### SWIMMING FOR ALL SWIMMING FOR LIFE

# SWIMMING FOR ALL - SWIMMING FOR LIFE MANUAL

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### Learn how to swim, the basics.

It is my great pleasure to introduce you this "Swimming for All, Swimming for Life – Learn how to swim, the basics" Manual, as part of FINA's global effort in the development of Aquatics in the five continents.

In general, our International Federation is perhaps more known for the memorable events it organises and for the great Stars of our six disciplines. FINA is a pillar of the Olympic Movement and was included, after the 2012 Games in London in the Group A of the International Olympic Committee regarding the importance it brings to the Olympic programme.

But as a world governing body, we think that we also have a social responsibility towards the children and youth of the world. Especially to the ones still not acquainted with our magnificent and natural element, water.

According to very alarming statistics, more than 370,000 lives are lost every year due to drowning on a global scale. As the guardians of the Aquatic Sports, FINA could not face this reality without acting!

That is why, we have launched this programme – "Swimming for All, Swimming for Life". This initiative's main objective is to offer the possibility to individuals from all ages, different backgrounds and capabilities, to take swimming lessons.

The "Swimming for All, Swimming for Life" programme will provide standard criteria to teach swimming on a global scale – this is the specific goal of this Manual - and will be mostly carried out in those countries on the five continents where the need is most urgent. By doing so, swimming will be more accessible, democratising its practice.

The programme's application requires planning, implementation, follow-up, evaluation and sustainability. Therefore, it is vital to count on the government's' implication by offering the required logistical and financial support in each country where it will be implemented.

As the FINA privileged partners in the five continents, our 208 National Member Federations have a special role in this strategy. All of them are naturally aware of the importance of Swimming, but they must now convince their local authorities of the crucial importance of this programme.

Alone, FINA cannot act. We are offering the tools, but we need favourable conditions to develop this project.

#### I count on all of you to achieve it!

If we are successful, we can save many lives, we can provide a better future for our children, giving them not only the possibility to practice sport, but also educating them to be better citizens.

In their name, and on FINA's behalf, THANK YOU!



**Dr. Julio C. Maglione** FINA President



### PROCESS OF ADAPTATION

Learning to swim is more difficult and more complicated when a person is affected by fear. This stage of adaptation is designed specifically to establish, through a combination of support, teaching and methodology, a step-by-step approach for the student, to bring them gradually to a level at which they positively embrace an unfamiliar medium, water. This approach should be basic, allowing the student to enjoy being in the water, with the security provided by the teacher and swimming aids, and with a gradual escalation of activities in terms of difficulty.



For a person to be safe in the water, ideally they need to pass through the following two stages:

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- 1. Getting used to the water (adaptation)
- 2. Learning swimming techniques





a. Activities which involve putting one's foot in a pool/at the beach/lake, etc.

**Goal**: to familiarize oneself with the water, overcome any initial fears, begin the process of postural retraining. Depth of 50-90 cm.

- 1. Students simply walk in all directions, getting round obstacles such as poles, with ropes above.
- 2. Incorporate little methodological games focusing on movement, carrying simple items, etc., where the game and the interest taken in the items distracts the student's attention away from the fact that they are in a "dangerous medium".
- 3. If the pool or water is very shallow, get the student to support himself with his hands, suspend his body while supporting himself with his hands, kick his legs as if swimming the crawl.
- 4. Games with balls, throwing and moving about, etc.



#### WHAT IS POSTURAL RETRAINING?

We all (as bipedal creatures) base our stability parameters, both static and dynamic, on spatial physical references. We have an in front, a behind, two sides, an above and a below. With these coordinates we move in the world.

Our brain registers these conditioning data for most motor actions we perform in our daily lives. However, these data are useless when the body changes position and lies in the water. What was above is now behind, what was below is now in front, and so on, always with reference the original framework of bipedalism.

Naturally, when the body changes position and lies in the water, this, together with the lack of a solid support, causes all the data gained from the experience of life to be blocked, leading to tension in the body, doubts and awkwardness in movements, and sometimes fear or despair.

