Learn To Breathe With Ease

The rules of breathing are simple in sports like cycling or running. You need a breath? You take a breath. You need more? You take more. Oxygen is there for the asking. A regular non-brainer. And then there is for swimming, where it sometimes seems to frustrated novices and cross-training athletes, that the simple act of getting oxygen to your muscles is a monumental task. And the stakes are high. Wipes out by just a few laps? It might not be your conditioning that's at fault. It might be your lack of breathing technique that gets in the way of a good workout or discourages you from swimming altogether.

Sloppy or incorrect breathing drags down more inexperienced swimmers than any other part of the stroke. Everything's smooth when these people can keep their faces in the water. But sooner or later they have to turn to get some air. As soon as they do they plow the water instead of gliding through it. They're squandering energy 40 to 60 times a minute (or about ten times every 25 yards). Once you get the breathing right, it will fit naturally into the stroke flow and, in fact, can even add power to the stroke because body roll is what produces power and you should roll more when taking a breath than when you're not. But the key is to breathe with that body roll, not by turning the head.

Among all aspects of swimming technique, freestyle breathing may suffer from the greatest number of common misconceptions. First among these is the one mentioned above - - that you breathe by turning your head. Try this simple test: As you sit comfortably reading this, turn your head 90 degrees from center, pointing your chin first at one shoulder, then at the other. For even a flexible individual, head-twisting of this sort creates considerable tension and resistance in one's neck and upper back. Now try that same head-twisting action while lifting your chin (the head-to-breathing position typical among most novice swimmers). Even more tension and discomfort.

Which is why many coaches tell you that you should limit the head turn to the least possible movement when breathing. Wrong again. Combining this with the flat body position also so typical among swimmers results in a head-craning movement that causes even more tension and restriction.

And finally, there's the powerful instinct to breath with head lift. If you put any non-swimmer, infant or adult, in deep water, their strongest survival instinct will be to protect themselves by fighting to keep the head above water. This deeply rooted instinct continues to influence breathing habits in dramatic ways for unskilled swimmers, and in subtle ways for skilled swimmers. Repeating any of these stroke errors 2,500 times an hour will cramp even the most fluid swimming style.

So if we shouldn't breathe in any of the traditional or instinctive ways, how should we do it? Very simply. As stated above, rather than breathe by turning one's head, breathe by using body roll to take your head to air while keeping your head aligned with your spine and your chin aligned with your sternum; you'll start swimming more easily, comfortably and efficiently . . . immediately. Following are four stroke modifications that will help you breathe easy.

Hide your head. Before you can breathe with body roll, you need to be able to roll easily and smoothly. Your first move should be to ignore the age-old swimming "rule" that says you should look forward and keep the water at your hairline. Simply raising your head to that position as you sit reading this will tell you that it's an unnatural position that causes tension along the length of your spine. You can eliminate a great deal of needless muscular tension by holding your head in its most natural position - - in other words, the way you hold it when you're not swimming. If you do this right, you'll feel as if the water is about to flow over the back of your head when you're not breathing. And keep your head in line as you roll to breathe.

Roll to the air. Now that you've got your head on straight, try this exercise: Put down whatever you're reading and stand up. Looking straight ahead and with your head aligned with your spine (imagine a steel rod extending up the length of your spine and out the top of your head), place your right arm straight overhead with your bicep pressed to your ear. Turn your entire body 90 degrees toward your left, keeping your chin and sternum also aligned as if doing a military left-face. You have just rehearsed

the ideal movement for freestyle breathing. The object is to keep head and body aligned as you roll a perfectly balanced body. The degree of your roll should be sufficient enough so that you neither have to turn nor lift your head to find air. In fact, if you imagine that you'll breathe through your navel - - instead of your mouth - - you're almost guaranteed to do it right.

Breathe rhythmically. Your stroke rhythm is a body-rolling rhythm. Since you breathe by rolling your body, your breathing and stroke rhythms should be indistinguishable. One of the most common stroke errors among novices is trying to prolong the breath by staying over on the side just a bit longer. You should breathe by rolling to where the air is and immediately roll back the other way with no change in rhythm. When you want to stroke faster, you do it by speeding up your body-rolling rhythm so you also breathe faster.

Emphasize the exhale. This seems counterintuitive since it's the inhale that brings precious air into your lungs, but inhaling is nearly automatic. Just open your mouth as it clears the water and air naturally fills your lungs. Spend much more time in each stroke cycle exhaling than inhaling; completely clearing stale air from the lungs is one of the most important things you can do. Trying to hold some air in your chest to assist with buoyancy or due to some involuntary breath-holding reflex will mainly make you feel oxygen deprived. What good will it do you to float a little higher if your muscles are giving out from lack of oxygen? The presence of carbon dioxide in your lungs, not the absence of oxygen, is what makes you feel that way. Because of the pressure differential between air and water, you need to exhale more emphatically into water than you do into the air - - and you do exhale into water for part of your breathing cycle since you start exhaling as soon as your face returns to the water after each breath.

Once you have mastered the basics, you can move on to Breathing 102: Should I breathe to both sides (bilateral breathing)? You should if you can, but few new swimmers can. Virtually everyone favors one side in breathing and tends to breathe to that side all the time because it feels more natural. The problem with breathing only to one side is that it tends, over time, to make your stroke lopsided and asymmetrical. In an hour of swimming, you'll probably turn your body to your breathing side about 1,000 times, meaning all your torso muscles pull more in that direction and less to the other side. Multiply that by hundreds of hours of swimming and you'll soon be making a lopsided stroke permanent. The best correction is bilateral breathing, which can be done in several ways.

Breathing every third armstroke is the simplest, but that also means you breathe one-third less often than when you're breathing every armstroke cycle on one side. While that shouldn't be a problem when you're swimming easy, it could leave you feeling winded when you go harder. A solution is to breathe to your right side on one length of the pool and to your left side on the next pool length. That way you will still get to breathe on every stroke cycle while building stroke and breathing symmetry. Again, the key to being able to breathe comfortably on either side is learning to balance just as well when breathing to your less natural side, and the key to that is properly learning side-lying balance drills (predominantly on your weaker breathing side). You'll find that it's helpful to be comfortable breathing to either side in a triathlon or other open water swim race.

I'd like to conclude with addressing the mythical benefit of hypoxic training, as intentional breath-holding is called. The intent is to acclimate swimmers, both mentally and physically, to the discomfort of swimming without breathing, and thereby stimulate the effect of training at high altitude. This is done by breathing only every 6, 7 or 8 strokes while swimming fairly hard. But when researchers studied the effects of hypoxic training, they discovered that all it does is raise carbon dioxide levels in the blood, which has no training value.

However, it is possible to derive some technical benefit from breathing less frequently. Having less air forces you to slow down and swim more economically - - to use less energy - - since energy metabolism is limited by the availability of oxygen. Breathing every 6 or 7 strokes forces you to find subtle ways to use less energy while swimming. And that exercise in energy economizing can be very helpful. But keep that body rolling between breaths!