



**ANNOUNCEMENTS**

- October is Backstroke Month
- Thanks to Ron Houston for printing and mailing these newsletters!
- **CORRECTION:** Beginning *December 1, 2008*, member dues will go up to \$300/ year. If you renew and make a payment before 12/1/08, then you can still pay \$280 for next year. That's still about 1/3 of what some other teams cost.

**OCTOBER**

*(coaching schedule subject to last minute changes)*

S	M	T	W	T	F	S
			1	2 6:30 Y Coach: Marty	3	4 4:30 ASU Coach: Michael <b>Rainbows Festival</b>
5 <b>Rainbows Festival</b>	6 6:30 ASU Coach: Gary	7 6:30 Y Coach: Eddie	8	9 6:30 Y Coach: Christopher	10	11 4:30 - ASU Coach: Trevor
12	13 6:30 ASU Coach: Kim	14 6:30 Y Coach: Gary	15	16 6:30 Y Coach: Michael	17	18 4:30 ASU Coach: Kim
19 <b>Fall Classic Meet - Flagstaff, AZ</b>	20 6:30 ASU Coach: Marty	21 6:30 Y Coach: Marty	22	23 6:30 Y Coach: Trevor	24	25 4:30 ASU Coach: Christopher
26	27 6:30 ASU Coach: Michael	28 6:30 Y Coach: Trevor	29	30 6:30 Y Coach: Kim	31	1 Nov 4:30 ASU <b>Halloween Party Kim &amp; Kerrie's</b>

**FUTURE EVENTS & ACTIVITIES**

- 11/1 - (Saturday) - Halloween party At Kim & Kerrie's
- 11/14 - 16 Ron Johnson Invitational - Tempe, AZ
- 12/5 - 7 SPMA Short Course Championship, Long Beach, CA

## EXERCISING BETTER

*This is the second of a two part series. Last month we covered eating habits*

There's a wide variety of reasons to come to swimming. And no matter whether your personal goal is to compete like Dara Torres, or just to meet a new ex-boyfriend (or ex-girlfriend), there are some basic principles that apply to you and your exercise regimen (yes, you've also got to get rid of that gut to impress the fertility goddesses!)

### Fitness Plan

*Firstly*, your swimming workout should be part of a larger fitness plan. That plan should include cardiovascular training (heart-lung), stretching, and strength training. If you're not doing all three, in some measure, then the gains you hope to achieve in the pool are going to be limited. Why is that? Because each one supports the other two.

**Stretching** allows you to exercise longer without injury during cardio training, and allows you to get more strength from the muscles you already have. In swimming, good flexibility (or exceptional) is very important for moving your arms and legs in the proper motion to get the most efficient strokes. You'll also push WAY further off the walls if you can touch your toes without bending your knees.

**Cardio** training allows you to fully warm your muscles while stretching and get more from it, as well as makes your muscles more compact and efficient while strengthening. The older we all get (yes, that's everyone over 25) the more we need to carry efficient muscles around. Try swimming with a 10 lb (4kg) weight on your back... you'll work a lot harder and go slower.

**Strengthening** your muscles allows you to perform better in certain cardio exercises as well as move and stretch better in those positions. For swimming, we need to supplement our strength especially in our shoulders, thighs, and abdomen since so much of swimming power comes from these areas. Remember those Arm Lifts with light weights we introduced in February? If you had been doing those weekly for 8 months, you'd have no trouble recovering your arms in butterfly today.

### Proper Conditioning

*Secondly*, your cardio training should be at the appropriate level(s) for your goals. Depending on the heart rate achieved during training, you'll be accomplishing different ends:

**General Fitness Conditioning** happens at a heart rate (beats per minute) of 60 - 70% of your *maximum rate*. **Aerobic** conditioning happens at a rate roughly 70 - 80% of your max. **Anaerobic** conditioning happens at a rate above 80 or 85% of your maximum heart rate... this is a pretty high rate. Warm-up and cool down happen at rates below 60% of max. In a typical swim practice, we will cover all of these conditioning zones. However you'll do yourself a disservice if you just try and do one conditioning type, *regardless of your fitness goal*. This is because in swimming all levels are intertwined.

### Here's how it works.

Practice *doesn't* make perfect. Practice of *perfection* makes perfect! In order to learn to swim fast in a swim meet, we have to first learn to swim fast in practice! For short distances, this is pure **anaerobic** exercise. Many older swimmers or swimmers that are "out of shape" are unable to get to the point where they can even move their arms fast enough to burn the amino acids that are used in anaerobic swimming. This is because their anaerobic threshold is so low that their bodies "give-up" before they even get started. This giving-up is usually in the form of being extremely winded or pulling a muscle (or a worse injury). For all swimmers, unless we train some portion of our exercise regimen at this level, we'll never learn (re-learn?) to exert ourselves beyond a few seconds of anaerobic exercise. Not much help in a 50 yard sprint lasting more than 30 seconds.