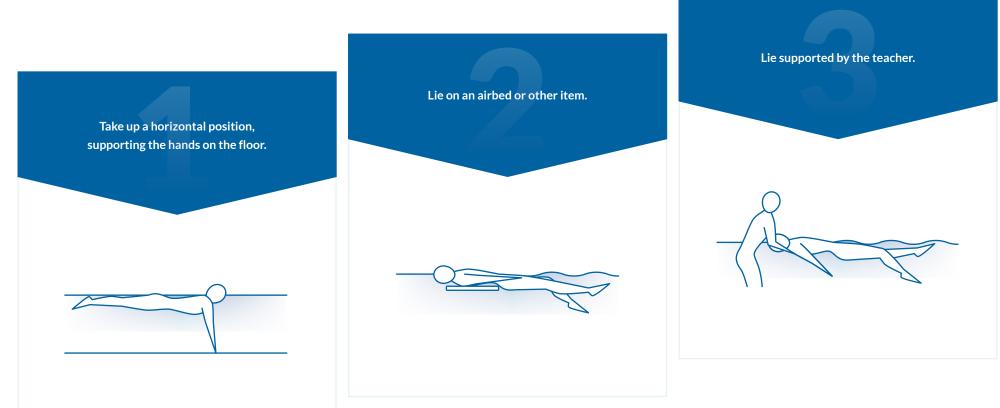
We therefore need to create a new database, which will assist the brain in progressively interpreting the new position the person takes in water. You only have to watch the difficulty experienced by a person when he lies the water for the first time, and the resistance he puts up both voluntarily and involuntarily to doing so, automatically raising his head and losing his sense of horizontality. The same happens when a person dives into water, and raises his head to face forwards, resulting in a horizontal position as he falls and a sharp slap: the classic "belly flop". What makes him do this? Quite simply, he is seeking his historical horizon - his "in front" thereby generating undesirable positions for natural floatation.

It is therefore essential to gradually get used to the new position, what we call postural retraining.





#### EXERCISES



Another issue to consider for special cases is putting the head in the water. It is suggested that you do not verbally urge or induce the student to do this, just let personal experience take its course, and thus the student will create his own framework of learning, security and self-esteem. In most cases, this problem will not occur, but "special cases" will always arise at some time in the various groups.





#### b) Deep pool

It may be that you are in a pool in which students cannot reach the floor with their feet.

In this case keep groups small:

- 1. Appoint a safety observer at the edge of the pool.
- 2. Safety is paramount in this area. A case of fright can affect others and set back the learning process.
- Use aids to assist floatation and movement. Recommend that students wear float jackets which incorporate pieces of polystyrene foam or plastic measuring around 20 cm. Try not to use inflatable arm bands or underarm floats, as these tend to condition and inhibit natural arm movements. In this way, students can float and move their legs and arms while feeling reassured by the float.

Many teachers prefer to dispense with these aids, but when the group is very large, it is advisable to rule out any possible risk.

- 4. If possible, construct platforms that raise the floor and children

  in this case can reach the floor with their feet. Clearly
  delimit the area where the class is taking place.
- 5. Your position vis-à-vis the group is: always in the pool, always facing the group; "never turn your back, and never lose sight of them". While working, observe the group.

You will thus have the issue of safety under control.





#### **TYPICAL EXERCISE**

Ventral floatation, with or without movement, is the ultimate goal of the process that begins with adaptation.

Remember, adaptation is the process of familiarization of a person who, because he is unfamiliar with water, fears it, is intimidated by it, and this prevents him from trying to tackle more complex tasks.

Once this stage of adaptation has been completed successfully, and the person is comfortable in the water, with some confidence, the process continues with progressively more difficult methodology, always from the simple to the complex, and at this point it becomes possible to introduce the act of floatation, both ventral and dorsal.



