



INSIDE:

Keeping Your Swimmer's Skin Healthy

An Overview of the Sport

What to Expect at Meets



You put a lot into swimming...

But it can take a lot out of your skin

The importance of your skin barrier

The skin barrier, or stratum corneum, is the name given to the top layer of your skin. It contains components, which protect the skin from outside elements. It also contains lipid bilayers, which help maintain moisture. Under the best circumstances, these layers work together to help keep skin healthy.

Swimming can take its toll on your skin

Repeated exposure to water (and chlorine) can damage your skin barrier. As a result, essential ingredients are often lost causing skin to become dry, itchy, or cracked.

CeraVe® helps put back what the water removes

CeraVe (pronounced, SeR-uh-vee) Skin Care Products offer a unique formulation of special skin-repairing ingredients. These natural ingredients, combined with a patented technology to deliver them throughout the day, actually help repair and maintain your skin barrier.

Put the CeraVe Family of Skin Care Products into your routine

CeraVe Hydrating Cleanser

Gently cleanses throughout the day, leaving behind essential ingredients designed to increase the skin's moisture level and repair the skin barrier.



CeraVe Moisturizing Lotion

Ideal for larger areas of the body. Penetrates deep into the outer layer of the skin. Delivers essential ingredients to help rebuild the skin barrier, attracting and maintaining moisture.



CeraVe Moisturizing Cream

Ideal for dryer areas of the body including elbows, knees, and heels. Penetrates deep into the skin, delivering essential ingredients to rebuild the skin barrier, which attracts and maintains skin mositure.



Manufacturers of CeraVe and proud sponsors of USA Swimming





Applied Science



Swimming and the Health of Your Skin

Dr. Bikowski

- Clinical Assistant Professor of Dermatology at Ohio State University
- 30+ years as a Board-Certified Dermatologist

Does chlorine affect your skin?

No, chlorine does not affect your skin. The exposure to water is what causes dry skin. The constant exposure to wet and moisture affects the top layer of the stratum corium, which is designed to be a protective barrier. Your skin contains three types of lipids – ceramids, cholesterol and free fatty acids. These three lipids combine to form a cell and water breaks down the layers. Skin dries out because it lacks water, not oil.

What can a swimmer do to correct and prevent dry skin?

Cleansing and moisturizing two times a day is the best practice. CeraVe's lotion and moisturizing products would be of great value to use because they are the only product on the market (both prescription and non prescription) that contain those three types of lipids found in the top layer of your skin. CeraVe products release those lipids over a long period of time which thus adds moisture back to your damaged skin.

Petroleum jelly is also effective as it creates a physical barrier on your skin where the moisture does not evaporate. Petroleum jelly is a bit greasy, and it does not replenish the lipids.

Are there connections between acne and swimming?

There are no connections between acne and swimming such as there are no connections between acne due to dirt, grime, pizza and pollutants. Eighty five to 90 percent of people have acne at some point, and scrubbing and rubbing your skin will not help change this outcome.

For significant acne, there is no over-the-counter product that will cure acne. Cleansing and moisturizing is your best approach to helping prevent acne.



Kristine Kucera

- Certified Physician Assistant Specializing in Dermatology
- Current President of The Society of Dermatology Physician Assistant

What is the most common problem you see in swimmers?

My typical swimmer patient is always complaining of dry, itchy skin. The best way to treat this is to immediately wash off the chlorine right after swimming. Chlorine breaks down your skin's protein and its natural skin defense, and water alone dries out your skin. The best practice is to wash off the chlorine immediately after swimming, and then apply a moisturizing cream within two to three minutes of showering. Lack of moisturizing also causes premature aging in the skin due to dehydration. I always recommend CeraVe to my patients because it is the best moisturizer to restore the lost or damaged proteins in the skin.

The best way to get rid of that "chlorine smell' is to wash, not just rinse off, with a mild cleanser like CeraVe after every swim practice.

For those tough to reach places like your back, you can purchase a back applicator from any drug store. The back applicators have a cotton-like swab attached to a long plastic stick and after putting lotion on the swab you can then easily apply the lotion to your back.



Skills

The four competitive swimming strokes are freestyle, backstroke, breaststroke and butterfly. The combination of all four strokes is called individual medley.

Competition

Each swim meet offers a variety of events and distances, depending on the age group and classification. Each swimmer will have a limit to the number of events he or she may swim each day, depending on the meet rules.

In freestyle events, the competitor may swim any stroke. The stroke most commonly used is sometimes called the crawl, which is characterized by the alternate stroking of the arms over the surface of the water surface and an alternating (up-and-down) flutter kick. On turns and finishes, some part of the swimmer must touch the wall. Most swimmers do a flip turn.

