



Coach-Athlete Q&A

A look at some coach-replies to common questions by topic.

Q: I'm having trouble convincing myself that I
> should change my swimming technique. I understand exactly how you want to
> me to swim after reading all of the "swim-specific drills and technique
> building" and practicing them in the pool...but I swim very slowly this
> way.

A: FOR NOW..... YES. BUT THE IDEA IS TO INCREASE THE DISTANCE-GAINED IN EVERY STROKEAND ****THEN**** PICK BACK UP THE ARM STROKE-FREQUENCY.

SWIM SPEED IS DETERMINED BY 2 FACTORS:

1-STROKE FREQUENCY

2-STROKE LENGTH

W/ YOUR STROKE FREQUENCY ALREADY HIGH.....THE ONLY WAY TO MOVE FASTER THROUGH THE WATER IS BY INCREASING STROKE LENGTH. NOW WE DO THIS SLOWLY @ FIRST.....AND THEN @ HIGHER STROKE-PER-MINUTE AS YOUR FORM HOLDS.

Keeping my elbows high and doing catch-up does not really allow me to
> have the smooth quick strokes that I am used to (its also harder on my
> shoulders). I don't understand how we're getting more for each stroke if
> the stroke isn't as long. When I swim with my elbows high I'm not making
> as large of an arch with my hand as when my elbows are in and I'm doing the
> "s" thing. **I'D HAVE TO SHOW YOU THIS.....BUT ONE OF THE COMMON MISCONCEPTIONS THAT WE DEAL W/ IN OUR CLINICS IS THAT YOU ****DON'T**** DRAW AN "S" W/ YOUR HAND.**

THE SHORTEST DISTANCE BETWEEN TWO POINTS IS A STRIGHT LINE. YOUR HAND SHOULD MOVE **STRAIGHT** BACK.

NOW, IT ***APPEARS*** THAT YOU'RE DRAWING AN "S" BECAUSE YOUR BODY ROTATES TO YOUR HAND.....YOUR HAND IS NOT PULLED UNDERNEATH YOU TO YOUR BODY.

THIS IS CRITICAL.

YOU'RE NOT PULLING A HAND FULL OF WATER **TO YOU**. YOU'RE TRYING TO ANCHOR THE HAND IN A FIXED POSITION IN FRONT OF YOUR BODY.....ROTATE **TO** THAT FIXED HAND.....THEN ROLL AWAY FROM IT AS THE OTHER HAND ANCHORS.

I'm thinking of it like rowing a boat...you get more distance
> with the strokes if your paddles are deeper in the water closer to the boat
> that out far and not moving as much water. **DOESN'T MATTER HOW DEEP THE OAR IS.....IT'S HOW MUCH SURFACE AREA IT HAS. A LARGER OAR ANCHORS ITSELF MORE FIRMLY FOR YOU TO MOVE THE "BOAT" PAST IT.**

WITH HIGHER ELBOWS, YOUR OAR/ARM HAS MORE SURFACE AREA.

You guys are the experts, and
> I'm not really trying to be a pain...just understand. **THESE ARE GREAT QUESTIONS!!**

I need a little bit more convincing before just changing everything that my swim team coaches
> have taught me for the last 15 years. **AHHHH, THERE'S THE KEY. [YOU SWAM COMPETITELY AS A KID.]**



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THIS EXPLAINS ALOT.

UNDERSTAND THAT SWIM-TEAM COACHES TEACH:

- 1-TO LET THE WATER LINE HIT YOUR EYE-BROWS
- 2-TO TURN THE ARMS OVER FASTER
- 3-TO KICK A 4 OR 6 BEAT KICK QUICKLY
- 4-DRAW THE "S"
- 5-BREATH ONLY EVERY 3RD, 4TH, OR 5TH STROKE

THIS IS FINE.....FOR EVENTS THAT END AFTER 1 TO 4 MINUTES.

BUT EACH OF THESE STROKE CHARACTERISTICS REPRESENT A POOR "RETURN-ON-ENERGY-INVESTED". SURE, THEY CAN PROVIDE YOU W/ ALOT OF IMMEDIATE SPEED.....BUT NOT AT A "CARDIAC COST" THAT CAN BE SUSTAINED FOR 800M, 1500M, OR 1.2 MILES.....ONLY THEN TO JUMP ON A BIKE AND NEED/EXPECT FRESH LEGS.

WE TEACH:

1-WATER LINE SHOULD HIT THE *TOP* OF YOUR HEAD.....THIS ELEVATES YOUR HIPS/FEET AND ALLOWS YOU TO KICK LESS (2-BEAT KICK).

2-TURN THE ARMS OVER QUICKLY.....BUT ONLY AFTER MAXIMUM "DPS" (distance per stroke) HAS BEEN ACHIEVED.

3-USE A 2-BEAT KICK.

KNOW THAT KICKING REPRESENTS ONLY 20% OF YOUR PROPULSION, BUT "COST" YOU 80% OF YOUR HR-ELEVATION. KICKING ALOT IS NOT A GOOD "DEAL" FOR SWIMS THAT LAST 10+ MINUTES.....WHERE YOU THEN HAVE TO GET OUT AND USE THOSE SAME LEGS IN 2 MORE DISCIPLINES.

4-DO NOT DRAW AN "S" W/ YOUR HAND.....ROTATE YOUR BODY TO A "STRIGHT-PATH" HAND. THE HAND DOES, THEN SEEM TO DRAW AN "S".....BUT IT'S ACTUALLY THE TRUNK ROTATING TO THE HAND RATHER THAN THE HAND BEING PULLED (w/ dropped elbow) TO THE TRUNK.

5-BREATH EVERY STROKE!! {DO YOU HOLD YOUR BREATH WHILE RUNNING OR CYCLING? OF COURSE NOT. SO DON'T WHILE SWIMMING.}

IF IT WERE A 1-MINUTE SWIM RACE, THEN THERE IS SOME SENSE TO LIMITING BREATHING FOR BODY POSITIONING. JUST LIKE 100, 200 & 400M TRACK RUNNERS WILL HOLD THEIR BREATH FOR MUCH THEIR RACE.

BUT FOR A 10-MINUTE EVENT (like a sprint-tri swim).....HOLDING YOUR BREATH (and accumulating CO2, going into o2-debt, and failing to remove accumulated blood-lactate) ISN'T OPTIMAL.

I've just never heard of any of
> these techniques before. I UNDERSTAND..... IT'S GOOD THAT WE'RE DISCUSSING IT THIS SOON IN YOUR TRAINING. THANKS FOR YOUR FEEDBACK.

IT MAY BE BEST FOR US TO GET TOGETHER IN A SWIM 1-ON-1 SOMETIME SOON SO THAT I CAN *SHOW* YOU SOME OF THESE THINGS RATHER THAN JUST WRITE THEM OUT.

STUDIO



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I'M ONLY 1:15 FROM CHARLOTTE, SO LET ME KNOW IF YOU'D LIKE TO SCHEDULE A TIME.

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