#### **VENTRAL FLOATATION**

We shall refer to the basic act as ventral floatation. This is an action that many believe to be simple, as long as "postural retraining" has been successfully accomplished. If not, it will require a little more work. It is not easy to move the arms while kicking the legs at the same time, but this is a classic "doggy paddle" action that comes naturally in the first few years of life, so that the next step should not feel totally strange, especially for children. You may start with floats and then, as the student progresses, gradually limit the use of these aids. As progress is achieved, you may move on to the second floatation position, with or without movement by kicking.





#### **DORSAL FLOATATION**

 Exercise lying on a floating mat, just so that the student can experience the position on a moderately solid surface. It is advisable to use mats of different thickness if available, starting from the thickest to the thinnest/least sturdy.



2. The presence of the teacher in the water, accompanying the student through the exercise by supporting him with hands on his back and/or head, is essential for the student to feel safe and secure, since it is not easy for a beginner to lie on his back.





## SUMMARY

We have gone over a very important aspect of the process of developing student safety. The process of getting used to the water is essential for most people, regardless of age. You may find that, as this is a highly individual process, the number of classes required will vary. We have described the process in very general terms to facilitate comprehension and provide uniform criteria.

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### THE BASICS

Undoubtedly, with regard to the various possible water environments where the learning process may take place, consideration must be given to a number of factors that make this process completely reliable. These are:

Possibilities offered by the infrastructure.
 Teaching staff.

With regard to the teacher, it is imperative that the teacher have special training in the subject he teaches.

### A TEACHER WITH A SOLID FOUNDATION

What knowledge do we need to be a good teacher? A set of basic principles will form the best foundation for a teacher to help students to overcome obstacles, teach them the right movements, and ensure the success of a person who has the potential to master the water with the right techniques.

- 1. Technical / mechanical principles.
- 2. Methodological principles.
- 3. Physiological principles.
- 4. Teaching principles.
- 5. Regulatory principles.

We will go into just two of the above in more depth.





## **TEACHING PRINCIPLES**

- 1. Tailor the process for individual learners within groups.
- 2. Interpret the needs of each student.
- 3. Establish strategies for progress in each class, in accordance with the weekly lesson plan.
- 4. Ensure a gradual increase in difficulty in the exercises, from simple to complex.
- 5. Set the safety parameters in the class.
- 6. Plan and evaluate each class.

### PHYSICAL/MECHANICAL PRINCIPLES

The teacher must know that:

- 1. The water offers resistance to the swimmer as he advances (principle of resistance).
- 2. Both the arms and the legs can perform propulsive actions (principle of propulsion law of action and reaction, law of lift or pressure differentials).
- 3. In styles involving alternating arm movements, the body rocks from side to side (principle of rotation).
- 4. The body floats, both owing to the characteristics of the body itself, to a greater or lesser extent, and through the use of lifting manoeuvres (principle of floatation).
- 5. The arms perform two fundamental actions in their movements (principles of traction and recovery, associated with coordination).
- 6. The subject must adjust his breathing to the sequence of arm movements (principle of breathing).
- 7. The student must move his hands and arms through different areas under the water in terms of both depth, length of stroke and lateralness/tridimensioness of the stroke (principle of seeking different areas of thrust).

A teacher with a knowledge of all these principles will be a great swimming teacher, as these aspects will be covered. The foundations are laid for a successful process.

### **SUMMARY OF EXERCISES FOR** THE PERIOD OF ADAPTATION

The exercises proposed herein are just a summary of the broad volume of literature consulted in a variety of countries, the aim being to point out the steps to be followed in the process of adaptation and learning, and no doubt many different versions can be added to what is recommended as guide here.

Note that the specialist literature identifies and recommends over 2000 simple and complex exercises. This period is very important, especially for people who do not have any experience of the water. The time required for this process will very much depend on the individual. Some people need just a few classes before they can go on to join another programme, others will need more attention and more exercises before they can get into and stay in the water

It must also be borne in mind that the activities described here are aimed at students aged 5 and over. For younger children, the activities must be specially tailored to their age.





**Total number of students per teacher**: shallow pool, 6-8 students; deep pool or natural environment, 2-3 students. It is recommended that there always be an assistant for safety reasons.