Backstroke consists of an alternating motion of the arms with a flut-ter kick while on the back. On turns, swimmers may rotate to the stomach and perform a flip turn and some part of the swimmer must touch the wall. The swimmer must finish on his back.

The **breaststroke**, which is the oldest stroke dating back hundreds of years, requires simultaneous movements of the arms on the same horizontal plane. The hands are pressed out from in front of the breast in a heart shaped pattern and recovered under or on the surface of the water. The kick is a simultaneous somewhat circular motion similar to the action of a frog. On turns and at the finish, the swimmer must touch the wall with both hands simultaneously at, above or below the water surface.

Some consider the **butterfly** to be the most beautiful of the strokes. It features a simultaneous recovery of the arms over the water combined with an undulating dolphin kick. In the kick, the swimmer must keep both legs together and may not flutter, scissors or use the breaststroke kick. Both hands must touch the wall simultaneously on the turns and the finish. The butterfly is the newest stroke and was developed in the early 1950s as a variation of the breaststroke. It became an Olympic stroke in 1956 in Melbourne.

The **individual medley**, commonly referred to as the IM., features all four strokes. In the IM, the swimmer begins with the butterfly, then changes after one-fourth of the race to backstroke, then breaststroke and finally freestyle.

In the **medley relay**, all four strokes are swum. The first swimmer swims backstroke, the second breaststroke, the third butterfly, and the final swimmer anchors the relay with freestyle.

The **freestyle relay** events consist of four freestylers, each swimming one quarter of the total distance of the event.

Starts: In the start, the swimmer is called to the starting position by the starter who visually checks that all swimmers are motionless. When all swimmers are set, the starting horn is sounded to start the race. If the starter feels that one of the swimmers has moved, left early or has gotten an unfair advantage, the guilty swimmer may be disqualified after the race for a false start. Under USA Swimming rules, one false start disqualifies the swimmer.

Rules

The technical rules of swimming are designed to provide fair and equitable conditions of competition and to promote uniformity in the sport. Each swimming stroke has specific rules designed to ensure that no swimmer gets an unfair competitive advantage over another swimmer.



The Course

Competition pools may be short course (25 yards or 25 meters), or long course (50 meters). The international standard (as used in the Olympics) is 50 meters. World records are accomplished in 25 and 50 meter pools. USA Swimming maintains records for 25 yard, 25 meter and 50 meter pools.

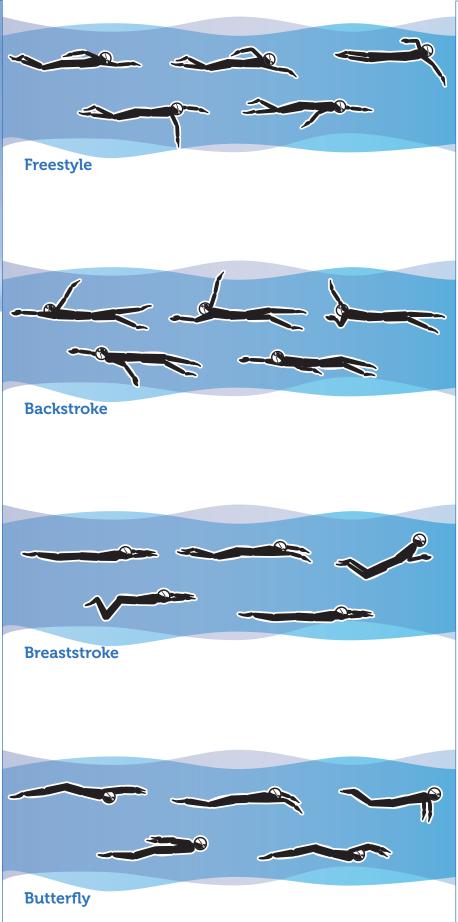
Teams

USA Swimming is made up of approximately 2,800 teams from all over the country. Of these clubs, nearly half have 80 swimmers or less, and a handful of teams have over 500 swimmers. A team may be comprised of any number of swimmers, parents and coaches.

Participants compete in different age groups and meets depending on their achievement level and how old they are on the first day of the meet. Traditionally recognized age groups are 10 and under, 11-12, 13-14, 15-16, 17-18. Many local meets feature 8-and-under, single age groups, or senior events. Team practice groups are usually determined by age and/or ability.

Officials

Officials are present at all competitions to enforce the technical rules of swimming so the competition is fair and equitable. Officials attend clinics, pass a written test and work meets before being certified. All parents are encouraged to get involved with some form of officiating.





wim meets are a great family experience. They're a place where the whole family can spend time together.

Listed below are some very indepth guidelines geared to help you through your first couple of swim meets.

