

Group Swim: Swim Skills Training

At Juanita Aquatics Center January - April 2019

This document contains a reference of the drills and swim sets that we did during our 2019 Swim Skills sessions. Incorporate these learnings into your swim practice on a regular basis and you will start to feel more comfortable, fluid, and faster in the water.

January 27: High Elbow Catch

Objective: There are 5 parts of your swim stroke: (1) entry, (2) catch, (3) pull, (4) exit, (5) recovery. Today, our objective is to gain awareness of your "catch" with a high elbow position.

Why is a high elbow catch important? A common swim error, especially when we are tired, is to drop the shoulder during the stroke, which sets our pull up for a cross-body propulsion rather than a forward propulsion. To think about this inefficiency, imagine that you are in the pool and you are going to press yourself out on the pool deck. If you imagine doing this with your elbows below your wrist and in line with your waist, like a T-Rex, you are going to have to work very hard. Your deck press-out will become more powerful if you raise your elbows up near your shoulders to press yourself out of the water. The concept is the same for your swim stroke.

Drill #1: Small Catch Drill

This drill isolates the forearm movement of your swim stroke catch. When you do this drill, focus on keeping your elbow in contact with the surface of the water. Your tendency will be to drop your shoulder and elbow to get propulsion forward, but resist this temptation and use this drill to develop the muscles in your shoulders and upper back to maintain a high elbow catch. See a video of this drill here.

(300)
4 x 25 small catch drill. Rest 10"
4 x 25 small catch drill. Rest 10"
4 x 25 alternate 25s as small catch drill and swim. Rest 10"
2 x 50 swim, thinking of high elbow.
Rest 15"
(500)
4 x 25 small catch drill. Rest 10"
4 x 75 - 25 small catch drill, 25 regular, 25 fast. Rest 30"
100 pull, thinking of high elbow

Drill #2: Catch-Up Drill

This drill works on your rotation and sets you up for proper hand entry. One of the most common mistakes is for your hand to cross over the middle line of your body when it enters the water. This drill makes sure that doesn't happen. See a video of this drill here.

(200) 4 x 25 catch-up drill. Rest 10" 4 x 25 - alternate catch-up drill and swim, thinking of drill. Rest 10"	(400) 4 x 25 catch-up drill. Rest 10" 4 x 50 - 25 catch-up drill, 25 regular. Rest 15" 100 pull, build on each 25
Workout	
(200) 2 x 25 kick, bilat breathing. Rest 10" 2 x 25 swim easy, think of high elbow. Rest 10" 2 x 25 swim hard, think of strong catch. Rest 10"	(350) 8 x 25 - ½ length easy, ½ length hard. Rest 5" 100 pull 50 easy cool down

March 10: Body Rotation

Objective: The objective of today's session is to gain awareness of the rotation of your body with each stroke, with a focus of keeping your shoulder in line with your hip during the pull and exit phase of your stroke.

Why is body rotation important? As you rotate your body, your body will elongate, enabling you to complete a full stroke. Also, if you rotate your body around your spine (like a chicken on a rotisserie), you will keep a taught, hydrodynamic position in the water, enabling you to move more fluidly. Finally, the proper body rotation will give your stroke power, as it will be fueled by your entire torso, not just your arms. Swim Smooth gives a great explanation of body rotation and why it is important. If you are interested in more details about this, check out their article here. One note for open water swimmers: Sometimes, choppy waters may require that we rotate less so that we can maintain stability and a high elbow catch in the water. Therefore, the drills for today are best practiced in the pool and in calm open waters.

Drill #1: Side Kick Drill

The focus of this drill is to feel the proper position of your body when it is rotated on each side. Extend one arm above your head. The opposite shoulder and hip will be rotated up to the ceiling. Imagine that you have a black line drawn down your arm and your leg - if I were looking at you from a birds-eye view, all I would see is the black line on the side of your body. In this drill, make sure to keep your head down, with your eyes focused on the bottom of the pool. See a video of this drill here.