### DAYS 1 - 2 - 3

- 1. Exercises to familiarize students with the space where they will interact with the water, as regards depth, the possibility of an uneven/sloping floor, the type of floor, viscosity or turbidity of the water, etc. Simply walking in all directions, then jogging (all in the same class).
- 2. Games or activities involving moving about in the vertical position, moving around obstacles such as rings, ropes, poles.
- 3. Games and activities with balls, moving the ball from one edge to another, introducing some difficulties or variants in the repetitions, alternately pushing with one arm then the other, with the chest, etc.







#### DAYS 4 - 5 - 6

- 4. Simple exercises involving immersing the face in the water. There are about 100 different exercises, some in the form of games.
- 5. Postural retraining exercises. Lying on a floating mat assisted and supported by the teacher, who holds the student's hands – supported on an edge of the pool – supported and assisted by the teacher with a pole – supported on the bottom of the pool if it is shallow (all these exercises in the ventral position) – two or three children lying on a floating mat and being moved around the pool by the teacher.
- 6. If the pool is deep, get students to move across the water holding on to the edge. If working in a natural medium that is not a pool, secure a tensioned rope where students can grasp it and perform exercises to move about (never do this in areas too deep to stand). For all activities carried out water which is deep for the students, they must wear a life jacket while doing the activity.
- 7. Exercises holding on to a kickboard, students kick their legs while the teacher helps them to cross. Do these exercises with the head out of the water, and also with the head in the water if the student is ready for this.
- 8. Standing still, inhale water through the mouth with the head out of the water and then exhale through the mouth and nose while ducking the head under the water. Repeat the exercise while walking about the pool.
- 9. There must always be an assistant observing from outside the water to ensure the safety of the group.

#### DAYS 7 - 8

Start activities for ventral floatation: walking around with the water up to the chest, and arm movements for support and propelling backward.

- 10. Same exercise, holding on to the kickboard, changing the gripping hand, in order to get used to alternating arm actions.
- 11. Exercises kicking the legs while alternating arms.

12. Exercises in the ventral position, while the teacher provides support with his hand under the chest, the student tries to kick his legs and move his arms while floating and moving across the water.

13. Basic locomotion exercise on own with jacket, but accompanied by the teacher.

Note: Whenever you are working with a child, you must always be in front of or beside him, never behind. This will give the child more confidence in you. If are behind the student, he will sometimes try to look at you, arching the body and causing considerable muscle strain to his neck and body.





**Note**: It is estimated that 10-12 days are generally sufficient to complete this adaptation process except for students who encounter problems or have particular circumstances. The student may then be able to face new challenges such as learning the basics of a style.



#### SWIMMING FOR ALL SWIMMING FOR LIFE

#### DAYS 9 - 10

- 14. Exercises for adaptation to the back position, on floating mat, with the head on the teacher's hand (the teacher's other hand is on the student's back), first do while stationary, then moving across the water (without jacket).
- 15. Exercises in ventral position, changing to dorsal position, with or without leg and arm movements by students. Always assisted by the teacher.
- 16. Exercises in dorsal position, moving about, student unassisted.

**Important**: Always remember that a student will not make progress with an exercise if he has not mastered adaptation completely. If the first stage is not consolidated there is nothing to build upon. Therefore, there is a margin for discretion on the part of the teacher between what is set out in theory herein and what happens in practice in the class. The teacher may decide to extend or simplify the exercises, or may lengthen or reduce the time spent on each exercise, etc.

This manual is not set in stone and can and should be used flexibly although it is recommended that the general number of classes per goal be adhered to so as to ensure uniformity in criteria and greater ease in scheduling classes over longer periods of time for thousands of students.

#### DAYS 11 - 12

Establishment and repetition of concepts, working on the weak points of each student.

### SUMMARY OF THE PERIOD OF ADAPTATION

Exercises for familiarization and adaptation to the water, exercises involving moving about on two feet and horizontal ventral postural retraining, exercises for commencing ventral floatation and horizontal dorsal postural exercises.

