
- *Prize Drawings* for Early Registration
- *Personal Records Awards, Breakfast & Landrunner Discount*

*Presented by:*

UROLOGY  
CENTERS OF OKLAHOMA

Optim Oncology  
Overcoming Cancer Together

Help Us End Prostate Cancer

Register Now at:  
[DashForDad.com/races/oklahoma-city](http://DashForDad.com/races/oklahoma-city)

*To Benefit:*

**zero**  
THE END OF PROSTATE CANCER.

**National Partners:**

SANOFI  
Dendreon  
Targeting Cancer. Transforming Lives™

janssen AMGEN  
Oncology

Premier  
**Abbott**

endo

CTE  
BAR

astellas  
ONCOLOGY

MEDIVATION

know error  
www.knowerror.com

Takeda  
MILLENNIUM  
THE TAKEDA ONCOLOGY COMPANY

eigen

# Recipes to Run By

By Adi McCasland

## Rosemary Shortbread

- 1 cup unsalted butter, room temperature
- ¼ cup + 2 Tbs salt
- 2 egg yolks
- 1 Tbs fresh orange zest
- 1 ½ Tbs fresh rosemary, finely chopped
- 2 cups unbleached flour
- ¼ cup finely ground cornmeal
- ½ tsp sea salt

- 1) Beat butter and sugar in a medium bowl until thoroughly combined. Beat in the egg yolks, orange zest, and rosemary.
- 2) In a separate bowl, mix flour, cornmeal, and salt well. Add dry ingredients to the butter mixture and beat just until combined.
- 3) Cut two pieces of parchment paper the size of a cookie sheet. Divide dough in half and place one ball on each piece of parchment paper.
- 4) Roll each ball of dough into approximately 12” logs. Roll up tightly in parchment paper and chill for at least one hour.
- 5) Preheat oven to 350°. Slice the logs into ½” discs and place them on parchment-lined cookie sheets approximately 1” apart.
- 6) Bake approximately 14-16 minutes, until edges are lightly golden-brown.
- 7) Enjoy the perfect way to use up those fresh herbs!



# Yoga Poses

By Jennifer Henry

**Seated Twist:** Sitting tall and straight bend one knee across and keep other leg firm and foot pointing up. If back is rounding, sit on blanket or towel to elevate hips slightly. Do not let low back round. As you exhale, gently twist using your arm to pull and the arm in back to keep pushing and lifting spine.



**Seated half fire log pose:** Sit on chair or bench. Cross one leg over and keep foot flexed. Hinge at hips bending forward to feel the stretch in hip of lifted leg. May rest hands on floor or on block.



# GET MUDDY TULSA! JULY 28, 2012

- Live music & DJ's will be rocking the Mud Run
- Tulsa's finest firemen hosing everyone down
- Two free beers to all adult participants
- Costume Contests
- Volunteer shirts for volunteer staff
- Official Mud Run shirts to the first 1,500 entrants
- Ask about premium tent spots for groups, clubs, businesses, corporations etc.

**NEW!**  
**Finishers**  
**Medals**



Register at  
[tatur.org/MudRun.html](http://tatur.org/MudRun.html)  
or visit:



---

# Strength Training for the Runner

By Jason Miller, PhD, CSCS\*D, USAW  
Assistant Professor  
Department of Exercise and Sport Science  
Oklahoma City University

Perhaps no topic sparks more interest and confusion in the running community (besides barefoot running) than resistance training. Many athletes have asked strength and conditioning professionals what is the safest and most effective way to resistance train or, better yet, do runners even need to resistance train?

The answer to the latter question is an emphatic yes, runners do need to resistance train. Resistance training is not only for running performance but as part of the general physical activity guidelines put forth by the American College of Sports Medicine, a leading national body of professionals in the movement and rehabilitative sciences. So the easy question has been answered, but the more difficult question is what type of resistance training is best? As are most of the answers in physical training, it depends.

If your goal as a recreational athlete is to get and stay healthy, and performance is not of great concern then the standard two day a week, 1-3 sets of 8-12 repetitions per set, working the major movements (notice I didn't say muscles) of the body will suffice. If you throw in a little Jane Fonda (if you're younger than 30 years old you might have to look up that reference) lateral leg lifts, donkey kicks, glute bridges, and hip flexors (flex your hip and knee), foam rolling for the IT band and calf stretching, you've got yourself something. That additional list of exercises sounds like a lot but every runner should be doing some hip maintenance work to protect the knees and lower back. Usually the injured joint is only the victim and not the criminal as any good physical therapist will tell you. Two sets of twelve repetitions for each exercise twice a week is a good start. Add a resistance band around the ankles (\$3 or so for a band from Perform Better) for a greater challenge.

Now for those individuals that are interested in performance I am going to suggest a form of training that will at first seem counterproductive so just give me a little bit to explain myself. Over the years as a strength and conditioning coach and a professor I came to a conclusion regarding resistance training and the endurance athlete. My first ideas on resistance training came from the generic circuit training that the cross country athletes I was helping to train at a Division I university would use. The athletes would do 2-3 sets of 15-25 reps with 30 second rest periods over the course of 6-10 exercises consisting of weighted arm swings and one legged squats. Exciting.

For an athlete starting out a resistance training program, such a high rep configuration is not a bad thing. However, when I started asking what the point of such high volume training was, the common response followed as, "lactate training" or "runners need muscle endurance."

