



March 1999

In this issue:

- [New England Registrar Needed](#)
 - [NEMorabilia](#)
 - [267 NEM's Sign on for 1999 One Hour Swim](#)
 - [Big Brown Meet April 9-11](#)
 - [The Art of the Taper, circa 1883](#)
 - [Workout Tips from Coach Mo Chambers](#)
 - [Advice from Popov's Coach](#)
 - [Aquatics Positions Available](#)
 - [Ask Dr. Swim](#)
-
-

New England Registrar Needed

THE JOB: Process over 1,100 membership applications to process each year. Computer required. Deadline-sensitive work, busiest in winter and early spring. No pay and no perks. But, the thanks of many and the indebtedness of all. Perhaps the most essential Masters job in New England.

THE REASON: Evelyn Hausberger has been our registrar since December 1996. She has done an outstanding job. She is now working longer hours at a paying job. Her registrar resignation was accepted with great regret as well as with great appreciation for the job she has done so well.

TO FIND OUT MORE: Contact Evelyn Hausberger at 603-888-5122 or Ehausberg@aol.com or Tom Lyndon at 781-235-8587 or TomLyndon@aol.com

NEMorabilia

Former NEM Featured in Ladies' Home Journal

After years of trying, then-NEM Susan Helmrich broke 20 minutes in the 1650 (19:57) at the 1984 USMS Nationals in Industry Hills, raucously cheered on by a half dozen teammates at pool's edge.

The March 1999 issue of Ladies Home Journal describes Susan's major struggle, since 1977 when she was 21, with numerous hospitalizations for cancer caused by DES. Last winter she developed a cancerous tumor on her bronchial tube. The prognosis from the surgery is excellent and Susan is back in the water, although not aiming to break twenty minutes.

Swimming is a Very Social Experience

So says NEM president Bob Seltzer, on the front page of the 1/13/99 Investors Business Daily. "When you swim with other people, they give (you) psychological and moral support." The article also notes, "(Bob) met his wife at a practice session."

XC-Ski Outing

E-mail from Mei-An Tsu:

About 25 people signed up -- we actually went despite the melting snow. The conditions were terrible and not many people showed up, but we had fun. The best part was a picnic lunch outside in the sun. Wine, cheese, sandwiches. Plus, it was a beautiful day. We ended up going to Great Brook Farms in Carlisle, MA.

It's a Boy!

Wendy and Ned Gulley are happy to announce the arrival of Jay William Gulley on March 3, at 8 pounds, 7 ounces. [Click here](#) for photos.

Ted Haartz Honored

E-mail from Ted Haartz to Meg Smath, Rule Book Committee chairman:

Finally sat down with the '99 edition yesterday. Only got to page 2 before my jaw dropped to my knees in surprise. So here I am, surprised but very pleased to have been so honored. I still find it hard to be so honored for doing things that I like to do while working with people with whom I enjoy being associated. Thank you, thank you.

(The 1999 USMS Rule Book is dedicated to Ted.)

Art Scott, Ballroom Dancer

At 65, Art Scott competes in ballroom dancing in addition to Masters swimming. He has been in three competitions as a beginner/novice. He says "I'm still nervous as hell," but appreciates that the attire allows for more personal expression than what is needed for swimming.

Wheaton Meet Massage

via email from Kim Goodwin

At the Wheaton meet on March 21, Kevin Leone will once again be on deck to offer free massages to all swimmers, spectators, etc. Even though he will be licensed by then, he is still offering to give massages for free. If people like his massages, perhaps we could ask for his services at the New England.

Dave Riley Completes the Big Ride

Dave Riley completed the GTE Big Ride Across America, in which he raised \$7,500 for American Lung Association.

Colonies Zone Championships (April 30-May 2) Travel Info

\$78 round trip airfare via Southwest (out of Providence, RI or Manchester, NH) to Baltimore/Washington International (BWI) airport, Pool is 30 minutes south of Baltimore and BWI. The University of Maryland in College Park is a suburb of Washington, DC.