When you see that the process is going well, and when you think the student is ready, you may start working on entry into the pool (vertical jumps from the edge of the pool into the water). Start from a height where the feet are very close to the water and the water is deep enough to be safe.

If you believe that an exercise should be repeated on other days in addition to those allotted for the exercise herein, in order to improve performance, this should be done.



### LEARNING A SWIMMING STYLE

To ensure that this new process - mastering a swimming style - is completed successfully, and given the time that this takes, it is necessary to have a student who is fully adapted to the water.

What criteria must be met before it can be considered that the student has successfully completed the adaptation stage?

- 1. Student shows no fear when getting into and on contact with the water.
- 2. Student can float in both dorsal and ventral positions.
- 3. Student can move about with no particular technique in both positions, and can change positions without the aid of the teacher.
- 4. Student can move about totally submerged (underwater action).
- 5. Student can inhale through mouth out of water and exhale through mouth and nose in water.
- 6. Student can jump from the edge in a standing position.

These criteria can be used to assess whether the student has reached the end of the adaptation period.



## **PROCESS OF LEARNING A TECHNIQUE**

# SUMMARY OF EXERCISES FOR THE PERIOD OF LEARNING THE CRAWL

Total days: 12 - 15 Length of each class: 45 minutes



### DAYS 1 - 2

- 1. Exercises involving kicking the legs, with and without kickboard, ith head out of and under the water.
- 2. Breathing exercises (inhaling through the mouth and exhaling through mouth and nose). These are performed while standing close to an edge, holding on to the edge, or with a pole, etc. In other words, in a stationary position, not moving about. Start these exercises breathing forwards and then towards the two sides.
- 3. Repeat the breathing while walking with the kickboard in the hands and with arms outstretched out while performing the breathing exercise.







#### DAYS 3 - 4 - 5

- 4. Repeat 1, 2, 3 for 10 minutes (from now on, no more breathing to the front).
- 5. Start teaching the stroke. Out of the water, explain the stroke technique to students with as much visual information as possible. Avoid giving complex technical details so as not to confuse the student, the recovery should be with the elbow semi-extended and semi-extended for traction in the water.
- 6. In the water, while standing, practice the movement with the same arm several times, with the other arm resting on the edge or on a kickboard.
- 7. Repeat with the head under the water, without breathing, and with the head out of the water.
- 8. Perform step 7, walking around as before.
- 9. With 5 minutes of the class to go, hold the kickboard and kick the legs with the head under the water, performing two to three strokes. Stop and start with the other arm.



#### DAYS 6 - 7

- 10. You can take 15 minutes to go over exercises from previous days that you consider need to be adjusted and/or corrected.
- 11. Exercise for coordination of kicking with the kickboard/breathing. Kick while holding the kickboard and breathe to the side.
- 12. Exercise for coordination of kicking with the kickboard/movement of just one arm.
- 13. Same catch-up coordination exercise (one arm arrives back, the other goes).

#### DAYS 8 - 9 - 10

- 14. For 10-15 minutes, go over exercises from previous days so that they may be corrected/become automatic, as you see fit.
- 15. Exercise for coordination of stroke/breathing, supporting the hands on one edge or on the kickboard (teach the student to inhale with the movement of one arm and exhale with the movement of the other arm).
- 16. With the kickboard in both hands, kick and perform catch-up drill while breathing to one side.

#### DAYS 11 - 12

- 17. For 15 to 20 minutes, go over exercises to make them automatic as you deem necessary.
- 18. Front crawl without kickboard with only one arm (the inhalation arm).
- 19. Total swimming catch-up drill.
- 20. Swim a minimum distance without stopping for 10-15 metres.

#### DAYS 13 - 14 - 15

- 21. Introduction to another technique (back stroke).
- 22. Automation and instillation of movements learnt.
- 23. Practice basic assistance to a follow student in the deep end.
- 24. Swim comfortably and without stopping for 25 -50 metres.



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