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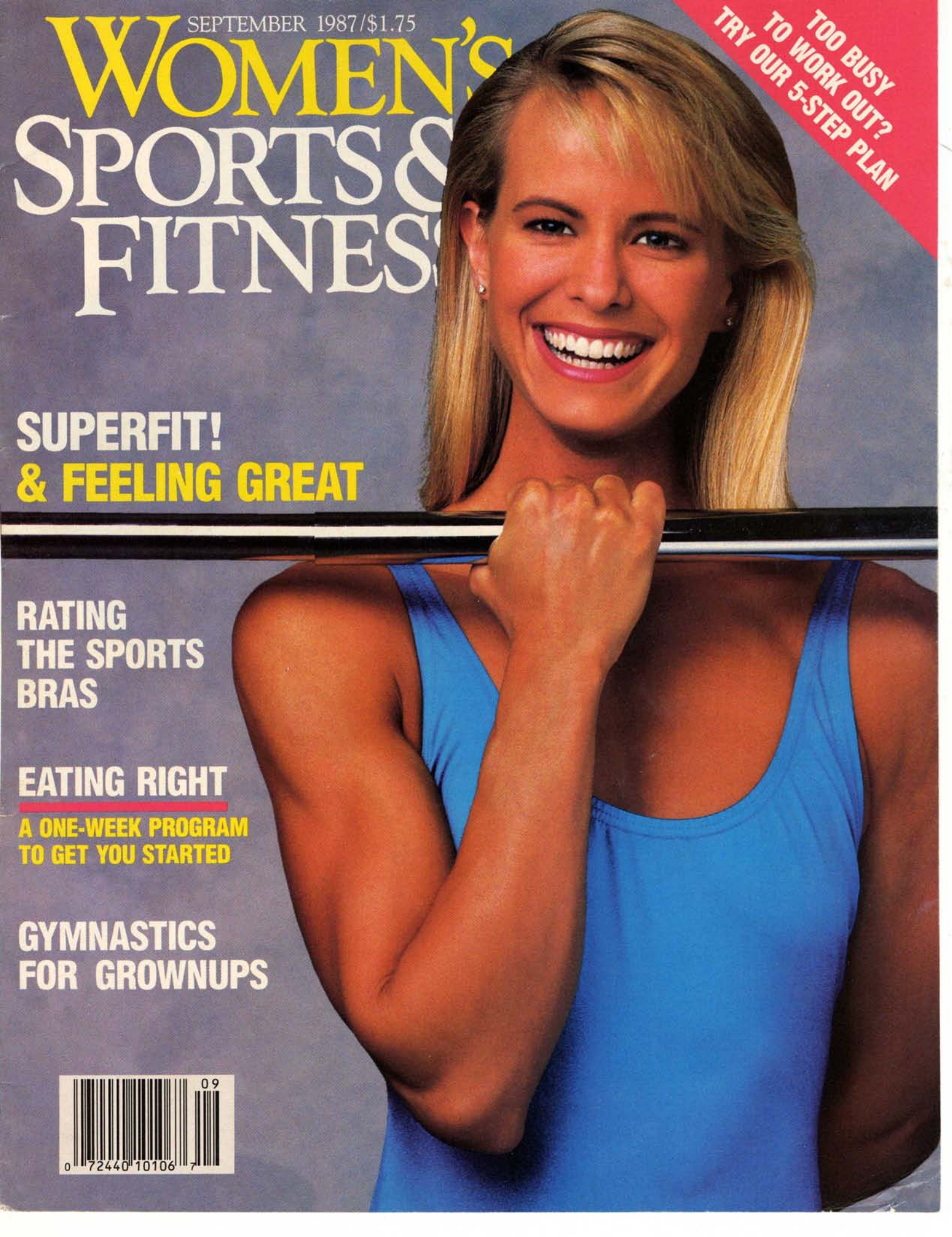
WOMEN'S SPORTS & FITNESS

TOO BUSY TO WORK OUT? TRY OUR 5-STEP PLAN



SUPERFIT! & FEELING GREAT

RATING THE SPORTS BRAS

EATING RIGHT

A ONE-WEEK PROGRAM TO GET YOU STARTED

GYMNASTICS FOR GROWNUPS

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RUNNING THE NUMBERS

How to figure what you burn

Hundreds of books and charts present estimates of how many calories are burned off in a half-hour run. You may wonder how closely any of them reflect your own metabolic rate.

However, according to the American College of Sports Medicine, there is a fairly accurate way to measure your own caloric expenditure, as well as your oxygen consumption, during a daily run.

All you need is a pocket calculator and a stopwatch. And you have to maintain a pace of five miles per hour or faster.

■ Step 1: Calculate your oxygen consumption per kilogram of body weight per minute. Begin by converting your distance into meters (one mile equals 1,613 meters). Then divide the meters by your time to get your pace. If you ran a 10K (10,000 meters) in 40 minutes, your pace would be 250 meters per minute.