[Return to list of articles at top of page.](#)

267 NEM's Sign on for 1999 One Hour Swim

Close 2nd to Davis -- First in 2000!

by Bob Seltzer

Fred Schlicher has proven he is the Bill Parcells of the NEM One Hour Swim team. In the two years under his direction we have become the only real threat to Davis Aquatics' One Hour National supremacy.

In 1997, we had 50 swimmers rack up about 200,000 yards. Last year, Fred's team drafted 176 sixty-minute wonders who churned out over 600,000 yards. This year, an amazing 267 NEM's responded to Fred's clarion call and swam 1,015,115 yards, topped only by 299 Davis Aquatic Masters swimming 1,068,210 yards.

Our three awards to the pools with the highest percentage participation, the most total yards swum and best average yards swum per participant will be listed next month's newsletter.

Thanks to Fred and his team of volunteers, including Rob Berry, Karla Black, Ed Gendreau, Tom Mack, and Mei-An Tsu, for making the One Hour Swim into one of NEM's most popular events. Also thanks to the many workout/pool coordinators who offered the One Hour Swim at more than 40 pools in our area. And finally, and most important, thanks to everyone who swam it. I'm highly confident NEM will continue to build on this fine 1999 performance to reach the record next year.

The Top Forty NEM One-Hour Swims*

*The "master Factor is the number in the right-most column and is explained below.

NAME	Home	Sex	Age	Yards	Place	MF
Barbara Crowder	Los Gatos, CA	F	41	4,880	2/155	98
Fred Schlicher	Meford MA	M	50	4,905	5/107	97
Juliana Nievergelt	Medfield MA	F	38	4,855	3/119	94
Clara Walker	Providence RI	F	72	3,565	1/25	93
Frank McQuiggan	Providence RI	M	50	4,645	12/107	92
Thomas Mack	Concord NH	M	40	5,100	7/164	92
Homer Lane, Jr.	Barrington RI	M	49	4,650	18/121	91
Karen Smyers	Lincoln MA	F	37	4,725	6/119	91
Karen Bierwert	Florence MA	F	46	4,315	9/99	91
Stuart Cromarty	Smithfield RI	M	34	5,350	3/105	91
Tracy Grilli	Londonderry NH	F	41	4,525	10/155	90
Claire O'Brien	Hingham MA	F	59	3,840	4/50	90
Ed Gendreau	Dover NH	M	36	5,210	3/150	90
Connie Hallett	Falmouth ME	F	39	4,530	17/119	89
Cary Mazzone	Winchester MA	F	35	4,635	12/119	87
Susan Livingston	Marblehead MA	F	60	3,645	6/31	87
Matt Chrostowski	N Kingston RI	M	57	4,105	13/54	86
David Bright	N Yarmouth ME	M	45	4,550	22/121	86
David Prior	Foster RI	M	53	4,215	27/107	86
Linda Hargreaves	Coventry RI	F	41	4,260	26/155	85
Jane Zee-Zoufaly	Centerville MA	F	40	4,300	24/155	85

Thomas Manfredi	Wakefield RI	M	55	4,105	13/54	85
Kathy Harris	Sudbury MA	F	43	4,165	36/155	85
David Cote	Wakefield RI	M	38	4,815	17/150	85
John Nixon	Northampton MA	M	43	4,560	33/164	85
Jennifer Luker	Marblehead MA	F	42	4,185	34/155	85
David Welch	Tewksbury MA	M	42	4,600	26/164	84
Chris French	Nashua NH	M	37	4,835	16/150	84
Karla Black	Nashua NH	F	43	4,135	38/155	84
Gayle Wettach	Wakefield MA	F	41	4,210	32/155	84
Richie Martin	Gloucester MA	M	50	4,215	27/107	83
Ethan Berry	Wenham MA	M	51	4,175	32/107	83
Ted Webster	W Dover VT	M	65	3,700	6/40	83
Doug Bosley	Boston MA	M	36	4,810	18/150	83
Michele Roy	Tewksbury MA	F	34	4,455	19/108	83
Pam O'Neill	Wellesley MA	F	48	3,875	23/99	83
Warren Wise	Hampton NH	M	43	4,455	47/164	83
Fred Bartlett	Narragansett RI	M	42	4,490	42/164	82
Evelyn Hausberger	Nashua NH	F	54	3,645	12/57	82
Melissa Braisted	Cambridge MA	F	26	4,830	9/102	82

