## Workout of the month: all about fitness

## By Tom Mester and Chris Campbell

The idea behind this workout is to emphasize that cardio fitness entails working frequently in different cardio zones. True fitness comes when we mix things up. When you do the same thing over and over again, we call that a rut. You'll also notice that we throw in a bunch of non-freestyle here and there. Again, that is to mix things up. The changes in fitness result from the body adapting to different physical stimuli. Poke at the organism, get it out of its comfort zone if you want to see changes.

First was a set where we dialed in our base pulse rates. That is to say, we figured out where are cardio zones were--low intensity base fitness up to our threshold level. Then the second portion was where once we figured those out, we made sure--where is your $70 \%$ level, your $80 \%$ level and your redline level. Then we worked at the redline.

Tom Mester's set had a heart rate chart associated with it. If you don't have one of those, start from your resting pulse rate. What was called Zone 1 will be your resting pulse rate plus up to about 20 more beats per minute. If your resting pulse rate is 70 , then Zone 1 is about $70-90$ beats per minute. Zone 2, where you're starting to get moving, is about 90-110 beats per minute. Zone 3, where you're hitting your aerobic threshold, will be on the order of $110-130 \mathrm{bpm}$, and that higher level, that $80 \%+$ level will be on the high side of 130 bpm . Above the aerobic threshold, your body is burning glycogen, rather than body fat. The body needs a faster, more accessible energy source when operating at the higher intensity levels. Your zones will vary according to your base resting pulse rate. Of course, there are all sorts of charts and formulae to determine this stuff, but let's keep it simple.

Start with a general warm up for 500 or so yards, then give a drill and/or kick set to bring some focus to the warm up. The main set goes like this:

Part 1--Finding your base level. Take a snapshot of your pulse rate ( $6-10 \mathrm{sec}$ ) after each swim, and adjust your pace accordingly.
$4 \times 75$ freestyle with 20 sec rest at Zone 1 level heart rate
$4 \times 25$ non-free with 20 sec rest at Zone 2 level
$3 \times 100$ free with 20 sec rest at Zone 1 level
$4 \times 24$ non-free with 20 sec rest at Zone 2 level
$2 \times 150$ free with 20 sec rest at Zone 1 level
$4 \times 25$ non-free with 20 sec rest at Zone 2 level
Part 2--Finding your aerobic threshold level.
$12 \times 50$ on 1:00 to 1:10
6 at about $70 \%$ level of effort (Zone 1 to Zone 2)
4 at about $80 \%$ level of effort (Zone 2 to Zone 3) Think 2 sec faster per 50.
2 at about $90 \%$ level of effort (Zone 3 to Zone 4) Think another 2 sec faster per 50.
take an easy 100 if you need to.

## Part 3 -- Working at the redline.

$4 \times 25$ kick as fast as possible. Go on the next one when your pulse rate drops back down to Zone 2 rates. We're not on the clock here--we're on our heart rate.
$1 \times 50-100$ recovery
$4 \times 25$ swim as fast as possible. Again, you go on the next one when your heart rate has dropped back down to your Zone 2 level.
$1 \times 50-100$ recovery.
This main set will be approximately 1800 yards, and with a warm up and warm down, this workout should fit into a 75-90 minute time span comfortably.

Warm down is as important as warm up. Consider a set like $4 \times 50$ on an ascending interval. Start at about $80 \%$ level of effort, with about $2-3 \mathrm{sec}$ rest, then $70 \%$, with $2-3 \mathrm{sec}$ rest on an interval that is 5 sec longer, and so on.

Chris: "I really liked this workout when Tom pitched it. It works the different cardio zones, it has some sprint-level intensity, it has some stroke work, and it allows the swimmers some time to figure their pulse rates and to work around them."

