P.E. SPORTS AND ACTIVITIES

SWIMMING

"There are always going to be obstacles that come in your way, stay positive."

Michael Phelps, American former competitive swimmer and the most decorated Olympian of all time

INTRODUCTION

Swimming is often considered an important life skill as it can save your life or even that of another person in the event of an emergency. Swimming is not difficult to learn, it takes a little coordination, practice and patience. The key to swimming is moving arms and legs in tandem and timing your breathing.

Swimming is an enjoyable recreational activity, considered a strong workout, and is a gratifying competitive sport. Regardless of the reason for being in the water, it is important to be safe. Safe swimmers always swim with someone else in designated areas supervised by lifeguards. Inexperienced swimmers wear lifejackets. Safe swimmers are aware of the weather and water conditions when outdoors, they don't overestimate their swimming or diving skills. Finally, they make sure they they're aware of water depth. Safety first, always.

As a recreational activity, swimming provides a low-impact workout and is a good way to relax. Recreational swimmers generally swim using the freestyle, side stroke, breaststroke and backstroke.

At the competitive level, swimmers receive the health benefits of a vigorous workout as well as the excitement of competition. Breaststroke, freestyle, backstroke and butterfly are four popular competitive swimming strokes. Pools for competitive swim vary from 50 meters in a pool to much further distances in open water.

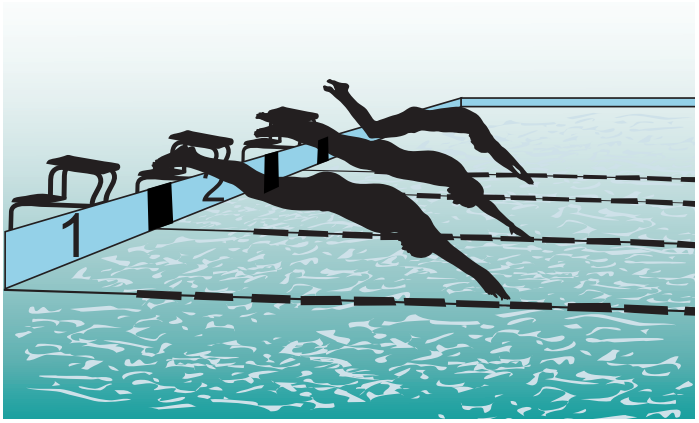
Swimming can help a person build endurance and muscle strength and also benefits the heart and lungs. Swimming also provides a low-impact therapy for some injuries and medical conditions.

HISTORY

Rock paintings showing people swimming have been found in early Egyptian caves. It is estimated these paintings are around 10,000 years old. Swimming became a competitive sport in the early 1800s in England. St. George's Baths, was the first indoor swimming pool built in 1828.

In 1837, swimming competitions were held in and around London. It was near this time that swimming emerged as a competitive sport in England. Captain Matthew Webb was the first man to swim the English Channel in 1875. The first women's swimming championship was in Scotland in 1892. During the 1896 Olympic Games, swimming was a male competition. Women entered the competition in 1912 during the Summer Olympics in Stockholm.

The International Olympic Committee recognizes FINA, the Federation Internationale de Natation, which coordinates competitions in aquatics. This organization is located in Lausanne, Switzerland. It develops rules for international competitions and organizes world swimming and aquatic championships. FINA sets rules on the size (length, breadth and depth) of swimming pools used in competitions.



More than 200 nations are affiliated with FINA. Swimming is a sport that is spans across all nations and continents. Many countries take part in swimming tournaments. USA Swimming is the National Governing Body for the sport of swimming in the United States. Their membership is comprised of swimmers from age group levels to international teams. In fact, USA Swimming is responsible for selecting and training teams for the Olympic Games. Today, men and women compete in 16 Olympic events, involving four different strokes across a range of distances. These are all timed events. There are also judged swimming events, such as diving and synchronized swimming. In water polo, 12 teams qualify for the men's division at the Olympic Games, while eight compete in the women's.

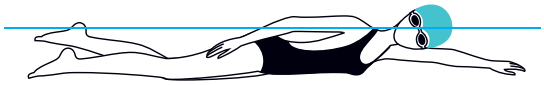
HOW SWIMMING IS PERFORMED

Swimming requires practice to become a safe and accomplished swimmer. There are four main strokes in swimming: freestyle, backstroke, breaststroke and butterfly. Each with their own unique form and style.

Treading Water

Although treading water is not considered a swim stroke, it's important to learn and often taught first. Treading water helps to keep a person afloat when stopping a swim stroke. This is a motion of your arms and legs moving at the same time. Right arms should push out and away from your body and in a clockwise motion back to the chest. Left arms should be in sync using the same motion but in a counter-clockwise direction. Your back should be straight with legs bent. Legs should be making the same clockwise and counter-clockwise movements.

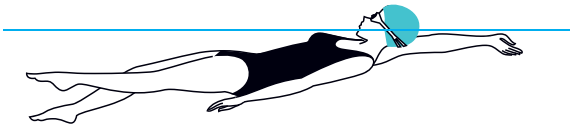
Freestyle



The most common stroke is the freestyle or front crawl stroke. It is considered to be the most natural stroke in swimming. It is done by being on your stomach while kicking your legs and rotating your arms over your head.

