

SWIMMERS LIVE LONGER?

BY PHILLIP WHITTEN

“No, I’m not surprised at all,” says the voice at the other end of the line. The voice, which sounds like it belongs to an energetic forty-something, actually belongs to multi world record-holder Rita Simonton, 93, a member of the Lompoc Other Swim Team (LOST).

Mani Sanguily, a 77 year-old physician, two-time Cuban Olympian and long-time Masters champion, is no less certain. “Of course,” he booms, “that’s one of the main reasons – though certainly not

the only reason – we continue to swim.”

Simonton and Sanguily are typical of the Masters swimmers interviewed about study published recently by Steven Blair, one of the most respected researchers in the field of exercise and fitness throughout the life cycle. Blair, a friendly, energetic 70-year-old who recently served as president and CEO of the famed Cooper Institute in Dallas, Texas, is currently the chairman of the University of South Carolina’s School of Public Health. He did his graduate

work at Indiana University and studied under James “Doc” Counsilman.

Even as our sedentary lifestyle and gluttonous consumption of junk food has been inflating the ranks of the obese and morbidly obese, nutritionists, exercise physiologists and other research scientists have continued to document the myriad benefits of regular exercise. This writer, along with a growing consensus of experts, has long maintained that swimming is the best of all forms of exercise for maintaining optimal cardiovascu-

lar fitness and muscular strength throughout life.

The reasons why are evident: Unlike running, walking, cycling, tennis and virtually every other form of exercise you could name, swimming works every muscle in the body.

Since the sport takes place in water, it is very low-impact.

As a result, swimmers sustain far fewer injuries than say, runners, and spend much less of their time recuperating from the injuries they do sustain.

It also means that swimming truly is the ideal sport for a lifetime. There are very

few octogenarian linebackers, wrestlers, shot putters, basketball players, kick-boxers, hockey or even baseball players. But there are tens of thousands of men and women in their 80s, 90s and older who maintain extraordinary fitness by swimming three to five times a week.

Since swimmers are able to maintain a high level of fitness, it makes sense that they would also live longer than both their sedentary friends and those who run or do another form of exercise to stay in shape. A recent article in *Runner's World* magazine noted that runners spend about 25 percent of each year recuperating from injuries. Injuries caused by running. That's not only 90 days each year lost for training. It's an additional 30, 60, perhaps another 90 days a year spent just getting back to the fitness level attained before the injury.

The number of days lost due to injury is far lower for swimmers. What's more, swimming offers training flexibility that is impossible with running. If you have a shoulder injury, you don't have to stay out of the water waiting for it to heal. You can still train using your legs. Likewise, if you have a knee injury, you can do arms-only workouts. Over the years, the difference is cumulative.

"Of course, dude," says Dr. Sanguily. "In swimming, you just don't get banged up from the constant pounding like you do in running."

Then there's the meditative, soothing, mystical factor of being immersed in water throughout your workout. After an hour or so, you emerge from the water tired, yet soothed, relaxed, peaceful, more attuned to your body. You know the feeling. Those are simply added benefits – benefits, many believe, that ultimately help swimmers to live longer.

So, it makes sense. If swimmers are healthier and more fit

than couch potatoes and even runners, won't they live longer? But logic and common sense can take you only so far. In science, you need cold, hard data. You need proof. Show me the study!

And what about the doubters – the evil-eyed cynics, those nasty naysayers, the nattering nabobs of negativism who just love raining on your parade? And, what about the folks who simply ask uncomfortable questions, questions that make you fidget and squirm?

For instance: What is the effect of immersing yourself, day after day, year after year, in chlorinated water? And what kind of risk do you take by swimming alone on occasion without a lifeguard? Or, turning it around, can you push yourself too hard training with a Masters team, trying to hang with that cute 35 year-old in the next lane, and wind up with a heart attack? And what about drowning? Or getting stung by jellyfish or eaten by a shark?



Photo courtesy of University of South Carolina.

ENTER DR. BLAIR

Actually, enter Tom Lachocki, chief executive officer of the National Swimming Pool Foundation (NSPF). Lachocki was aware of the Cooper Institute's large, longitudinal study of the relationship between fitness and health. Wondering if it might be possible to use the data from the study to mea-

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sure mortality rates by type of exercise (or lack thereof), he contacted his counterpart at Cooper, Steven Blair.

Blair was intrigued with the idea. Armed with detailed health, fitness, exercise and morbidity data on some 40,000 men over a period of 13 years, and buoyed by a \$91,000 grant from the NSPF, he accepted the challenge.

"Over the past 40 or 50 years," he says, physical inactivity has been confirmed and reconfirmed as one of our most serious public health problems. Compared to people who are fit, people who are inactive and unfit are far more likely to develop diabetes, heart disease, hypertension and other chronic diseases. As they get older, they lose function and, as a consequence, their independence. Finally, they die prematurely."

Over the years, most evidence about physical activity and health has come from studies of aerobic exercise and self-reported physical activity. The Aerobics Center Longitudinal Study (ACLS) database, the largest of its kind, is based on objective measures of fitness collected on more than 80,000 patients at the Cooper Institute since 1970. Its major focus is examining the impact of physical activity, diet, and other lifestyle factors on mortality. Blair's study compared the mortality rates of runners, walkers, sedentary folks and swimmers over 13 years.

In 1995, Blair and his associates began by carefully scrutinizing data on some 40,547 men between the ages of 20 and 90 who were patients at the Cooper Clinic. The men were then divided into groups

based upon the type of exercise (if any) they did: 15,883 were deemed to be couch potatoes; 20,356 were classified as runners; 3,746 were walkers; and 562 were swimmers.

