

Henleaze Swimming Club

Winter Swimming Guide



The Joy of Winter Swimming – A Guide

Why is winter swimming so good for you?

Scientists have found lots of evidence of health benefits from regular cold water swimming.

- It contributes to better general well-being. Winter swimmers experience less stress and fatigue, and more vigour. They report better memory function, better mood, and feel more energetic, active and brisk. Swimmers who suffer from rheumatism, fibromyalgia or asthma report that winter swimming relieves pain.¹
- Winter swimmers do not contract diseases as often as the general population. Infectious diseases affecting the upper respiratory tract are 40% lower among winter swimmers. Short term exposure of the whole body to cold water produces oxidative stress, which makes winter swimmers develop improved anti-oxidative protection.²

You will also get to see the Lake throughout the seasons: the spring and autumn can be wonderful and swimming on bright clear winter days can be a tonic for the soul.

We also hope to have fun!

Why people love winter swimming

Winter swimming has changed my life! Ros

I swam in April when the Lake opened so I thought I might as well pick up a card and get my sticker for April. I had no experience of swimming in cold water and did not expect to get beyond October. Now I have got my winter dipper badge and managed to swim nearly every week in just a swimsuit - including at 2C in February. It has been fantastic and such a social and friendly group. Sarah

I have swum over the years during the winter but never regularly. I was surprised by how much you get use to very cold water and swam much further than I expected. The sauna was fun after my swim (and sometimes before and between!). Winter swimming really made a big difference to my winter and looked forward every week to my winter dip. Will be there this coming winter. Mark

We are all as mad as water snakes! I never felt more alive. Abigail

Cozy steamy chats. Then astoundingly cold exhilarating plunge: pushing your limits and exceeding your expectations. Back into the laughter and gaiety of a hot crammed room occasionally joined by a cold clammy body squeezed between you. Screaming and push them away. Jude

I've loved it! It is challenging. It is also very sociable and invigorating. Getting in is the hardest bit for me and it is wonderful getting out! I hope to swim further next year. Jenny

How can we ensure winter swimming is safe?

The Serpentine Swimming Club in London, which has years of experience of winter swimming, advises it is best to start in the summer and keep going. Regular winter swimming helps you adapt to the coldness of the water.

There are four hazards you need to be aware of before you swim in cold water.

Hazard 1: Cold Shock³

Humans have a *mammalian diving reflex*, which is an autonomic response to sudden immersion, which causes us to hold our breath, and slows our heart-rate and circulation. However, in cold water, i.e. under 15C, the mammalian diving reflex is overcome by cold shock.

Cold shock doesn't occur immediately, but between 10 seconds to 3 minutes after entering the water:

- With cold shock, your breathing rate increases from normally around 10 breaths per minute, to 60 breaths per minute
- Your ability to hold your breath decreases from over a minute to just 10 seconds
- Surface blood vessels close down, causing a sudden increase in blood pressure
- Most critically, you may inhale or gasp, even if your face is underwater.

These changes can lead to:

- **Hyperventilation, caused by breathing rate increase, leading to dizziness and confusion**
- **Cardiac arrests or strokes, caused by increased blood pressure**
- **Sudden inhalation of water, and possibly drowning.**

Regular swimming in cold water decreases all these possibilities, but does not eliminate them.

For the above reasons we advise that you only enter into the Lake via the swimming steps with no jumping or diving in.

If you have a known heart condition, history of strokes or asthma we require that you consult with your doctor before signing up for winter swimming.

Hazard 2: Hypothermia

Hypothermia is defined as a body temperature below 35C. There are varying degrees of hypothermia: mild, moderate and severe.

Obviously swimming in cold water puts you at risk of hypothermia.

For this reason we ask you to know your own limits and not to push yourself beyond them. You should also note that as the water temperature drops your ability to swim safely decreases. How long you will be able to swim at 5C will be a lot less than at 15C. Be prepared to swim less as the water temperature drops.

Again swimming regularly will help your body adapt to cold water swimming

The available swimming area will be restricted when the water temperature falls below 10C. We ask you not to swim outside the designated area

If we think you are showing signs of hypothermia we will ask you to exit the water. Please ensure you comply with this immediately.

Hazard 3: After Drop

When you swim in cool water the body cleverly tries to protect vital organs by reducing blood flow to the skin and limbs. Thus the core stays warm while the skin, arms and legs cool down. The process is known as peripheral vasoconstriction.

Shortly after you exit the water, peripheral vasoconstriction ends. Cold blood from your limbs and skin returns to your core where it mixes with warmer blood thereby causing your deep body temperature to drop, even if you're warmly dressed and move into a warm environment. This is why you often only start shivering 10 to 15 minutes after leaving the water.

"After drop" is common after swimming in cold water; you get out and feel fine, and then you start to get colder, sometimes growing faint, shivering violently and feeling unwell.

After drop can occur up to twenty minutes after you exit the water. You should not drive or operate machinery until you have warmed up. Please seek assistance from a lifeguard. The Lake has a "warm" room set up during the winter to help swimmer recover from after drop.

You should not take a hot shower or bath until you have warmed up. If you need to have a shower or bath only use warm water.

Hazard 4: Transient Global Amnesia

Transient global amnesia (TGA) is a neurological disorder whose key defining characteristic is a temporary but almost total disruption of short-term memory with a range of problems accessing older memories. A person in a state of TGA exhibits no other signs of impaired cognitive functioning but recalls only the last few moments of

consciousness, as well as possibly a few deeply encoded facts of the individual's past, such as their childhood, family, or home perhaps.