**Aerobic** conditioning helps prepare our muscles for continuous exertion over longer periods - say minutes in our cases to hours in elite long distance runners. The benefits for races in the 1 minute to 20 minutes range are obvious. The unobvious benefits are the elevated circulation and fully engaged muscles that are a by product of this training. It's these "unobvious" benefits that help *anaerobic* conditioning. Circulation helps metabolize lactic acid, one of the limiting factors in anaerobic exercise. Aerobic exercise is the 15 minutes on a treadmill you do at the gym. But 15 minutes isn't really enough - a thorough regimen will include 30 to 40 minutes of aerobic training in a workout; Elite swimmers will train 2+ hours at this level in a workout. The only way to improve your aerobic duration (endurance) is to push yourself a little longer each day. Your aerobic capacity (how much oxygen you burn) will steadily increase with duration, and practice.

### Maximum Heart Rate

Described in "beats per minute". Take 220 (226 for women) and subtract your age.

34 years old?  $220 - 34 = 186$

### Current heart rate:

Find your pulse (!) Count the beats for a six second duration, and multiply by 10. 12 beats = 120 bpm. A more accurate method is to count for 10 seconds, and multiply by 6, but the math is harder...

**Fat Burning** conditioning helps us train our basic muscles, as well as use the generic fat stores we all have (some more than others). Moderate swimming, including drills, helps build the foundation for higher level conditioning. Our muscles must be ready at this level before we can step up to aerobic conditioning, and you'll be able to stretch better afterwards too. This level also includes extended walking, cycling, etc. We can all enhance our fat burning exercise by doing some basic things:

- Attend the entire swim practice
- Walk more (park at the *furthest* parking spot at the Safeway)
- Try riding a bike to the corner CVS or the gym once in a while.

You'll find that swim practices are structured with about 20 minutes of warm-up, 10 to 30 minutes of Fitness Conditioning, 20-40 minutes of aerobic conditioning, and sporadic bouts of anaerobic conditioning lasting from 25 yards to 100 yards interspersed throughout. When we swim 3 x 300 at a moderate pace, you're in the Fitness/ Fat burning zone. When we do 8 x 100 on a relatively short interval (5 to 15 seconds rest) you'll be doing aerobic conditioning. Sprints are most likely Anaerobic training.

All are important to a complete workout.

**ANAEROBIC**

Literally: "without oxygen". Muscles perform by burning amino acids and sugars, and don't use oxygen. The muscles fatigue quickly, usually within a few seconds, but can be trained to sustain for as long as 2 minutes. Typically used in sprints, extreme physical exertion (lifting maximum weights), or whipping your neck to see Ashton Kutcher in white trunks at the beach.

> **80% OF YOUR MAX HEART RATE**

< **15% ENERGY FROM FAT**

**AEROBIC**

Literally: "with oxygen". Muscles burn energy by mixing with oxygen carried by the blood. Limiting factors include the heart's ability to sustain high workloads, lungs ability to transfer oxygen and CO2, and the individual muscle's ability to continue exercising without damage or fatigue. Typically several minutes, but can be trained to sustain for hours with dedicated conditioning.

**70 – 80% MAX HEART RATE**

~ **50% ENERGY FROM FAT**

**FITNESS/FAT BURNING**

The muscles are mixing with oxygen at a much slower pace using primarily the body's fat stores for energy. With proper warm-up, this level of exercise can go on for prolonged periods.

**60 – 70% MAX HEART RATE.**

~**85% ENERGY FROM FAT**

## LEADERSHIP ELECTION

Next year is fast approaching. Nominate a member (or yourself) for one of the team leadership positions for 2009. Nominations will be open for the month of October; voting will happen in November, and the transition will take place in December. While there are a variety of traits that will make an effective team leader, the only immutable stipulation is that the leaders **must attend practice on "some regular basis."**

Open positions are **Co-captains (2), Secretary, and Treasurer.**

**Co-Captains** are responsible for the week-to-week operation of the team. This includes setting the agenda for the team's activities such as swim meets, fundraisers, social events, Pride Parade, and Rainbows festival. *Please note that while co-captains set the agenda for all these activities, it is still the responsibility OF ALL MEMBERS to carry them off.* There's also a fair amount of "coordination" involved - that with media organizations like Echo, or our facilities (YMCA, ASU), as well as USMS, Arizona Masters, IGLA or other sports organizations. Captains are responsible for ensuring our "501(c)3" tax status remains in good standing (which is a yearly commitment). And finally, they are responsible to make sure team and leadership meetings happen when needed.

**Treasurer** is responsible for managing and keeping track of money flowing into and out of the teams' account. Also responsible for maintaining financial documents to support our 501(c)3 tax status. Brian has already nominated (volunteered?) himself again for 2009.

**Secretary** is responsible for team documentation. This includes maintaining and archiving membership forms, attendance sheets, generic team communications, meeting minutes, and corporate documents (needed for our 501(c)3 tax status).

**More help is always needed!** We have other roles that should be filled, to help reduce the workload on your leadership team.

- Meet coordinator (help motivate swimmers for meets to attend)
- Fundraising coordinator
- Social coordinator
- Media coordinator
- Newsletter writer(s)
- New member greeters
- Recruiting

### PHOENIX SUNFISH

Co-Captains:	Eddie Mylan Kim Pinch Eric Dykeman
Treasurer:	Brian Douglas
Secretary:	Gregg Smith

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