# Five Stages in Long Term Athlete Development for Swimming

#### **FUNdamentals**

Age: 5-9 years

The FUNdamentals stage aims to be structured and fun because a child's attention span is short and there is a strong need for positive re-enforcement. Growth at this age is rapid due to the development of large muscle groups, and therefore the emphasis should be on developing basic movement literacy and fundamental movement skills.

The skills to be developed are the ABCs (Agility, Balance, Coordination, Speed), RJT (Running, Jumping, Throwing), KGBs (Kinesthetics, Gliding, Buoyancy, Striking with the body) and CPKs (Catching, Passing, Kicking, Striking with an implement).

In order to develop basic movement literacy successfully participation should be encouraged across as many different activities as possible. As the size of the heart increases in relation to the rest of the body, endurance should be developed using FUN and games. In addition, children should be introduced to the simple rules and ethics of sports to complement the beginning of their understanding into the need for rules and structure. These activities should be part of well structured programs with proper progressions that are monitored regularly.

Above all else, children should have FUN and be active during this stage.

#### **SwimSkills**

AGE: 9-12 years

During the SwimSkills period, the nervous system is almost fully developed and there are rapid improvements in the co-ordination of movement skills. As a result, young people should learn how to train and develop sport specific skills.

This is a good time to work on developing excellent technique in all four strokes as well as starts, turns and finishing skills. A multi stroke approach to training and competition will not only reduce the likelihood of injury but also ensure interest levels will remain high with the result that swimming should continue to be fun.

It is often a good idea to participate in complementary sports i.e. those sports, which use similar energy systems and movement patterns.

Training should include the use of 'own body weight' exercises; medicine ball and Swiss ball exercises as well as developing suppleness. Swimmers should also learn the basic technical and tactical skills which include; warm up and cool down; stretching; hydration and nutrition; recovery; relaxation and focusing.

Although the focus is on training, competition should be used to test and refine skills. The recommended training to competition ratio is 75% to 25% over one swimming year.

If a young swimmer misses this stage of development then he/she is unlikely to reach their full potential. One of the main reasons athletes plateau during the later stages of their careers is because of an over emphasis on competition instead of taking full advantage of training during this very important stage which may produce an initial rapid increase in performance, but a lower level of achievement and early retirement. Studies have also shown that swimmers who do not develop early may have a slower initial increase in performance, but they can ultimately reach a higher level of achievement and are more likely to have a longer life in the sport.

### Training To Train

AGE: 12-15 years

During the Training to Train stage, there should be an emphasis on aerobic, or endurance, conditioning. The cardio-vascular system, determines the efficiency of the heart and lungs. These organs are developed through building up work on longer distances. Swimming is an endurance sport - most events last 45 seconds or more and none are similar to the 100m track event, which lasts a few seconds. Training and competition for young swimmers should therefore have an endurance base. Even at senior level it is common practice for swimmers in the sprint events (50 and 100m) to train and compete in the distance above (200m). It is recognized that a swimmer may compete successfully at a distance "down" (shorter) but that it is very difficult to compete successfully in an event, which is a distance up (longer).

This should be the stage of greater individualization of fitness and technical training. The focus should still be on training rather than competition and the training should be predominantly of high volume, low intensity workloads. It is important to emphasize high volume, low intensity training cannot be achieved in a limited time period, and therefore the time commitment to training is likely to increase significantly. As the volume of training increases there is likely to be a reduction in the number of competitions undertaken. However, there should now be specific targets for each competition, with a view to learning basic tactics and mental preparation. There should be either one or two training cycles during the year.

During this stage, training should continue to develop suppleness and to include the use of 'own body weight' exercises; medicine ball and Swiss ball exercises. However towards the end of this stage, preparations should be made for the development of strength, which for girls occurs at the end of this stage and for boys at the beginning of the next stage. This could include learning correct weight lifting techniques without any resistance; the knowledge base of how to warm up and warm down; how and when to stretch; how to optimize nutrition and hydration; mental preparation; regeneration; how and when to taper and peak; pre-competition, competition and post competition routines.

Similar to the previous stage, if insufficient time is devoted to this stage or it is missed, the young swimmer is unlikely to reach their full potential.

### **Training To Compete**

AGE: 15-18 years

During the training to compete stage there should be a continued emphasis on physical conditioning with the focus on maintaining high volume workloads but with increasing intensity. The number of competitions should be similar to the end of the previous stage but the emphasis should be on developing individual strengths and working on weaknesses. This should be achieved through practising technical and tactical skills based around specific strokes at all distances, or specific distances across a range of strokes.

Although the muscular system develops throughout childhood and adolescence, significant strength gains tend not to respond to training until after puberty. Therefore, training should also focus on developing strength gains through the use of weights, but only when the correct lifting techniques have been learned. This should be coupled with continued work on core body strength and maintaining suppleness.

## **Training To Win**

AGE: 18+ years

This is the final stage of athletic preparation. The emphasis should be on specialization and performance enhancement. All of the swimmers' physical, technical, tactical, mental, and ancillary capacities should now be fully established with the focus shifting to producing the best possible performance.

Swimmers should be trained to peak for specific competitions and major events. Therefore, all aspects of training should be individualized for specific events.

There should be two, three or more training cycles, depending on the events being trained for. During this stage, training should continue to develop strength, develop core body strength and Maintain suppleness.