

## LETTER FROM LEAGUE COACH DECEMBER 2011

### PEAK OF COMPETITION PERIOD

In our seasonal training plan we are now fusing GENERAL & SPECIFIC ENDURANCE PERIOD with the COMPETITION PERIOD, i.e. swim training should now further enhance anaerobic and nonaerobic conditioning to promote speed related racing skills, stroke mechanics, turns and starts. The ultimate goal is to reach peak performance for Divisionals and Champs in February.

It is important to maintain technique by regularly including STROKE DRILLS into training. The swimmers ought to be reminded of “ACTIVE STREAMLINING” above and under water (after turns and starts).

Drill-swim combinations should be included in all practices at Basic Endurance level (active Rest Intervals between high intensity sets are ideal for that) as the swimmers are requested to concentrate when working on all five mechanics of each stroke, using the “motor learning” process.

STARTS, as I observed, must improve throughout ALL ages. Time has to be dedicated to also teach theoretically and dry-land the start procedure.

The rules are for the benefit of an efficient race. The swimming race begins, at the latest, when the swimmers are proceeding on to the starting block (not only when they are in the water). As the swimmers are getting on the block, they ought to step right forward and assume immediately final start position, BUT in a “loose” state, i.e. relaxed muscles. Upon the “take your mark” command, the swimmers then merely and completely contract all muscles (compare to a compressed spring) and be promptly motionless, so that at the moment of start the release provides the “explosive” force that propels the swimmers far forward into the water.

The final start position is a critical one, as not all swimmers have the easy flexibility of bending so that the body’s gravity center is in the middle, or even very slightly forward and must therefore be practiced over and over. If in contrary, the swimmers get on the block and stand straight up, the proper and beneficial position must then be found quickly, securely and additionally, upon the command of “take your mark” and that precisely is the cause for delays until the start command is given, thus causing false starts.

### CHRISTMAS “BREAK”

**Special attention must be given to regular continuation of swim training during the Christmas vacation.** This applies to swimmers all over the world since they are in a

very important phase of the winter short course competition period. Make sure with each team member that those who do not attend a training camp during the holidays, receive regular daily training.

With Champs taking place in mid-February one cannot afford to miss a practice. An interruption of several days will hurt condition built during the last months and technical skills, and in consequence bring poor results, especially, in the meets to come which really matter.

### TRAINING FOR COMPETITION PERIOD

From December on, swim training should be more **intensified** as follows. It is now time to shift emphasis from ENDURANCE TRAINING to SPRINT TRAINING. Special focus should be on LACTATE TOLERANCE (SPR-1) (race speed, i.e. pacing), LACTATE PRODUCTION (SPR-2) and POWER TRAINING (SPR-3). Enough endurance training must still be included in the program to maintain the improvement made during the months of September through now. This type of work requires a considerable amount of time, pool time and meticulous organization and management from the coaches. It might be useful to see the swimmers outside pool time for detailed explanation in preparation of the training sessions. Swimmers must know what they are doing and for which objective.

Weekly mileage should be reduced by perhaps 25-30 % to allow for longer active rest intervals between intensive sets. Lactate Production (SPR-2) and Lactate Tolerance (SPR-1) should now be the main sets.

Following is a suggestion which should be adjusted to individual pool conditions, i.e. time and space, level of swimmers, etc.

Warm up A: 400 m (swim 200 m IM, kick 100 m IM, pull 100 m IM)

Warm up B: technical warm up - specificity strokes

Kick 50 to 100 m, technical drills 300 m (if time allows), swim full stroke (building to perfect stroke) between drills 25-50 m,

Swim 3 to 4 x 50 m building to perfect stroke – the 50's should be descended to a reasonable fast speed so that body temperature rises.

LACTATE PRODUCTION (SPR-2) swim specificity stroke 4-5 x 50 at maximum effort, 3 min. active rest (easy 25 m swim, 50 m kick, 25-75 m swim or drill) between 50's. Watch for starts and turns (racing style and power).

10 to 20 min. recovery at END-1 level (65-70 %): first swim 100 m of the above stroke to recover the same performing muscles' metabolic mechanism, then continue with easy drills, swim, kick and some pull combination of the next stroke

LACTATE TOLERANCE (SPR-1) 2 to 3 x 75 in above specificity stroke at

maximum effort, i.e. at 100 m race pace, or ideally faster than 100 m best time pace, with 5 min. or longer active rest between 75's for near complete recovery from the state of acidosis.

BASIC ENDURANCE (END-1) to OVERLOAD ENDURANCE (END-3) (speed play) swim Freestyle (an excellent set to prepare for 200 and 400 Freestyle events).  
f.e.: 3 x 100 m at END-1 or approximately 65 % effort on f.e. 2.00,  
(i.e. swimming time 1.30, rest interval 30 sec.)

1 x 100 m at END-3 approximately 80-85 % effort on 1.45, i.e.  
(swimming time 1.20-1.25, rest interval 25 sec.)

Continue with 2 x 100 m at END-1, but on only on 1.55

2 x 100 m at END-3 on 1.40

1 x 100 m at END-1 on 1.50

3 x 100 m at END-3 on 1.35

Note the progression in rest intervals and faster swimming speeds.

Another alternative END-1 or END-2 sets at 65 or 80 % working on Individual Medley would be a Transition IM set, f.e. 3 or 4 x 100 m Fly/Back, i.e. 50 m of each.

Then 3 or 4 x 100 m Back/Breast

3 or 4 x 100 m Breast/Free

with 15 to 20 sec. rest between the 100's.

POWER SPRINTS (SPR-3) (not lactate producing): approximately 12 m, but no longer than 15 m, on 45 sec. can be done in every training in form of start or turn sprints, ideally on days when there is only endurance/aerobic level swim training foreseen.

The above main sets of Lactate Production and Lactate Tolerance should be changed in each training session. Another form for Lactate Tolerance would be to swim 1 to 2 sets of 8 to 12 x 50 m at race pace of 100 m race with rest interval of 30 to 45 sec. rest between each 50, but 3 to 5 min. active rest between sets. The latter should be done in easy swims, kick and drill exercises.

Based on these examples one can design a great variety of interesting sets, but attention must be paid to intensity and especially to the correct rest intervals, i.e. recovery sets.

#### Attention!

Intensive sets with an excessive number of repetitions, too long duration and too short rest intervals should be avoided at all costs.

(The specific terminology/designation was in detail explained/discussed in the Coaches Clinic when the energy system was covered. If any of the readers need explanation or clarification, please contact me – tel. 00-36-598/020 (Hungary). From December 16, 2010 through January 5, 2011: tel. 00-43-6562-4615 (Austria)).

CARE – PREVENTION

I recommend that coaches pay attention to other areas of their swimmers' lifestyle that affect swimming/competition performance, like for example their health. Avoid cold and typical winter related illnesses by proper dressing, mainly when leaving the pool. Insist and promote enough rest/sleep and good and healthy food, i.e. fresh, home cooked meals, a good breakfast which includes a warm drink to begin the day. Caution the swimmers when they are engaged in other sports that there could be accidents – ski and snow boarding are particularly risky. A broken bone could put participation in February's Championship into question.

As we look forward to spend the holidays with some EFSL swimmers at the Alpineswim Camp in Mittersill, I like to wish everybody a

MERRY CHRISTMAS AND A HAPPY AND HEALTHY NEW YEAR!

Peter