Practice this drill with this set:

4 x 25 drill - switch sides on each 25. Rest 20"

4 x 50 - 25 drill (alternate sides on each 50), 25 swim easy thinking about drill. Rest 20"

4 x 50 - 25 easy, 25 hard, thinking about proper position of your hip and shoulder. Rest 20"

Drill #2: Catch-Up Drill

This is a great multi-purpose drill, and a repeat from our January 27 session. This drill works on your rotation and sets you up for proper hand entry. One of the most common mistakes is for your hand to cross over the middle line of your body when it enters the water. This drill makes sure that doesn't happen. See a video of this drill here.

Practice this drill with this set:

4 x 25 drill. Rest 20"

4 x 50 - 25 drill (alternate sides on each 50), 25 swim easy thinking about drill. Rest 20"

4 x 50 - 25 easy, 25 hard, thinking about proper position of your hip and shoulder. Rest 20"

Sprint Workout

Here is a fun sprint workout to add to your swim routine to work on your power and speed.

(1000 yds)

4 x 25 as 12.5 (half the length of the pool) easy, 12.5 ALL OUT. Rest 10"

4 x 50 as 25 easy, 25 ALL OUT. Rest 15"

4 x 75 as 37.5 (1-1/2 lengths of the pool) easy, 37.5 ALL OUT. Rest 20"

4 x 100 as 50 easy, 50 ALL OUT. Rest 30"

March 24: Kicking

Objective: The objective of today's session is to feel an efficient and powerful kick. We will talk about common kicking errors and work on some drills that will help you feel the correct kick position.

Why is kicking important? A popular belief is that triathletes do not need to worry about kicking because they need to save their legs for the bike and run. While I would agree that, as a triathlete, you don't need to have a powerful kick, you do need to ensure that your kick is not slowing you down! Also, the more you work on your kick and gain some power in it, the more you can use that tool against your competitors.

There are a few recurring themes with all of the kicking drills that we will do today:

- Kick from the hip, not the knee
- Kick like a whip, completing the kick from your hip through your toes
- Keep your ankles loose and flexible, acting as your natural fins
- Keep splashing to a minimum that's resistance and instead, work on creating a "washing machine" feel which delivers more propulsion
- All of the drills below can be done with and without fins. Fins will help with leg strength, as well as with ankle flexibility.

Exercise #1: 100yd Time Trial

Before we start on any kick drills, we want to check to see if your kick is slowing you down, or helping your swim speed. To do this, first do 2 100-yard time trials; a time trial is the hardest that you can swim for the entire interval. Don't start out too easy or too hard - keep a consistent, hard effort for the entire interval.

TT1: Swim 100 regular. Record your time.

TT2: After you are rested, swim another 100 with a pull buoy. Record your time.

Take note about whether your kick is hurting you (your TT1 will be slower than your TT2) or helping you (TT1 will be faster than TT2). We are aiming for it to help you :-)

Drill #1: Kick on Back

Lay on your back and hold the kickboard over your head. Kick as you would if you were swimming regularly. Kick from your hips and push your hips up to the surface of the water to keep your legs from sinking. See this video, starting at 0:35

Drill #2: Kick on front with kickboard

For this drill, face down, as you would normally swim freestyle. Use the same kicking principles that are listed above. Feel the difference in your propulsion between your back and your front. In which position do your hips sink more? The goal is to develop an easy kick that keeps your body balanced in the water, eliminating drag. You want your heels to touch the surface of the water, but you don't want a big splashy kick. See this video, starting at 1:35

Drill #3: Vertical Kick

If you have access to a pool with a deep end, you can try the vertical kick. You will simply kick with the same principles discussed above, only your body will be vertical instead of horizontal in the water. See the video here.

Try this progression:

30-sec - hold onto the side of the pool, or a lane line

2 x 20" - cross your arms in front of your chest. Work up to 30-60 seconds.

2 x 20" - hold your hands above the surface of the water. Work up to 30-60 seconds.

2 x 20" - hold your hands above your head! Work up to 30-60 seconds.

