

STRESS RELIEF

How Does Swimming Compare with Other Sports?

by Elise Oberliesen

As a registered nurse in a psychiatric unit, Carolyn Boak says her work environment is filled with surprises. Clear thinking is a must at all times. Her secret weapon? Swimming. After a workout in the pool, Masters swimmer Boak is ready to take on the challenges of her day, whether it's a patient's suicidal tendencies or a coworker's prima donna attitude.

"My life is fairly stressful, swimming keeps me more even," Boak says. "I can handle things that come up in the day without getting as upset."

But Boak admits that even swimming has its stressful moments — also known as competition jitters—and the only thing that calms her is to keep swimming.

Well known among both competitive and recreational USMS members, Boak swims and coaches for The Woodlands Masters, just north of Houston, a team she and her husband, Tom, helped found in 1987.

Boak says she competes in four to six local meets, and one or two national meets

each year. To prepare her arms and legs up for the task, she gets into the water at a time when most friends and colleagues are still in bed. Boak heads off to the pool around 5 a.m. to welcome in the morning and fight off jitters and other stress. She says it is her first defense and helps give her an edge throughout the day.

The reason swimming is a stress reliever, she says, has to do with setting a goal each day. Boak has no excuses — no mental chatter about why she cannot hit the pool or how it is too early. She says the workout gives her a sense of accomplishment each day, and she feels psychologically rested each time she completes her morning swim.

Pulling down her goggles and kicking off the wall each morning doesn't happen magically for Boak. The dedicated swimmer schedules time into her week to make sure her workouts happen. The routine amounts to about an hour to an hour and a half, four to six days per week in the water. She loves freestyle, but also enjoys training with individual medley sets, which keeps the workout interesting and staves

off injury.

Swimming gives her a feeling of "high energy, but not manic energy. It relaxes you to do an aerobic activity before work, and I feel like I have more energy after I work out than if I had stayed in bed an extra hour."

Boak isn't the only believer in the swimming stress cure. Another firm believer is Jane Katz, one of the founding members of USMS and a physical education professor at John Jay College of Criminal Justice, where she is women's swim coach.

Katz fell in love with swimming's grace and agility as a child, and from that point on, she simply could not leave the sport alone. "I have been swimming for over 60 years. I'm sure I swam before I walked," Katz says, adding that swimming brings the body back to equilibrium, the "relaxation response" that calms the body after a swim. "The rhythmic breathing in and out helps to relax you and it brings you back to homeostasis."

A concept developed by Herbert Benson, M.D., at the Harvard Medical School, the relaxation response is a widely



Purdue

accepted theory in mind/body research that says the mind is capable of making the body well through the practice of deep breathing. It requires "following the breath, in and out, and the avoidance of distracting thoughts," Benson wrote. This type of breathing is considered one of the most ancient forms of wellness and preventive care.

Researchers and practitioners of the relaxation re-



sponse and the deep rest that comes with it commonly believe the technique helps change the way people respond to stress, both physically and emotionally. When practiced correctly, this deep relaxation decreases heart rate and blood pressure, slows the breathing and relaxes tense muscles – all of which can take a bite out of the damaging effects of stress, and sometimes even reverse it.

Katz believes swimming is capable of putting people into a similar state of mind because swimming also requires the discipline of rhythmic, deep breathing. Just add in a few positive thoughts and the mind is likely to take a pleasant journey to momentary bliss.

During stressful moments, Katz says, people tend either to hold their breath or take shallow breaths, a practice that can lead to hyperventilation,

leaving one feeling “breathless.” Quick shallow breaths bring on a more tired feeling, whereas the deep rhythmic breathing associated with swimming tends to energize the body, she adds. Thinking of the lungs as an accordion illustrates how they expand and contract with each breath during a swim.

Katz also believes breathing practice is good for a little fun in the pool. Pop in on her, and she’s likely to be bobbing in

the water during a cool down, like a kid splashing and playing with a good buddy. She says she remembers that as a kid she and her friends would jump up and down a lot, dunking their head under the water, holding their breath to see who could stay under the longest. Bobbing is the perfect way to open up the lungs.

“The extra oxygen helps you to feel energized and not fatigued,” she says, adding that

USED BY THE
BEST SWIMMERS
IN THE WORLD



Swimmer's Snorkel

Patented Center-Mount Design

- Perfects body balance, head position, and stroke technique
- Eliminates tension on the neck, back, and spine
- Increases lung capacity

SRP: \$39.99

"The Swimmer's Snorkel allows the swimmer to concentrate on body balance, rotation, and alignment by eliminating the complicated breathing motion."

- **Richard Quick**
Head Coach 1996, 2000, USA Olympic Swim Team
Head Coach Auburn University



WWW.FINISINC.COM

filling up the lungs stimulates the alveoli, small balloon-like structures attached to the branches of the bronchial passages. These alveoli inflate and deflate with inhalation and exhalation.

When you are stressed, "you can beat up the water," Katz says, instead of your boss or annoying coworkers. Being in the water simply lets you tune everyone and everything out. It's this kind of down time that many experts agree helps to alleviate the symptoms associated with stress.

"It's hard to hear the phone under water," Katz jokes. And that is why it helps bring the mind and body back into balance—it's a time to forget the worries of daily life.

Katz recently lost her husband and says she swims with a "heavy heart." The grieving process hasn't been an easy one for Katz, but the water is her best medicine. She says it has helped to "wash away the tears."

Katz says usually when a person is stressed, the first thing to go is eating and hydration and that's why it is so important to remember proper nourishment and drink plenty of water. And if you don't have bottled water, just take a drink from the nearby water fountain before and after your workout, Katz says.

