



swim smart

A SMART BODY PUBLICATION

TRIA SWIM EXPERT:



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THE STATS SWIMMING IN THE US

- ↻ 100-120 million US recreational swimmers
- ↻ 250,000 US competitive swimmers registered
- ↻ Many swimmers train 2x/day—year round
- ↻ 20-30 hours/week in pool; + dry land hours
- ↻ 8,000-20,000 yd (11.4 miles)/day
- ↻ 2,400-4,000 overhead strokes/10,000 yds
- ↻ > 1 million shoulder rotations/year/arm

swimming mechanics

- ↻ Soreness is acceptable, pain during activity is bad
- ↻ Avoid: arm crossing midline, “snaking”, inconsistent kick beats, limited/excessive body roll, dropped elbow & shortening of stroke
- ↻ Strive for: 45 degree body roll, alternate side breathing, early “catch” and exit, pinky vs. thumb entry

train smart

- ↻ Limit paddle use—they prevent normal body roll
- ↻ Balance dryland with pool time—need dryland for “closed chain” activity and bone density development
- ↻ Alternate hard and easy training days
- ↻ Allow for warm-up at individual’s own speed
- ↻ Incorporate flexibility into program—do not swim with pain

stretch/strengthening

- ↻ Areas to strengthen are muscles that attach to and control the dynamic movement of the shoulder blade (scapula).
- ↻ Most common shoulder/scapular muscles to be strengthened for swimmers are the serratus anterior, subscapularis, lower trapezius, and external rotators.
- ↻ Most common area with tightness in swimmers is the posterior capsule (shoulder), and pectoral (chest) muscle.





BUILD A STRONG CORE

strength & stability

- Overuse of shoulder can cause muscle weakness & imbalance, ultimately resulting in shoulder instability, pain & impingement
- Stretching is useful on a limited basis; too much stretching can exacerbate shoulder problems
- Core includes abdominal, back & buttock muscles; strength here can avoid muscle imbalance/weakness elsewhere

CORE BODY EXERCISES for swimmers



EXERCISE 1:
Lift arm from side with thumb pointed to ceiling, focusing on pulling shoulder blade in with movement.



EXERCISE 2: With arms at 45 degrees from front/side, thumbs up lift arms up to shoulder height.



EXERCISE 3: Lying on side, rotate hand upward toward ceiling, keeping elbow at 90 degrees.



EXERCISE 4: Standing/on knees/toes, push arms outward, keeping stomach tight, then at end of push up, give a "plus", spreading shoulder blades apart.



EXERCISE 5: Sitting, press downward with hands lifting bottom off table, hold 5 seconds and repeat with palm forward, backward, and facing yourself.

get inspired

"Being your best is not so much about overcoming the barriers other people place in front of you as it is about overcoming the barriers we place in front of ourselves. It has nothing to do with how many times you win or lose. It has no relation to where you finish in a race or whether you break world records. But it does have everything to do with having the vision to dream, the courage to recover from adversity and the determination never to be shifted from your goals."

- Kieren Perkins, Australian
5 time Olympic gold medalist

when chronic pain hits... know your resources.

*Most common sources of pain for swimmers:
Shoulder and Knee*

*When pain doesn't go away, use the right
resources to get back to your active lifestyle.*

- ➔ Doctors: diagnosis, medical and surgical treatment of injury
- ➔ Physical Therapists: biomechanical evaluation, injury specific rehabilitation, instruction and implementation of an individualized home exercise program