The Master Factor

The Master Factor is an attempt to quantify the effect sex and age have on performance in order to compare times between sexes and ages. The top forty NEMs have MF's ranging from 98 to 82. All of the columns are self-explanatory except perhaps "place"; the numbers there show the swimmer's place, nationally, in his/her age group among the number of swimmers. So, 47/164 indicates 47th place among 164 swimmers.

The NEM News editor would like to know what you think of this Master Factor. Do you have a better way to compare the 'apples and oranges' that are Masters swimmers??? Send it in. Is the MF just a contrived way to unsuccessfully try to level swimming pool results for young and old, and male and female?

How to calculate the Master Factor:

1. Add 10% to women's yards. (Add 0% to men's yards.)
2. Multiply adjusted yards by age plus 60.
3. Multiply product of adjusted yards and adjusted age by .00018. (Multiplying by .00018 makes top swims close to 100.)

Using the above formula, Barbara Crowder's Master Factor is:

$$[(4,880 + 488) \times (41 + 60) \times .00018] = 98 \text{ (97.59 rounded up)}$$

[Return to list of articles at top of page.](#)

New England Championships

With as many as 500 swimmers expected, we will use two eight-lane courses at Brown for the entire meet. This will considerably shorten the length of the meet each day.

Meet Time Line

We expect the meet to end no later than 9:00 p.m. on Friday night and between 2 p.m. and 3 p.m. on Saturday and Sunday. A more accurate timeline will be posted on our web page the week before the meet.

Workout Group Competition

One of our goals for the meet this year is to have over 100 organized workout groups register; last year we had approximately 80 workout groups/pools compete.

Workout group leaders: Please e-mail [Ed Gendreau](mailto:Ed.Gendreau@ultranet.com) and let him know how many swimmers you hope to bring.

An informal group recently projected these standings among workout groups at this year's Championships:

- 1 East Providence Masters (1998 champions)
- 2 Cambridge Masters
- 3 Great Bay Masters
- 4 BU Masters
- 5 Longfellow Sports Club
- 6 Andover-North Andover Y
- 7 Nashua YMCA Penguins
- 8 JCC Masters
- 9 Beverly Y
- 10 Brown Masters

Also mentioned as possible top ten finishers: Atkinson, Belmont Hill, Boston College, Cape Cod, Concord (NH) Y, Dedham, Duxbury, Hockomock Y, Minuteman Masters, Providence College, Wayland Pool, and Wellesley Center.

Relay Information

We had more than 150 relays at the 1998 Championships, and we expect at least as many this spring. Workout group leaders should plan to put together relays well in advance. We will include relay deadlines (with estimated event time line) in a subsequent edition of Meet ENews. Download a relay form from: <http://www.nh.ultranet.com/~gendreau/#6>.

USMS Relay Rules

USMS requires all four members of each relay to be registered with the same USMS club. Unattached swimmers cannot swim relays under USMS rules. We will enforce this rule. Make sure all your workout group swimmers are USMS registered in the same NEM or other USMS club.

Warm-up and Warm-down

One hour before the published meet start time the two eight-lane competition pool is open for warm-up and warm-down. On Saturday and Sunday morning, immediately following the completion of the last heat of the 1000 and 1650, respectively, we will open the two eight-lane competition courses for warm-up. Additionally, 3+ lanes will be available until 30 minutes after the completion of the last event of

each session for warm-up/warm-down.