Not only does water provide hydration, but buoyancy in a pool also helps diminish physical stress on the body and its precious joints. Swimming is one of the great protectors against physical stress and injuries from overuse, when done correctly, and that's because it offers a smorgasbord of strokes. The best way to stay injury free is to use all the strokes, advises Boak. "Different muscle groups for different strokes."

Good technique is a good way to stay away from doctors and is something Boak prescribes to The Woodlands Masters where she coaches. For starters, Boak says it's important to

have a good "hip rolling" motion. The gentle rocking back and forth creates momentum and prevents the common overstretching of the arms, which can lead to shoulder stress. If that's not enough, good technique also helps improve speed.

Unfortunately, although research has virtually proved that exercise reduces stress, little actual data exists to support whether swimming is especially good for relaxation. Watery conditions of the pool environment make it nearly impossible to measure VO_2 max, explains Richard Cox of the University of Missouri-Columbia. An exercise and sports psychologist, Cox says treadmills and bikes make VO_2 measurement much easier, so most data comes from runners and cyclists.

The pool lies somewhere between lap lanes one and eight, not to mention that space between our ears that signals emotional perceptions like stress and anger or happiness and elation. Question any swimmer about their mood just after a swim and you're likely to hear words like relaxed, peaceful, soothed or feeling that "good tired."

So what do we know about swimming and its ability to turn sour moods into sweet ones? Cox says the results of tests on runners and cyclists can be applied to swimmers because both are aerobic activities capable of increasing heart rate.

"There are many theories as to why exercise might have a positive effect," Cox says. "There are no clear cut explanations."

Cox attributes the stress relief indicated by swimmers and other exercisers to a "combination of effects." Although many theories exist, Cox says the two leading hypotheses are the "cognitive behavioral hypothesis" and the "distraction hypothesis." The first hypothesis says that exercise either creates

good feeling or stirs up positive thoughts that are already there. The distraction hypothesis says that exercise puts the brain on a detour, allowing it to disengage from taxing thoughts while it focuses on activity. Cox says distraction is capable of pushing out the “normal negative thought processes, if they are present.”

If pessimism invades your mind, then you're not alone. Many scientists consider it fairly normal that negative thoughts jump around in everyone's head, capable of sending anyone into a prickly mood. When too many negative thoughts build up, the result is commonly referred to as stress.

Contrary to popular belief, moderate intensity aerobic work is not necessarily the only key to unlocking stress relief, according to Cox's research.

“Both moderate (60 percent of maximum effort) and high intensity exercise (80 percent

of maximum effort) provide a positive psychological boost to a greater degree than a control group that does not exercise,” Cox says. However, when comparing both groups to each other, the higher intensity group shows a “stronger effect, in terms of increasing positive affect.”

Some swimmers say their bodies feel more relief from stressful events after a hard sprint set, as opposed to the long 500. Cox says the explanation comes from the distraction hypothesis. “An individual can continue thinking about (his or her) problems while completing a moderate bout of exercise, but not [during] a high intensity bout [because you] have to pay attention to your task.”

Swimmers who are looking to get in the zone and tune out the rest of the world should be cautious not to push too hard, however. Whether a quick 30-second sprint is a personal

best or you prefer to simply pick up the pace and burn up those quads, muscles can weaken when we overdo it.

Although swimming is seen as a safe, gentle form of exercise, for competitive swimmers, the sport can be anything but gentle. Hitting the pool everyday, lap after lap, can take a toll on the body. Swimmers are not immune to injury.

Sports medicine physician William Roberts, M.D., says swimmers sometimes overstretch shoulder muscles, causing them to become lax or loose. “It creates a sloppy base,” Roberts says. And that often leads to poor biomechanics, which throws off a swimmer's technique. If you're doing high volume training, the shoulder can get sore from grinding tendon on bone.”

If you have put too much stress on the shoulder, Roberts says, it is best to back off with the swimming and focus

instead on core strengthening, or using the shoulder in a static way. If the injury does not clear up, he suggests working with a physical therapist who specializes in swimming. Strengthening the muscles around the shoulder blades will often help alleviate shoulder stress.

Unlike running, cycling or walking, swimming offers more choices for different types of stress-relieving exercise — freestyle, breaststroke, butterfly, backstroke and even the infamous sidestroke.

Getting healthy and staying stress-free happens one stroke at a time anyway. Staying active happens when we take care of our body and listen to its gentle guiding voice. Boak has a long-term plan for fitness, and swimming is very much a part of that journey. “If you want to swim for life, it's not necessary to swim for two hours, but rather to swim for the long haul,” she says. <<<

Ferries are for Wimps
LET'S SWIM!
www.swimtrek.com

Caribbean • Greece • Italy • Croatia • Turkey
 • Egypt • Malta • Finland • British Isles

Individuals
 Groups
 Clubs

SwimTrek
 SWIMMING ADVENTURE HOLIDAYS

Better swims every time out

MASTERING SWIMMING
 The guide for fitness, training, and competition

Renowned coaches Jim Montgomerie and Mo Chambers have teamed up to provide:

- Stroke instruction and refinement for freestyle, butterfly, backstroke, and breaststroke
- Workout plans for fitness and competition
- Training for open-water swimming and triathlon
- Second-saving starts and turns

NEW!
 ISBN 978-0-7360-7453-7
 \$18.95 (\$23.95 CDN)

To place an order or to see our complete line of swimming titles visit <http://swimming.humankinetics.com> or call 1.800.747.4457 U.S. • 1.800.465.7301 (Canada)

HUMAN KINETICS
 The Premier Publisher of Sports & Fitness