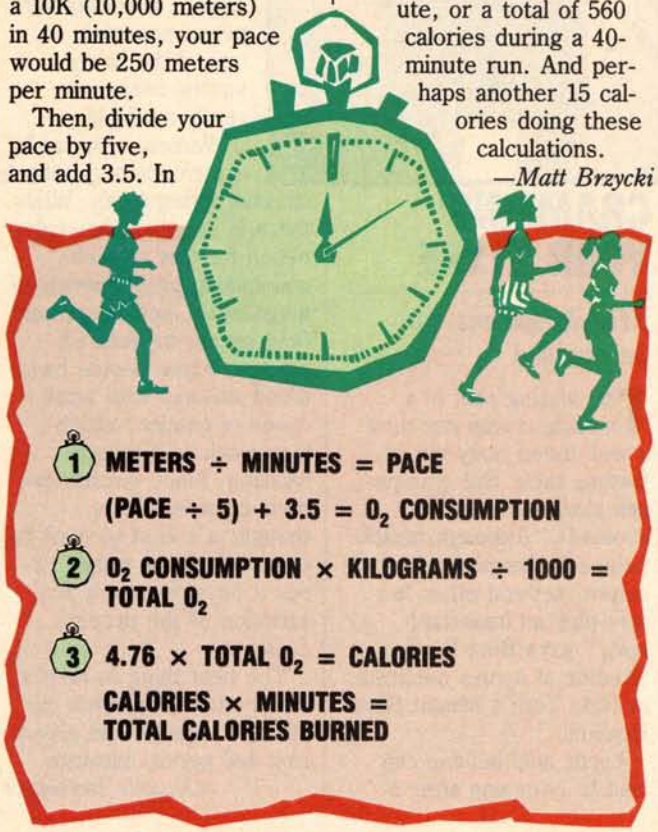
Then, divide your pace by five, and add 3.5. In this case, the resulting number would be 53.5—which means that for each minute of your run, you consumed about 53.5 milliliters of oxygen for every kilogram that you weigh.

■ Step 2: Calculate your total oxygen consumption. First, divide your weight by 2.2. For example, 121 pounds translates into 55 kilograms.

Now multiply that number by your oxygen consumption per kilogram per minute, and divide the resulting number by 1,000, to get the total liters of oxygen you consumed per minute. Using the earlier example, you would have used about 2.94 liters every minute of the run. That's a total of almost 28 gallons in 40 minutes!

■ Step 3: Figure out your caloric expenditure. Everyone burns about 4.76 calories for every liter of oxygen consumed. So multiply 4.76 by your oxygen uptake (in liters per minute). Again using the same example, you would have burned about 14 calories per minute, or a total of 560 calories during a 40-minute run. And perhaps another 15 calories doing these calculations.

—Matt Brzycki



SPORTS FEST

September 17 to 27 marks the American Festival of Fitness and Sport at Hilton Head Island, South Carolina, beginning with the Ford Mixed Doubles Tennis Championship and ending with the Bud Light U.S. Triathlon Series National Championship. In between, activities geared toward all fitness levels include workouts, competitions, seminars, and an equipment trade show. Call (803) 842-3378 for information.

IT'S NOT HOW FAR YOU GO

But what you eat that counts

Women who stop menstruating lose bone mineral and increase their risk of stress fractures and osteoporosis. Yet the cause of amenorrhea (loss of periods) has remained unclear.

Now, the latest studies point to poor nutrition as a major factor in the development of amenorrhea. Nancy Clark, R.D., a nutritionist with Sports Medicine Brookline near Boston, and Miriam Nelson, a doctoral fellow at Tufts University Nutrition School, surveyed the menstruation history, running schedules, and eating habits of 93 elite women runners.

While the amenorrheic athletes and the menstruating athletes had similar physiques, training miles, and racing times, there was one basic difference: daily caloric intake. The amenorrheic group reported eating 300 to 500 fewer calories a day.

Other data—such as the fact that the amenorrheic women ate fewer lunches—suggest that their cycles were affected not just by how little they ate, but by how frequently they ate, as well. Clark sees this same pattern in her work as a nutrition counselor. "Many women with amenorrhea don't allow themselves to eat three meals a day."

The results of two other recent studies concur with Clark's. At the Pacific Medical Center in Seattle, Barbara Bruemmer and Barbara Drinkwater asked amenorrheic and normally menstruating (eumenorrheic) athletes to keep a three-day food diary, and to fill out a questionnaire on food preferences. The amenorrheic women ate an average of 250 fewer calories per day, and were much more likely to avoid red meat.

At Columbia University, Merle Myerson and Bernard Gutin found that when they compared amenorrheic runners to eumenorrheic

runners with the same percentage of body fat, the amenorrheic athletes had slower metabolisms and ate about 200 fewer calories.

These studies suggest that amenorrhea may be the body's way of conserving energy when it doesn't have enough fuel. If that theory is correct, maintaining a normal menstrual cycle may be as simple as eating healthy foods, in healthy portions.

—Janet Venturino

ILLUSTRATION (LEFT) BY NATHALIE VALETTE; (RIGHT) BY ANNIE GUSMAN