Positive Check-in Events

The 400IM, 500 free, 1000 free and 1650 free are positive check-in events. If you don't positively confirm that you will swim that event by the posted cut-off time, you will be scratched. These events will be re-seeded during the meet. Make sure to check the final seeding which will be posted on the wall near both competition courses that day.

Safety Rules for Warm-up, Warm-down

There will be absolutely is **no diving** permitted except in designated one-way sprint lanes. Swimmers must enter the pool feet first. Violation of this rule can result in disqualification. It is also important to observe the usual courtesies of circle-swimming. Warm-up lanes will also be organized by speed. Please select the right pace lane.

Meet Results

Shortly after the completion of all heats we will post results. The results will include your time and place according to 5-year age group. After the meet the results will also be available on the web, including split times. Meet results will also be published in a regular edition of NEM News.

Individual Awards

Yes, we will give out medals for 1st through 3rd places for each event by five-year age group. Additionally, we will give you a certificate for mounting an adhesive label record of your performance.

Team Awards

A trophy will be awarded to the workout group with the highest point total. Additionally, plaques will be awarded to teams placing 2nd through 10th place

Meet Staff

It takes a lot of people to run a meet of this size. This year the Seekonk Dolphins Swim Club will be providing the officials, back-up timers and other on-deck staff. Altogether we expect them to provide 70+ people to help out during the 2.5 days of competition. We are using the money that we formerly spent on paid officials to make a financial donation to their swim team. It's also great to show the kids that some of us "old folks" can still get up on the blocks and swim fast. Please take the time to thank the kids, and their parents, during the meet.

Massage Therapy and Swim Shop

For the fifth year, Seacoast Massage Therapy will be on deck for pre- and post- swim massages at \$1 per minute. SwimSkin, our Bentley vendor, will have a variety of swimsuits and swim gear, including prescription goggles.

Meet Promotion

Articles, ads in March issues of MetroSports and Boston Sports Journal.

You can **download complete entry information** from: <http://www.nh.ultranet.com/~gendreau/#6>.

To register for NEM, complete the membership form [in PDF format](#) or [HTML](#) and mail it to our Registrar, Evelyn Hausberger.

To receive e-mail updates about the Brown meet, you can add your name our list by sending message to: seltzer@metasoft.com.

[Return to list of articles at top of page.](#)

The Art of the Taper, circa 1883

In "The Swimming Instructor," (1883) William Wilson recommended that the following important points be observed in preparing for competition: "During the last three or four days before the date of the race, attention should be paid to prevent any difference in weight, while muscles and all functions must be kept in good play, lungs clear, eyes steady, skin polished and bright, tongue clean, whilst all liability to chill or become cold must be strenuously guarded against. There should be no exercise on the day of the race, and if one feels at all inclined for ease the whim should be gratified. He should be kept warm and comfortable, and be allowed to lounge about or even lie in bed until the time for getting ready for the coming effort."

"In training for a swimming match there is this difference in the preparation from that of running or walking - that the man must not be got ready too 'fine.' If the distance is above five hundred yards, there must be some fat and red blood left to combat the cold water."

from Swimnews, October 1998

[Return to list of articles at top of page.](#)

Workout Tips from Coach Mo Chambers

Mo was the head coach of Mountain View (CA) Masters for nine years and is now the mother of 18 month old twins. She was named the 1996 ASCA Coach of the Year. Mo knows her swimmers want to get the most out of practice, so she teaches efficiency. Much of what she teaches she learned from Bill Boomer, a technique consultant at Stanford University in Palo Alto, California.