Your back, neck and head should be in line with each other to reduce resistance. In freestyle, you should reach forward with your right arm and extend it as far as possible as the right palm is placed into the water. The left hand should be in motion reaching up and forward. The right arm will be pushing through the water as your left arm is stretched out and swinging about your head. When rotating arms to reach forward, your body will rotate with the arm reaching out of the water. Your body will pivot with each stroke allowing you to push harder through the water and extend your arm further. While rotating, tilt your head and breathe. You shouldn't take a breath with every stroke but rather find a comfortable pattern, for example every 3-5 strokes. Your feet should be kicking in a flutter.

Backstroke



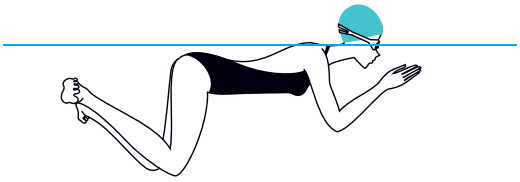
This stroke has similar movements as freestyle but on your back instead of on your stomach. It's considered an easy to learn stroke.

With this stroke, your head is in a neutral position, in line with your spine. Your face is above the water and you look straight up. Execute a flutter kick with your legs, point your toes, kick your legs alternately upward and downward.

One arm recovers above the water from the hip to the overhead position in a semicircular movement. The arms are kept straight during the recovery. Meanwhile, the other arm sweeps underwater from the overhead position backward to the hip, providing propulsion.

The hand follows an S-like pattern during this sweep. The recovering arm becomes the sweeping arm once it enters the water in front of the swimmer, and the sweeping arm becomes the recovering arm when it exits the water at the hip.

Breaststroke



First developed in the 1960s, the breaststroke allows you to propel forward while keeping your head above water. Since its development, the stroke has evolved into a whip-kicking undulating stroke.

Start with palms together and thumbs up. While keeping your hands together, push your arms forward away from your body. As you stretch your arms straight, release your hands and turn your palms out. Push your arms to your sides and back up to your chest returning to the starting position.

Legs are equally important in this stroke. The kick is a short, narrow whip-kick and timing is key. Together with your arms, draw your knees up to your chest and kick your legs out to each side as wide as you can. Bring your legs together, straight back behind you and start the motion over again. Exhale through your nose as your face enters the water.

Butterfly

This stroke has three parts: the pull, the push and the recovery.

The pull is focused on body positioning and propulsion. The hands should be kept straight to make a paddle. Make a semicircle with the elbow higher than the hand and the hand pointing towards the center of the body and downward. Fingers should shoot downward and forward to create the strongest propulsion.

The push is executed by pushing the palms of your hands back through the water underneath the body at the beginning and at one's side. The movement increases speed throughout the transition phase of the pull and push. The speed at the end of the push is used to help with the recovery.

The arm recovery is about using your hands to aim for where you want to lunge your head. Your hips will follow your head, so aim to jump forward, bringing your hands just below the surface of the water.

The kick is an unnatural movement, requiring a swimmer to have flexibility in their ankles and hips in order to turn the feet in a dorsiflexed position at a 90-degree angle in to create

thrust. At the end of the kick, your feet should be together. The kicking motion begins just after the swimmer has completed the pull. The kick accelerates and powers the lunge of the arms and the head into the next stroke cycle.

SWIMMING CLOTHING AND EQUIPMENT

Competitive Swim:

Clothing

Briefs and jammers are approved wear for those who identify as male. FINA rules prevent swimmers from gaining an advantage by wearing aerodynamic swim suits. Men can wear only a one-piece swim suit from the waist to just above the knee.

Those who identify as female usually wear one-piece suits at the back. Some of the popular designs are racer back, axel back, corset, diamondback, and butterfly-back/Fly-Back. The suits can be of various lengths; however, women are not allowed to wear suits that go past their knees or shoulders.

Swim cap

In the water, hair induces drag and slows down the swimmer. Long hair may also obstruct vision in the water. A swim cap is used to lock hair and reduce drag. Caps are made of stretchable materials like, latex, silicone, Spandex or Lycra.

Goggles

Goggles prevent water and chlorine from getting into a swimmer's eyes. While swimming at open pools, swimmers might choose tinted goggles to neutralize glare. Some goggles are made of vision correcting lenses.

Recreational Swimming:

Clothing

Street clothes or workout clothes are typically prohibited at indoor pools as they can introduce contaminants into the water. Lycra and Nylon are the best non-absorbent material for swimming and are good fabrics for proper swim attire. Schools and community pools usually post specifications regarding acceptable attire. Most swimming facilities also require showering before entering the pool.

SWIMMING NOTES

According to data collected by the U.S. Census, swimming ranked fourth in popularity of all sporting activities in the United States. Swimming for fitness is a growing activity in the U.S. Over three million new participants have been added to the rolls of swimmers recently. There are many possible reasons for this popularity:

- Swimming is a good low-impact form of exercise that puts very little stress on bones and joints.
- Swimming is an easy way to burn unwanted calories: an hour of swimming can burn about 500 calories.
- Swimming can be good for strength and coordination with over two-thirds of the body musculature engaged. The upper and lower body, trunk, head, arms and legs are forced to work together to make a balanced effort.
- Swimming strengthens joints and improves posture by improving the position of the spinal column. This makes it an excellent exercise for people with back issues.
- Swimming is considered a good aerobic activity and therefore good for cardio conditioning.

In part, the popularity of swimming can be attributed to the abundance of pools: community pools, school pools, YMCA pools, and health center pools.

In addition to the websites listed, you can also visit YouTube online and type in various swimming strokes to see how swimmers execute them.

Check out these websites for more information about this popular activity and sport:

www.fina.org

www.usaswimming.org