It is rare – affecting about one in 10,000 people in the UK every year – and it typically happens to people over the age of 50. There are a number of causes include swimming in cold water.

Most people recover within 24 hours.

TGA should not be confused we a transient ischaemic attack or mini stroke. Please tell any medical staff – GP or paramedic - the circumstances of the incident so transient global amnesia can be diagnosed correctly.

Hazard 5: Swimming-induced Pulmonary Edema

Swimming-induced pulmonary edema (SIPE) is a type of pulmonary edema that occurs during surface or underwater swimming and causes the accumulation of fluid in the lungs without water aspiration and consequently symptoms of pulmonary edema. It has an estimated prevalence of 1.4% among triathletes.

The patient is usually severely breathless, sweaty, nauseated and anxious. An ambulance should be called and immediate medical attention sort.

How to keep yourself safe

Deciding if winter swimming is for you

Most healthy people will be able to adapt to cold water swimming if they are sufficiently motivated. If you are pregnant or have an underlying cardiac condition, low or high blood pressure, asthma, diabetes or epilepsy or other health issues you should consult their doctors before trying winter swimming.

Commit to coming frequently as regular cold water swimming will help your body adapt to the cold.

If you are a distance swimmer please accept that the distance you will be able to swim safely will be severely limited. Do not compete with experienced winter swimmer who may be able to stay in the water for a considerable time. During your first winter establish your own limits – this is different for everyone. The first winter is the most challenging but it does get easier after that.

Before you swim

It is important that you are fully well and in good health when you swim in the winter. To ensure your own safety please only swim if:

- You want to. Please do not be influenced in your decision to swim by friends and family.
- You are fully well and in good health
- You have slept well the previous night
- You have eaten at breakfast
- Are free from the influence of alcohol and drugs.

Please check with your doctor that any prescription drugs will not affect your ability to swim in cold water.

During your swim

- Only enter via the steps and ease yourself into the water
- Get out of the water before you get too cold as you will continue to get colder after swimming – give your body a margin of safety. This is difficult to judge as when you are swimming you may feel perfectly fine. Know your own limits and err on the safe side.

After your swim

- Please do not stand around after your swim chatting especially when the air temperature is low and/or there is a breeze or strong wind blowing. Please get changed quickly into warm clothes.
- Drink something hot and eat something. It is a good idea to bring a flask of your favourite hot beverage and plenty of cake to share.
- Keep an eye on your fellow swimmers. Someone who appears completely fine getting out of the water may be in trouble 10 minutes later and may need help. Please let a superintendent know immediately if you are concerned about anyone.

What should you wear for winter swimming?

As the water temperature drops you may want to consider extra protection! This is not wimpy but allows you to enjoy the experience more.

Before and after your swim

Please come to the Lake in warm clothing – multiple layers are best - and wear water proof footwear. Many winter dippers have dry robes to help with changing quickly and warming up after their swim.

Swimming gloves, sock or boots

When you swim in cold water your blood leaves your extremities to protect your vital organs, hence your hands and feet can become very cold very quickly, and can impair your ability to swim. It is well worth considering a pair of insulated swimming gloves and/or swimming sock/boots. Most winter swimmers used both gloves and socks when the water temperature drops and consider them essential kit.

Swimming Caps

A swimming cap helps reduce heat loss through your head - especially important if the air is cold or a wind is blowing. Silicone hats are better than latex hats, two hats better than one and neoprene swimming caps possibly best.

Wetsuits and thermal rash vests/shorts

Some people will prefer to wear a wetsuit as the temperature drops – we all know people who will not swim in July without one! Thermal rash vests and shorts will take the edge of the coldness.

Winter Dipper Badge

A winter dipper badge will be presented to all people who swim 6 out of the 7 winter months (October – April) at the Lake as follows:

1. Blue badge – awarded to anyone completing their first year winter swimming.
2. Silver badge – awarded to blue badge holders who swim through the winter.
3. Gold badge – awarded to silver badge holders who swim through the winter.

Remember to get your winter dipper sticker on your card every month you swim.

Winter dipper year badges will also be able to be purchased from the Lake. Look out for signs at the Lake.

Winter Swimming Sessions

There will be three sessions per week from November to the end of April:

1. Wednesdays 10.00am to 2.30pm (out of Lake grounds by 3pm)
2. Saturdays 10.00am to 2.30pm (out of Lake grounds by 3pm)
3. Sundays 10.00am to 2.30pm (out of Lake grounds by 3pm)

Look out for Club emails and/or notices at the Lake for details of Christmas and Easter opening.

Subscription forms will be sent out late in October. Winter swimming subscriptions are payable by the end of October.

Events and Facebook Group

Keep up to date with winter swimming events at the Lake by visiting the Events page of the website (www.henleazeswimmingclub.org/events/). Keep in touch by join the Winter Dipper's Facebook group: "Henleaze Lake Winter Dippers".

References

1. Huttunen, Pirkko, Kokko, Leena, Ylijukuri, Virpi (2004). "Winter swimming improves general well-being". International Journal of Circumpolar Health 63.
2. Siems, WG; Brenke, R; Sommerburg O.; Grune, T. (1999). "Improved antioxidative protection in winter swimmers". QJM: an International Journal of Medicine 92 (4):
3. <http://loneswimmer.com/2012/11/13/cold-water-immersion-and-cold-shock-the-first-three-minutes/>