Get in Position

Swimming is much harder if your body isn't balanced. So Chambers suggests you float on the surface without using your arms or legs. Push your chin and chest toward the bottom to bring up your hips (in backstroke, focus on the base of your neck as a balance point). Once you feel balanced, try kicking, with your arms at your sides. After a few laps, shift to your side and get balanced in that position, then rotate to the other side, maintaining your balance point. Alternate sides every lap. Work slowly so you can feel when and where you lose your balance.

Shift the Balance

Swim a lap with your fists closed. It forces you to use your core instead of your hands to balance. When you open your hands, you instantly try to hold the water for balance. Swimming with closed fists helps you shift the work of balancing to your core so you can use your hands for propulsion. As you shift that balance, think of your core as the motor and your hands as extensions of the force. Your hands hold the water, but it's your core rotation that's bringing you by your hands.

Stay in Front

As you press your head and chest into the water, keep one arm in the "front quadrant" of your body. The front quadrant, Chambers says, is the area at the front of your shoulders and head. When you keep an arm in the front quadrant on each stroke, you create a "catch-up effect" -- the back of your stroke is faster than the front part. Aim for slow to-fast hand acceleration. The classic catchup drill-- waiting to pull through with one arm until your other hand recovers and touches your hand at the top of the stroke - is effective in creating this tempo. Think about rushing your hand to the top of the stroke, with no stop at the back end.

Speed the Hand

"The biggest difference between fast and slow swimmers is change in hand speed," says Chambers. "In slow swimmers, even if the mechanics are all correct, the hand is the same speed all the way through. With fast swimmers, the hands are almost stopping and then speeding up." To emulate the fast folks, think about stopping your hand at the top of the stroke. (Don't really stop, but that's the feeling you should strive for.) You want to accelerate through the power part of the stroke; if you rush the front of the stroke, you'll slow the end of it.

Kick it Up

Most swimmers kick hard to hold up their hips, says Chambers. That's because they're not balanced. Your kick should move you forward. "You should feel that if you stopped kicking, you wouldn't sink. Then you can decide how much kick you need to accelerate. Initiate your kick from your hip and roll down from there, as if your legs were rubbery fins."

Have Some Fun

Technique is important, Chambers says, but so is having a good time. "I want my swimmers to have fun. I want them to team up and be challenged a bit." If you swim on your own, try to keep your practice upbeat, she says. "If practice is getting to be a drag, don't do it. If it's not fun, then don't do it."

from the October/November 1998 issue of Fitness Swimmer

[Return to list of articles at top of page.](#)

Advice from Popov's Coach

excerpts from an article by Popov's coach, Gennadi Touretski, in Swim Online

From analysis of the training of the best athletes, it is evident that the proportion of speed and/or specific work rarely exceeds 20% of the total training volume. While the volume of work decreases some six weeks before racing, the weekly training volume is still quite substantial and some reach 50-60 km per week in this phase. In this phase, Michael Klim does not swim further than 6.5 km per session with up to 10-12 sessions per week. Generally I use the principle of the three R's to explain and teach good swimming technique:

- **Rhythm:** the basis of maintaining the quality of motion. As soon as rhythm is lost, distance per stroke and speed decrease.
- **Range:** through the stroke we can determine the optimal range for competitive swimming. In training the goal is to reduce the number of strokes per length.
- **Relaxation:** Johnny Weissmuller was reported to have said that the secret of sprinting is relaxation at top speed. The feel of the water is the ability to balance the propulsive force and counter it through the stroke. In training, the goal is to minimize the intracycle fluctuations in acceleration and deceleration that occur at different phases of the stroke.

Starts

The importance of starting and turning is well described. In the 100 freestyle event, the start and turn cover almost 30% of the total distance at a speed greater than the average race speed.