Over the next 13 years, 3,386 of the Cooper Clinic patients died. Just who was most likely to have died was quite predictable. The highest death rate occurred among the sedentary group: Eleven percent (1,747) of the couch potatoes passed away. In contrast, 7.8 percent of the walkers (292 men) and only 6.6 percent of the runners (1,336 men) died. None of this raised any eyebrows.

What did jump off the page, however, were the data for the swimmers. Only 1.9 percent of the swimmers – just 11 individuals – died during the 13 years of the study.

Why did swimmers have such a low mortality rate? Blair and his colleagues did not offer any hypotheses. The runners tended to have a slightly lower body mass index (BMI) and the swimmers had higher good cholesterol (HDL) and lower total cholesterol levels. But on most measures, the two groups were essentially indistinguishable. Says Blair: "My guess is that these differences are probably irrelevant."

So what can account for swimming's apparent life-extending power? To Simonton and Sanguily, the answer is obvious. It is the full-body, low-impact, low-injury character of the sport, which, in turn, allows unparalleled consistency in training. And she emphasizes the endorphin-rich, some would say "spiritual" feeling swimmers get most every day after emerging from the embracing warmth of the water.

FITNESS ACTIVITY AND MORTALITY RATES: Comparison of Sedentary Subjects, Runners, Walkers and Swimmers



Photo courtesy of University of South Carolina.

Group	Total	Decedents (%)
Runners	20,356	1,336 (6.6%)
Sedentary	15,883	1,747 (11.0%)
Walkers	3,746	292 (7.8%)
Swimmer	562	11 (1.9%)

Statistically, the results were highly significant, though Blair – who, for the record, does not swim for fitness – admits to some “uneasiness” about the small number of swimmers and swimmer deaths during the study. He welcomes follow-up research.

There are legitimate questions that can be raised about the study. For example: Just what is the difference between a “runner” and a “walker?” The physicians who designed the questionnaire for the ACLS chose a 15-minute mile as the dividing line. That is, if it took you more than 15 minutes to complete a mile, you were a walker; less than 15 minutes, and you were a runner.

Then there’s the issue of age grading: having the same 15-minute standard for a 20 year-old and a 90 year-old seems

unreasonable.

And how is a “swimmer” defined? There are no standards for speed, distance swum, number of days per week a person swims, number of years a person has been swimming, and whether a person trains by himself or under a coach.

More generally, we don’t know how many years a person has been training or what he did before he began his current mode of fitness training.

Scientist and Masters record-holder Dave Costill, calls the results of Blair’s study “reasonable.” Now officially retired, Costill acknowledges he has not yet examined Blair’s research carefully, but he believes the reason swimmers have a lower mortality rate than runners has to do with “the effects of the high impact running has on run-

ners’ lower bodies.” Still, he emphasizes that before Blair’s results are accepted as fact, they must be replicated.

Joel Stager, head of Indiana University’s Counselman Center for the Science of Swimming, takes more of a wait-and-see approach, but he has questions about Blair’s research methodology. “Blair’s subjects report themselves to be swimmers, runners or walkers, but what were they doing three months earlier?” he asks. “We don’t know.”

“Masters swimmers tend to be habitual. In our own longitudinal study, they average 17 years in the sport.

“Then there are questions about quantification as well as more basic questions about how representative of the general population these research subjects are. After all, the Cooper Institute is far from cheap and there’s no socioeconomic data, no digging to see if something else can explain the difference between swimmers and runners and walkers. It’s possible that the swimmers may just be more active than the other groups.”

Blair replies: “The study’s participants were white, well-educated men who were middle class to upper class. But there is no compelling reason to assume that the benefits of swimming would be different for men in other socioeconomic groups or for women. In an earlier study using the ACLS databank, we found that both women and men had similar benefits from swimming in terms of fitness and other health indicators.”

Jeff Moxie, president of USMS, feels Blair has identified a real difference between swimming and other fitness sports, one that could have a massive positive impact on marketing Masters swimming in the immediate future.

Meanwhile Simonton, who turns 93 in June, is already making plans for 2012. No, she does not expect to make the

U.S. Olympic Trials, though you can’t rule that out completely. Simonton notes that she was “not very good” when she began competing in Masters swimming more than 35 years ago, “but with each age group I’ve gotten better.” Still, she concedes, her real target is the only record in the women’s 95-99 division: the 5:10.24 mark for 50 meters freestyle set by Mary Maina of Australia. Since Simonton recently swam a 4:29 for 200 meters freestyle, she’s a good bet to take Maina’s record down.

Simonton is, by no means, the only athlete in the upper age groups making plans to expand the realm of the possible for older athletes. Frank Piemme, Simonton’s LOST teammate just turned 85. Piemme, a retired engineer who has set more than 60 Masters world records since he began swimming Masters in 1975, has a pentathlon meet coming up shortly – 50s of each stroke plus a 100 IM. The USMS national records in each event are held by different stroke specialists: five records, five record-holders. Piemme’s goal: to take down all five records in that one meet.

But the most ambitious of the goal-setters is 59-year-old Jim McConica of Ventura, Calif. The owner of more than 60 world records, McConica, who trains with an age group team, plans to go after all the freestyle standards for men 60-64 when he ages up next year. Plus the 200 back, 200 fly and both IMs. But his real long-term goals can’t be achieved until the turn of the next century.

“My long term goal,” he says, without a trace of irony, is to be the first swimmer in the 150-154 age group. “And when people see me, I’d like them to say, “wow, that guy swims like a 90 year-old!” <<<

>>> **Phil Whitten is a veteran Masters swimmer and author. He has written numerous articles and books on swimming, including “The Complete Book of Swimming,” Random House, 1994.**