March 31: High Cadence/Turnover

Objective: The objective of today's session is to work on creating a high arm turnover, aiming for more than 30 strokes per minute (i.e. 1 stroke = a single pull with both arms).

Why is it important to maintain a high cadence? When you are in an open water swim environment - like a triathlon - a high cadence (or, also called, turnover) will help you power forward through strong winds, currents, and other swimmers in the "washing machine." Since having a high turnover places your arms in position near your face more frequently, it is also a great way to protect vulnerable areas from other swimmers' around, letting you claim your space in the water.

One of my favorite ways to work on feeling a high turnover is swimming with the use of an ankle band. Like this:



You can make a band from an old bike tube or auto tire tube, or you can buy one, like the Finis band below (they are ~\$5-10).



Here are the drills that we worked on in today's session:

- 1. Swim 2 x 25 (no band). On the first 25, count your strokes. On the second 25, try to increase your stroke rate by 2. Do it again if you didn't increase on the 2nd 25.
- 2. 4 x 25 with band and pull buoy. When you first start swimming with an ankle band, use a pull buoy. This will help you get used to how your body feels when it is being held taught. Continue to focus on a your high turnover. When you eventually take the pull buoy away, you will find that if you stroke slows, you will sink, so keep that turnover high.

3. 4×25 (no band), Rest 15" - 25 hard, 25 easy. When you take away the band, you will feel like you are floating through the water effortlessly! Note how small your kick really needs to be to keep your legs from dragging. If you cannot complete 4×25 with only a 15" rest between each 25, then continue to use the pull buoy with the band.

When you are comfortable with completing the above sequence, try this workout:

(Total yards: 1000)
4 x 25 with band. Rest 15"
4 x 25 (no band) - 25 fast, 25 slow, 25 fast, 25 slow. Rest 15"
6 x 25 with band. Rest 15"
2 x 75 - 50 fast, 25 slow (no band). Rest 15"
8 x 25 with band. Rest 15"
2 x 100 - 75 fast, 25 slow. Rest 20"
100 easy with band and buoy to cool down.

April 14: Open Water Swimming

Objective: The objective of today's session is to start transferring your pool skills into open water by getting comfortable with three elements of open water swimming: (1) sighting, (2) drafting, and (3) swimming in a pack.

Why is it important to practice open water skills in the pool? Unless you make an effort to practice open water techniques, you will never use them - or know if you should use them - until you are in a race situation and, possibly, panicky. Let's avoid that by practicing some open water skills in the pool.

- (1) **Sighting** is important so that you swim as much on course as possible and don't swim more distance that you have to. It's also important to be aware of your surroundings, including people, kayaks, buoys, etc. The most common ways to sight in open water are (1) sight with your eyes only, breathing in a separate stroke (aka "alligator eyes"), (2) sight forward then turn your head to breathe, and (3) turn your head to breathe, and then sight forward in the same stroke. Practice each of these styles to see which works best for you.
- (2) **Drafting** is one of the best ways to pick up some efficiency in your swim. If you are lucky enough to find someone in your race who is a slightly faster swimmer than you, and are able to get on their feet to draft them, you should feel comfortable with how drafting feels so that you can take advantage of this effort-savings as much as possible. When you draft another swimmer, you should be 2-6 inches behind their feet but don't touch their feet! As you approach the feet of another swimmer, you'll see a bunch of air bubbles. At this point, you can decide if you are much faster than them in which case, you should pass them or if you want to save some energy and stay on their feet for awhile. You can also get the advantage of a draft by swimming to the side of a swimmer, near the bottom third of their body or behind and between two swimmers side-by-side in front of you.

(3) Swimming in a pack can be disconcerting if you haven't practiced it before your race. The best way to practice it is to get some friends together and swim 3-wide in a single lane of a pool. Take turns where one person will surge and the other two need to try to keep up, or having one swimmer slightly behind the other two and surge through the middle to pass. Any creative way you can think of to swim close together is a good way to practice protecting your personal swim bubble in a pack.