Turns

- maintain the maximal possible speed in the last 5 metres before the wall
- use a minimum radius of rotation (head close to knees)
- no twisting of feet on the wall
- streamline the body in the drive from the wall
- stay under the following wave
- keep lowest possible angle when breaking the surface

[Return to list of articles at top of page.](#)

Aquatics Positions Available

Age Group Team in New Hampshire Seeks Assistant Coach

The Lakes Region Wavemakers team, in Laconia New Hampshire, seeks an assistant coach to work with head coach and NEM Susan Maguire. The fifteen year-old team is a developmental USS program of 50 members, and is growing. The assistant coach will work with the team 2-3 nights a week during the winter season, plus travel to meets on weekends. The club will pay up to \$14.00 an hour for a qualified candidate. The club will also pay for and assist in certification. For more information, contact Kevin Sullivan, club president:

sully@lr.net

Kevin Sullivan c/o Melnicks
574 Main Street
Laconia, NH 03246
603-524-1276 (phone)

Aquatic Professionals Wanted

HealthPoint, a CareGroup Wellness and Fitness Center in Waltham, MA, is seeking aquatic professionals to fill the following positions:

- Aquatics Director
- Lifeguards
- Youth Swim Instructors
- Water Exercise Instructors
- Swim Instructors

High energy and enthusiasm necessary. Candidates should have WSI, Red Cross Lifeguard, first aid, CPR, aquatics certification. Please send or FAX resume and recent salary history to Michael See, HealthPoint, 916 Winter St., Waltham, MA 02451 FAX 781-522-2223.

Pool Director for Summer '99

Pool Director Sudbury Swim & Tennis Club is seeking a Pool Director who will be responsible for: management of all phases of pool operations, maintenance, swimming lessons and the swim team. Experience preferred and certifications required. Pay is \$14-16 per hour depending on experience. Please send resume to: Stephen Kozak, 20 Axdell Road, Sudbury, MA 01776. Email: medlink@ziplink.ne.

[Return to list of articles at top of page.](#)

Deconstructing Popov

by Terry Laughlin

excerpts from his April/May 1998 article in Fitness Swimmer

Alexander Popov has dominated swimming's marquee events--the 50 and 100-meter freestyle-- for the past decade. Popov first grabbed world attention at age 20 when he dethroned America's Matt Biondi, the reigning sprint king, and the 1992 Olympics in Barcelona. He won gold in both the 50 and 100, but not by speed alone. With his awesome stroke efficiency, Popov was swimming perfection.

He and his coach (Gennady Touretsky) proved what aquatic sports scientists have maintained for years: efficiency, more than fitness or power, separates champions from runners-up. Winning his first Olympic gold medal, Popov swam the 50 meters in 21.91, beating Biondi by two-tenths of a second, a margin of just one percent on the stopwatch. But Popov took only 33 strokes in 50 meters, compared to Biondi's 36...

Drag Time

Swimming at high speed produces two major physiological demands. First, the drag--or resistance--caused by a body moving through water goes up exponentially as you increase your speed... second, the energy required to move that fast and overcome that drag is far greater than your body can supply aerobically...

Consider dolphins for a minute. They can cover 100 meters in five seconds while expending about the same amount of power as Popov. "Dolphins don't create resistance," says Touretsky. That's why Popov spends his workouts learning to be more fishlike, instead of swimming endless laps harder and harder.

Get It Right

Popov's training volume is determined by how far he can swim while meeting Touretsky's rigorous standards for technical excellence... Mileage and intensity are increased only as Popov can maintain his stroke length and efficiency while swimming farther or faster...

So stroke length is the most critical element in Popov's training. He swims nearly all of his 50-meter practice lengths taking only 23 to 24 strokes. In a 25-yard pool, this translates to about seven or eight strokes per length, counting each hand entry as one stroke.

Learn to Relax

"The biggest secret to successful sprinting is relaxing at top speed." So said Johnny Weissmuller, the Popov of his day, more than 60 years ago. Popov has his own version: "Don't fight the water; share its spirit and it will help you move." He spends many hours doing that, because it isn't as easy as it sounds. Relaxing at slow speeds is hard enough; at top speed it's an act of almost Zenlike discipline, acquired only through relentless attention to technique during practice. "If your skill is automatic, you will be relaxed, and that will decrease the energy cost of swimming..." explains Touretsky.