Before the Meet Starts

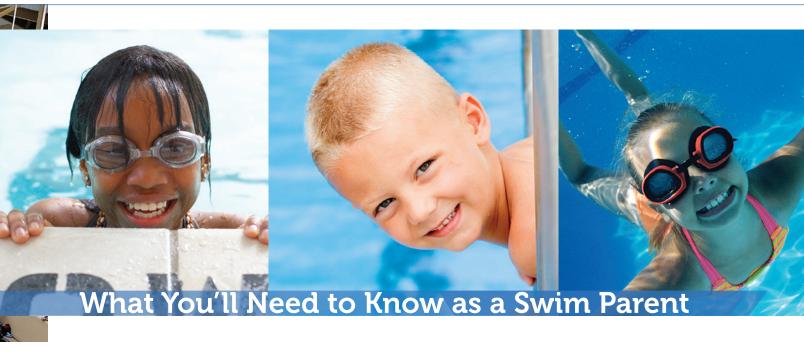
- Arrive at the pool at least 15 minutes before the scheduled warm-up time begins.
- Upon arrival, find a place to put your swimmer's blankets, swim bags and/or sleeping bags. The team usually sits in one place together, so look for some familiar faces.
- Once checked in with your coach, have the swimmers write each event-number on his or her hand in ink. This helps him remember what events he is swimming and what event number to listen or watch for.
- Your swimmer now gets his cap and goggles and reports to the pool for warm-up instructions.
- After warm-up, your swimmer will go back to the area where his team is sitting and wait there until his first event is called. The meet will usu-

- ally start about 10-15 minutes after warm-ups are over.
- According to USA Swimming rules (because of insurance purposes), parents are not allowed on deck unless they are serving in an official capacity. Similarly, all questions concerning meet results, an officiating call, or the conduct of a meet, should be referred to a coach. He or she in turn, will pursue the matter through the proper channels.
- A psych sheet is usually available for sale in the lobby or concession area of the pool. It lists all swimmers in each event in order of seed time. If the swimmer is swimming an event for the first time, he will be entered as a "no-time" or "NT." A "no-time" swimmer will most likely swim in one of the first heats of the event. A heat sheet may be available close to the start of the meet that lists the actual heat and lane a swimmer will be competing in.

Meet Starts

- A swimmer usually reports directly to his lane for competition a number of heats before he actually swims. Check with your swimmer's coach for specific instructions.
- In some novice meets, a swimmer's event number will be called, usually over the loudspeaker, and he will be asked to report to the "clerk of course" or "bullpen." Swimmers

- should report with his/her cap and goggle. The clerk will usually line up all the swimmers and take them down to the pool in correct order.
- You can expect at least 4-8 heats of each event.
- The swimmer swims his race.
- After each swim: he is to ask the timers (people behind the blocks at each lane) his/her time.
- The swimmer should then go immediately to his or her coach.
 The coach will discuss the swim with each swimmer.
- Depending on the coaches instructions, the swimmer may be asked to do some recovery swimming if a "warm down" pool or lanes are available.
- Things you, as a parent, can do after each swim:
 - Tell him how great he did.
 The coaching staff will be sure to discuss stroke technique with him. You need to tell him how proud you are and what a great job he did.
 - 2. Take him back to the team area and relax.
- When a swimmer has completed all of his events, he his parents get to go home. Make sure you check with the coach before leaving to make sure your swimmer is not included on a relay.



 Results are usually posted somewhere in the facility. Awards are often gathered for a team and given to the coach at the end of the meet. The coach will give the awards to the swimmers at a later time.

What to Take to the Meet

- Most important: Swim Suit, Team Cap-and goggles (if your swimmer uses them).
- Baby or talcum powder too dust the inside of swim cap. This helps preserve the cap and makes it easier to put on.
- Towels. Your swimmer will be there awhile, so pack at least two.

- Something to sit on. The swimmer area may be located in a gym or cafeteria. Example: sleeping bag, old blanket, or anything that will be comfortable to sit on. The swimmers will be spending a lot of time on it.
- Sweat suits. Each swimmer may want to bring two because they can get wet and soggy.
- Team T-shirts. Two or three. Same reason as above.
- Games. Travel games, coloring books, books, anything to pass the time.
- Food. Each swimmer is usually allowed to bring a small cooler. It

is better to bring snacks. They usually have snack bars at the meet, but the lines are long and most of the time they only sell junk food.

Once you have attended one or two meets this will all become very routine. Do not hesitate to ask any other parent for help or information.

These meets are a lot of fun for the swimmers. He gets to visit with his friends, play games and meet kids from other teams. He also gets to race and see how much he has improved from all the hard work he has put in at practice.





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