

Benefits of interval training in swimming



Constant pace and rest are the foundation for developing your endurance and are best accomplished by swimming intervals. This ensures consistency and accountability of swimming pace and rest.

What is interval training ?

Interval training consists of swimming a series of repeated distances and rest periods.

A set is the usual swimming terminology used to describe a group of repetitions. E.g. 10 x 100 m/yd Freestyle.

The training responses will depend on the number of repetitions, distance of repetitions, intensity (speed) of repetitions and the duration of rest or recovery periods.

For examples:

- 1) If the training purpose is to maintain or develop endurance, one method is through repetitions with short rest periods. E.g. 10 x 100 m/yd Freestyle at low to medium intensity with 10 seconds rest between each repetitions of 100 m/yd.
- 2) If the training purpose is to develop a higher level of endurance or speed, one method is to alternate short distance repetitions with a high intensity and longer period of recovery. E.g. 10 x 50 m/yd Freestyle fast with 1 minute rest between each repetition of 50 m/yd.

What makes interval training so effective ?

Interval training can be applied to all levels of swimmers from beginners to competitive athletes.

Interval training enables greater exposure to more intensive training without the excess fatigue.

Swimming a long distance without stopping makes it more difficult to maintain good technique and consistent intensity.

Swimming 10 minutes non-stop will use the same amount of energy as swimming 20 x 30 seconds with 5 to 10 seconds rest between each 30 seconds block.

In addition to practicing short distance repetitions, interval training:

- Enables you to increase the intensity during a set without becoming too fatigued.
- Allows you to focus and maintain proper stroke technique throughout the set.
- Develops the cardiovascular system to build endurance.
- Develops and trains each energy system more accurately.
- Adds variety to any session with much more potential to combine swim sets in creative ways.

What are the different methods of interval training ?

The first method is based on the swimmer having a fixed amount of time to rest between each repetition.
E.g. 10 x 100 m/yd Freestyle with 10 seconds rest between each repetitions of 100 m/yd.

The second method is based on the swimmer completing each repetition on a specific time usually known as a send-off interval.

E.g. 10 x 100 m/yd on 2'00 (starting each 100 m/yd every 2 minutes)

Most swimming sets of Outpace Swimming Workouts are on send-off intervals.

This means you focus on when you start each repetition, not on the amount of rest in between.

Training with send-off intervals is far more beneficial for developing your endurance than doing repetitions based on how much rest you want to get after each swim.

Send-off intervals allow swimmers to:

- Maintain in the best technique while swimming.
- Remain engaged, focused and motivated throughout the whole swim set.
- Measure progress throughout the season or over a long term.
- Challenge themselves to improve the starting times (send-offs) as they are progressing.

Examples of motivational challenges from send-off intervals:

- 1) A harder send-off interval requires the swimmer to swim fast enough to “make the interval”
- 2) An easier send-off interval can challenge the swimmer to swim faster as the resting time is longer

How do send-off intervals work ?

To manage send-off intervals you will need either a pace clock or a watch.

Send-off interval = swim + rest

The rest time is included in the send-off interval.

E.g. In a set of 6 x 100 on 2'00, each 100 is an interval within the set. This means that you have 2 minutes to complete a 100 before you begin the next one.

The rest time varies in duration depending on the specific aims of the set, e.g. endurance, power or speed.

Usually, the more intense or the faster the swim pace, the longer rest therefore the longer interval you get.

On the other hand, if you are swimming at easy or steady pace, the chances are that the send-off intervals won't allow you much more than 10 seconds rest most of the time.



There are many other variations of send-off intervals swim sets such as:

1) Descending send-off intervals:

This means that your send-off interval decreases during the set.

Example: 4 x 100 on 2'00 / 1'55 / 1'50 / 1'45

In this example, the first 100 is swum on a 2 minutes send-off interval, the second 100 on a 1 minute and 55 seconds (1'55) send-off interval, the third 100 on 1 and 50 seconds (1'50) send-off interval and the fourth 100 on 1 minute and 45 seconds (1'45) send-off interval.

See the details below when using a pace clock:

1st 100: Start the first 100 when the **hand is on 60** (or 00),

2nd 100: Start the 2nd 100 when the hand is on 60 (or 00) as the first 100 as on 2'00 send-off

3rd 100: Start the 3rd 100 when the **hand is on 55**. *Subtract 5 as the second 100 is on 1'55 (2'00 – 1'55 = 5")*

4th 100: Start the 4th 100 when the **hand is on 45**. *Subtract 10 as the third 100 is on 1'50 (2'00 – 1'50 = 10")*

2) Descending send-off intervals with an increase of pace:

In this variant, you swim each 100 five seconds faster than the previous ones so you get the same amount of rest each time.

Example:

1st 100 on 2'00 send-off interval at 1'50 pace = you get 10 seconds rest

2nd 100 on 1'55 send-off interval at 1'45 pace = you still get 10 seconds rest

3rd 100 on 1'50 send-off interval at 1'40 pace = you still get 10 seconds rest

4th 100 on 1'45 send-off interval at 1'35 pace = you still get 10 seconds rest if you were continuing the set.

3) Descending send-off intervals with a fixed pace:

From the above example, you swim each 100 with a fixed pace, e.g., 1'40 (1 minute and 40 seconds) and get progressively less rest throughout the set.

Example:

1st 100 on 2'00 send-off interval at 1'40 pace = you get **20 seconds rest**

2nd 100 on 1'55 send-off interval at 1'40 pace = you get **15 seconds rest**

3rd 100 on 1'50 send-off interval at 1'40 pace = you get **10 seconds rest**

4th 100 on 1'45 send-off interval at 1'40 pace = you get **5 seconds rest** if you were continuing the set.