Slow Down

"Popov does a huge proportion of his training at [what are for him] very slow speeds. He does very little 'hard' swimming," says coach Bill Sweetenham, the swimming development director for Australian Swimming. (Touretsky and Popov now train at the Australian Institute of Sport in Canberra).

In 1996, the Russian Olympic squad trained in Columbia, South Carolina, for three weeks before going to Atlanta. Coach Bill Irwin attended many sessions and marveled at what he saw. "Popov did long sets of repeats with meticulously precise strokes and a consistently beautiful flow. In three weeks, I never saw him do a single lap that looked hard." Bill Boomer, who was part of the U.S. Olympic coaching staff in Atlanta, described Popov in the warmup pool as he prepared for his races there. "I never saw him do anything hard or fast in warm-up. He appeared to focus entirely on reinforcing his sense of flow and rhythm and saved all his effort and speed for the race itself."

Stroke Right

...Challenge yourself to swim for several weeks taking two to four fewer strokes per 25-yard length than you normally do. Swim as slowly and easily as you need to be able to do that. Before long, that lower stroke count will feel normal to you. When it does, subtract another stroke or two.

Slip Through the Pool

Sweetenham noted that Popov swims for hours doing little more than acutely tuning in to feelings of where and how the water resists him and finding ways to avoid that drag.. Focus on what you can do to feel more "slippery" as you swim.

Stay Sensitive

Whenever you do speed up from your concentrated slow-swimming practice, be very sensitive to when you begin fighting the water or yourself. At all costs, avoid struggling. Swim at all speeds with as much economy as possible.

Use Your Head

You may not realize it, but you're probably holding your head pretty high when you swim. That's not the Popov way. He carries his head much lower than you do. To swim like Popov, look at the bottom, not forward, as you swim. When you get it right, it'll feel as if the water is just about to flow over the back of your head...

Go Long

Lengthen your body when you swim. Use every inch of it, just like Popov, who extends his had as much as possible before he begins stroking. As you swim, feel as if the most important thing you do with your hand is lengthen your body line, not use it as a paddle to push you forward.

[Return to list of articles at top of page.](#)

Ask Dr. Swim

Q. Am I training too hard?

A. There are limits to the benefits of hard training.

Noted physiologist David L. Costill, Ph.D, director of the Human Performance Laboratory at Ball State University, former Masters record holder, and NASA consultant says. "We're probably training our athletes to train, not to perform." In one study, researchers split Ball State swimmers into two groups.: One group continued to train twice a day; the other dropped down to once. The twice-a-day swimmers lost their sprinting ability during the season, while the one-a-day group set personal records. A subsequent project found that swimmers who added weight training to their routines didn't improve their times either.

from Longevity 3/93

Q. Does exercise reduce cell damage and promote longer life?

A. It appears to help.

While you're churning through your laps, there's a metabolic war going on in your cells. Exercise triggers a biochemical chain of events that turns oxygen molecules into toxic scavengers called 'super-oxide radicals.' At the same time, exercise also makes your body kick into high gear to make antioxidants that control the radicals. Studies in both animals and people indicate that regular moderate exercise primes your body to make more of the damage- controlling antioxidants than of the rogue radicals. The result? Less cell damage and, apparently, longer life. So, people who exercise live longer. Remember that the next time you're tempted to skip a workout. Antioxidant from food, like vitamins C and E and beta carotene, also help but they're only part this process, say researchers from Miami University in Ohio, who looked at a raft of studies on exercise, antioxidants, and lifespan

from Fitness Swimmer Oct/Nov 1998

[Return to list of articles at top of page.](#)

NEW ENGLAND MASTERS SWIM CLUB

This page is maintained by [Carolyn Dooman](#).

&