To the first point of lactate training, it is true you can have some pretty nice lactate increases with resistance training. However, raising lactate to or beyond lactate threshold usually takes going to failure with moderate loads while employing short rest periods between sets. The to-failure type of training is part of, if not the cornerstone, of how a body builder trains. Trying to raise lactate via resistance training then doesn't make a lot of sense for a runner if the byproduct of increasing

lactate might also increase the potential for gaining muscle mass. Not a good result for someone looking to carry only important cargo for 5k to 100 miles.

To the second response that runners need muscle endurance. The question I had as I watched and even implemented high volume programs for endurance athletes was: aren't endurance athletes doing muscle endurance during training for an endurance event? Running 40-100 miles a week is a pretty good way to build muscle endurance and will physiologically change a skeletal muscle and systemic physiology much more than doing calf raises and leg press for 2 sets of 25 repetitions.

What I started to look into then in regards to resistance training and the endurance athlete was the seeming absurd notion that endurance athletes should train more like, dare I say, football players, at least load wise. Thankfully during my bout with insanity and the notion of walking away from the traditional circuit training approach, I found I was not the only coach having the same crazy thoughts.

In a 2010 article published in the peer-reviewed training journal *Strength and Conditioning Journal*, running coach Jason Karp outlined the very idea I had many years ago. Endurance athletes should train with heavy load (75-95 percent of 1-repetition maximum). In fact there are some solid studies done with endurance athletes and in particular runners that have used heavy loads (80 percent or more of 1-repetition maximum) (Johnston et al., 1997; Støren et al, 2008). The results of the studies have showed significant increases in running economy.

While you don't have to look like a football player (a really bad idea for endurance athletes), you might want to train like one, at least in terms of strength development. Keep in mind gains in muscle strength do not equal significant increases in muscle mass and bulk. Instead, muscle strength, especially derived from neurological training, equals better running economy and better performance.

If you have any questions about specific training programs, or need a gait analysis, lactate threshold test, body composition assessment, movement screen or cholesterol assessment drop me a line at [jmiller2@okcu.edu](mailto:jmiller2@okcu.edu). As the founder of Oklahoma City University Sports Performance services (in addition to being a professor at OCU) I would be happy to help any interested athlete improve their performance.

## References

- Johnston, R., Quinn, T., Kertzer, R. and Vroman, N. (1997). Strength training in female distance runners: Impact on running economy. *Journal of Strength and Conditioning Research*, 11(4), 224-229.
- Karp, J. (2010). Strength training for distance running: A scientific perspective. *Strength and Conditioning Journal*, 32(2), 83-86.
- Støren, Ø., Helgerud, J., Støa, E. and Hoff, J. (2008). Maximal strength training improves running economy in distance runners. *Medicine and Science in Sports and Exercise*, 40(6), 1089-1094.

The Fine Arts Institute  
presents



August 25, 2012

27 E Edwards, Edmond, OK

405.340.4481

## Join us for our annual Family Fun Run and 5K Race

LIVE MUSIC \* FREE ART ACTIVITIES \* FOOD AND DRINKS

**8:00 AM – 1 Mile \$15** (\$18 after August 1)

- ▶ T shirt included
- ▶ Children and adults are welcome to walk or run
- ▶ Medals for all children 12 and under

**8:30 AM – 5K \$25** (\$30 after August 1)

- ▶ T shirt included
- ▶ Both races begin and end at The Fine Arts Institute
- ▶ Medals awarded to top runners in standard age groups

Register online:

[www.edmondfinearts.com/events-news/](http://www.edmondfinearts.com/events-news/) or [www.signmeup.com/77757](http://www.signmeup.com/77757)



This family friendly run features a race for all ages and abilities!



Saturday Evening

# August 25<sup>th</sup>

**Hafer Park, Edmond**

5K - \$25

1 Mile - \$15

Kids' Dash - \$10

<p>.....<b>Hurry</b></p> <p>to be guaranteed a t-shirt, must sign up by August 1<sup>st</sup>.</p>	<p>Sponsored By:</p>  <p><b>edmond</b>electric THE POWER OF EDMOND</p>	<p>registrants receive <b>FREE</b> snow cone</p>	<p><b>\$5</b> off 5K with promo code <b>"landrunners"</b></p>
<p>for more information or to register <a href="http://www.5krun.friendsofosbi.org">www.5krun.friendsofosbi.org</a></p>			



P.O. Box 18113, OKC, OK 73154

**ADDRESS SERVICE REQUESTED**

July 2012

PRSRT STD  
U.S. Postage Paid  
Okla. City, OK  
Permit 1810

## Join or Renew Online Today!

Check your mailing label for your renewal date.

Join or renew your subscription online at [www.okcrunning.org](http://www.okcrunning.org) or:

1. Write a check for **\$20** to OKC Running Club
2. Mail Check with your mailing label (above) or new member application (available online) to:

Oklahoma City Running Club  
PO Box 18113  
Oklahoma City, OK 73154

Visit The Landrunners Online:

**[www.okcrunning.org](http://www.okcrunning.org)**

*The Landrunner*, the Official Newsletter of the Oklahoma City Running Club, is published monthly by the Oklahoma City Running Club



### OKC Landrunners Trail Sweep Lake Hefner / Bluff Creek

**When:** Saturday, July 14<sup>th</sup> @ 10:30 a.m.

**Where:** 7300 N. Portland

Stars & Stripes Park - South Parking Lot

Bags and gloves will be provided by OKC Beautiful

Questions may be addressed to the...litter chair

Jim Roblyer: [jfrobyler@yahoo.com](mailto:jfrobyler@yahoo.com)