## 10 Kilometer Open Water Swim Training Plan

The 10 Kilometer open water swim is the swimming world's equivalent to running a marathon (26.2 Miles) and is sometimes referenced as a Marathon Swim. In both, world-class times are roughly 2 hours and take dedication and training. Unlike running a marathon, the 10 K swim has the added challenge of dealing with cold water. When running in a cold environment, you can just add clothes to keep warm. For the 10K swim, we follow English Channel rules which prohibit wetsuits and allows only the basic swimsuit, plus cap and goggles. To handle the cold environment, the swimmer needs to both train in cold water and learn to take in adequate nutrition to avoid "hitting the wall" or bonking during the swim. Taking in nutrition during an open-water swim is different from fueling during a bike ride or run. When runners bonk, they slow down to a walk but can keep going to the finish line. When swimmers bonk they slow down and also stop producing internal heat from exercise that keeps them warm. This may lead to hypothermia, a serious potentially life-threatening condition. All this makes it very important for the participant to complete a solid training plan for swimming and fueling.

The 10K open water swim, like running a marathon, is not meant for novices. The assumption in this training plan is that the participant is a competent swimmer and can comfortably swim for a minimum of 2 miles, non-stop in a pool. If you are new to swimming, it is best to try the 1.2 Mile or 2.4 Mile swim first.

As part of the training plan, there are three key aspects to focus on. First is the basic training of the muscles to propel you the distance of the swim. Second is the training for multiple hours of cold water immersion. Third is training the body to take in the proper nutrition during the swim. This article will address the muscle training and the cold-water immersion. For nutritional information, there is another white paper on the Horsetooth Swim website. It is highly recommended that you practice your nutrition during your training swims to adapt to eating and digestion during (often referred to as feeds and feeding) swimming.

This training plan has three sections: Strength and Supporting Muscle Training, Distance and Base Building, Cold Water and Distance. Each section of the plan is approximately three months long.

Strength and Supporting Muscle Training: The purpose of this section is to build up the supporting muscles to prevent injury as you begin ramping up the mileage. It is a good idea during this time to work with a coach to identify any problem areas in your stroke that may cause an imbalance, potentially leading to injuries as you ramp-up the distance. It is also a good time to work with a physical therapist or personal trainer to identify dry land exercises that strengthen rotator cuff related muscles as well as any other supporting muscles needed for swimming. Frequently, the larger, power muscles will develop faster than the smaller, supporting muscles which can cause imbalances and injuries. During this section is also a great time to add yoga, Pilates or other flexibility and core strengthening activities. Open water swimming requires a much stronger core than pool swimming due to both the need to sight to maintain correct direction, as well stabilizing yourself in the waves and swells of open water.

Distance and Base Building: The purpose of this section is to slowly ramp up distance to allow the body to adjust to the increased distance safely and injury free. The goal during distance buildup is to average no more than a $10 \%$ increase per week for the Long Swim Goal Weeks (in bold). Every third week is designated as a recovery week. On the chart below, there is listed both distance and time. It is best to
move your mental mindset to swimming for a given time versus a given distance, because it is common in open water to not know the exact distance of the event on race day. At the end of this phase, you should be comfortable swimming at least two hours continuously and be prepared for beginning cold open water training.

Cold Water and Distance training: The purpose of this phase is to get you comfortable in the colder open water environment while finishing your ramp up in distance. This phase can overlap with the first two phases: you can begin cold water adaptation as you strengthen muscles and build up distance. Depending on where you live, it might be hard to get access to cold open water. You can continue the majority of your training in a pool but it is best to get in the open water at least once a week during this period. In some areas, the time allowed in open water can be limited. If the workout requires a longer period than you are allowed, add a pool swim of the balance of the distance on the same day as the open water swim.

Remember when in open water to be aware of the safety aspects. First, be legal, that is, do not swim in unauthorized areas. Second, be aware of the motorized craft in your area. It is a good idea to wear a swim buoy (for example, SwimSafer® from the International Swimming Hall of Fame) to make you visible to motor craft. Third, always, always swim with a partner. Even the most accomplished swimmer can run into trouble (i.e. hypothermia) without warning and thus it makes having a partner extremely important.

Remember, enjoy and have fun while training!

Suggested Training Plan for the 10K Open Water Swim:

|  |  | Continous Long Swim |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Section of Training | Week | Yards | Time | Weekly Total yards | Purpose |
| Strength and Supporting Muscle Development | 1 | Swim 2 to 3 times a week, averaging 1500 to 3000 yards per practice. During this time, work with a personal trainer or PT to strengthen the supporting muscles, particularly those involved with the rotator cuff. |  |  |  |
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| Distance/Endurance Ramp-up | 14 | 1000 | 15 to 20 min | 5000 |  |
|  | 15 | 1500 | 25 to 30 min | 6000 |  |
|  | 16 | 3000 | 45 to 60 min | 8500 | Long Swim Goal Week |
|  | 17 | 1000 | 15 to 20 min | 6000 | Recovery |
|  | 18 | 3000 | 45 to 60 min | 8000 |  |
|  | 19 | 4000 | 60 to 75 min | 9400 | Long Swim Goal Week |
|  | 20 | 2000 | 30 to 40 min | 7000 | Recovery |
|  | 21 | 3000 | 45 to 60 min | 9500 |  |
|  | 22 | 5000 | 1.25 to 1.5 hr | 10400 | Long Swim Goal Week |
|  | 23 | 3000 | 45 to 60 min | 8000 | Recovery |
|  | 24 | 4000 | 60 to 75 min | 10500 |  |
|  | 25 | 6000 | 1.5 to 2 hr | 11500 | Long Swim Goal Week |
|  | 26 | 4000 | 60 to 75 min | 9000 | Recovery |
| Cold Water Ramp-up | 27 | 5000 | 1.25 to 1.5 hr | 11500 |  |
|  | 28 | 7000 | 1.75 to 2.25 hr | 12700 | Long Swim Goal Week |
|  | 29 | 4000 | 60 to 75 min | 9000 | Recovery |
|  | 30 | 6000 | 1.5 to 2 hr | 12500 |  |
|  | 31 | 8000 | 2 to 2.5 hr | 13000 | Long Swim Goal Week |
|  | 32 | 4000 | 60 to 75 min | 9000 | Recovery |
|  | 33 | 6000 | 1.5 to 2 hr | 12500 |  |
|  | 34 | 9000 | 2.25 to 2.75 hr | 14400 | Long Swim Goal Week |
|  | 35 | 4000 | 60 to 75 min | 9000 | Recovery |
|  | 36 | 6000 | 1.5 to 2 hr | 12000 |  |
|  | 37 | 10000 | 2.5 to 3 hr | 16000 | Long Swim Goal Week |
|  | 38 | 6000 | 1.5 to 2 hr | 12000 | Begin taper |
|  | 39 | 4000 | 60 to 75 min | 6000 | Taper |

Continuous swim: Distance that should be swum without stopping, either in a pool or open water.

