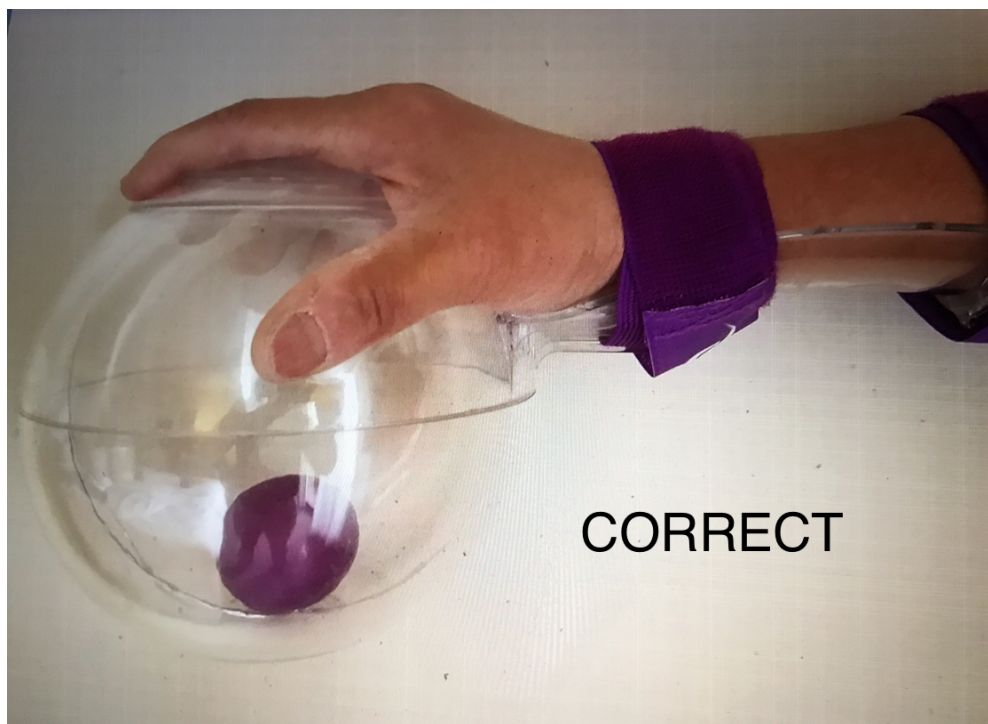


## SWIMMING

### ShoulderSphere® Instructions for Use

Correct position: ensure your wrist is relaxed and has complete contact against the plastic splint while being securely strapped in by the elastic strap. Relatively tight engagement is necessary in order to optimize the rotator cuff workout. Make sure there is no wiggle room between your wrist and the splint. This also avoids undue stress against the plastic splint, which may cause breakage.

The easiest way of putting on the ShoulderSphere® is to place it on top of your hand -- PALM facing UP - and gently cradle it, making sure that the strap is wrapped securely, particularly the part at wrist level.



Incorrect position: note in the image below how the wrist is tense and flexed against the splint. There is a large gap between the splint and the wrist, which creates undue three-point contact stress against the plastic splint. This will break the plastic splint. There should be no wiggle room in-between the skin and the plastic splint. Incorrect posture prevents an optimal rotator cuff workout.



#### ARM CARE SHOULDER STRENGTHENING PROGRAM

Here is my 10 week build up rotator cuff strengthening program for swimmers.

Do not start with high volume workout -- need to build up slowly over 10 week period since this is high intensity rotator cuff isolation workout -- don't want to overtrain.

#### ARM CARE AND PERFORMANCE PROGRAM for SWIMMERS

My philosophy is that , for sports specialists , they train the activity to get strong for THAT activity. This is my event driven, activity specific training program. One does not do bench press to get stronger in swimming breaststroke , one trains breaststroke motion to get strong in breaststroke . The closer the athlete mirrors that activity, the better the neuromuscular recruitment for that activity.

Use of the ShoulderSphere will replace ALL other rotator cuff workouts such as elastic bands, J-bands, Cross-Over symmetry, or any weight lifting , shoulder tube, heavy ball tosses .This is because ShoulderSphere is rotationally based training and trains ALL the rotator cuff muscles simultaneously 360-degrees in a multidirectional manner, both concentric and eccentric strengthening. Trains acceleration and deceleration responsiveness up to 6 times per second. Studies show it takes 10 weeks of disciplined training , every other day, to show measurable improvement in shoulder strength.

Use the A7 ShoulderSphere and keep the ball rotating to engage the ROTATOR CUFF MUSCLES

(RC) . If the ball bounces, RC has lost its engagement. MUST keep the ball rotating in order to reap the benefits of RC strengthening.

Simulate and "mirror" as closely as possible the movement of the swim style e.g. free, breast, fly, back etc. if multi-event swimmer -- train one style each time. So, if 4 styles, then it takes 4 training sessions to go through all the styles. The goal is NOT to go through the motion quickly, but deliberately and with pace and intention -- about 3 seconds for one cycle of completion of starting from starting position then move back up to starting position. This is to be done all the while keeping the ball rotating within the sphere... no dropping!

Do not need to be concerned with the electronic tracker in the beginning. Eventually , use the tracker as challenge pacer-- do 2 to 5 strokes while keeping the light in red as high power sprint, then just do green for 5 strokes, then up to red for 2-5, etc -- vary the tempo at personal choice.

Train only every other day , 3 days a week , to give recovery time and muscle build time.

Week 1 : 5 reps of swim motion ( both arms need workout because swim with both arm) no stop in between. Must be perfectly executed. Not to rush through motion. Focus on keeping the ball rotating. Rest and stretch 15 seconds before starting set 2. Do total 2 sets. ( i.e. Only 10 swim stroke cycles) This takes just about 1 minute including rest time between sets. No need to do more at this time because the rotator cuff muscles are 100 % isolated with the ShoulderSphere -- makes workout so much more efficient and effective. No need to overkill.

Week 2 : 7 reps, 2 sets

Week 3 : 10 reps, 2 sets

Week 4 : 12 reps, 3 sets

Week 5 : 15 reps, 3 sets

Week 6 : 16 reps, 3 sets

Week 7 : 17 reps, 3 sets

Week 8 : 18 reps, 3 sets

Week 9 : 19 reps, 3 sets

Week 10 : 20 reps, 3 sets

SO, by the 10th week, the swimmer will have the confidence to do total 60 stroke cycles each arm. . This will give confidence in a strong RC to meet the demands of at least 60 stroke cycles -- equivalent to almost a 100 meter distance. If swimmer is distance swimmer of 200 or 400

meters -- then for dryland training, they need to do 20 reps 5 sets each arm for 200 meter distance ( takes about 10 minutes to do for each arm with rest time in between sets). 20 reps 10 sets for 400 meter ( that's a 20 minute workout for each arm) -- swimming is difficult !!!!

During the season of competition -- only do once a week for strength train with ShoulderSphere.

Immediately before swim competition, the swimmer may do a simulation ShoulderSphere warm up before the swim by just doing 5 reps 2 sets each arm of the swim style -- this will completely heat up the shoulder and there is never a need for any band stretch workouts or warm ups.