

Master Runner's

“...for the aging person it is a duty and a necessity to give serious attention to himself.” (–C.G. Jung, “Contributions to Analytical Psychology,” 1928)

Question: Why do I hurt more now after my runs than I used to? I am 50 years old. Is it something I just have to “grin and bear”?

There are many reasons that a runner hurts after running. The more obvious ones include training errors, repetitive stress syndromes, lactic acid retention, improper shoe wear, and anatomical conditions. In the above question, the writer implied it might have been his/her age.

Aging is simply the process of growing older. (How can aging be “simple”?) It describes the progressive changes produced by the passage of time. During this time, as runners, we might expect to see our endurance decrease, our race times slow, our injuries increase, and the time to heal them increases. It should not be a time to dwell on how fast or how strong we were several decades ago. Our enjoyment of the sport of running should continue to increase, and in order to ensure this, some adaptations to our sport must be made. Our expectations of why we are running have to be prioritized. What if our enjoyment doesn't meet our expectations? Why do some runners at an older age experience more pain and aches when they run?

Are we supposed to get hurt physically and mentally as we run into the sunset? The answer to this is a categorical NO!

To address these issues it is important to understand some basic physiology.

The human body is composed of several organ systems, various tissues and many cells. It is these cells that are responsible for the production of energy to make muscles and other tissues work. As we mature, the various relationships between the cellular elements change. The elasticity of the skin, muscle and other organs diminishes and is replaced with fibrous tissue and fat. Neither of these tissues is particularly suited to movement and stretching, so we can expect to see a decrease in flexibility of the joints, muscles and tendons with increasing age. This lack of flexibility is probably the most important factor in decreasing muscle output and increasing injury occurrence with age. The lack of muscle flexibility results in poorer muscle contractions in the heart and hence reduced cardiac output. This will result in a decreased VO₂ Max.

A word about VO₂ Max:

In exercise, an increase in oxygen consumption follows an increase in exercise intensity. The point at which the athlete can take in or use no more oxygen is the point of maximum oxygen consumption. VO₂ Max is the maximum rate of oxygen flow and usually is expressed relative to body weight (e.g. ml/kg/min.).

Healthy persons experience a gradual decrease in VO₂ Max by approximately 10% per decade after 25 years of age. In prime athletes this reduction may be only 5% per decade.

Why does VO₂ Max decrease with age?

1. There is a decrease in heart rate with age and therefore a decrease in cardiac output.
2. There may be a decrease in muscle contraction or a loss of muscle mass with age.

Running speed deteriorates faster with increasing age than does endurance. Peak performance in marathons, for example, occurs in the range of 25–30 years. After 40 years of age there is a linear decline in performance. This fall in performance mirrors a fall in a runner's VO₂ Max.

Therefore, there are definite reasons why, as we age, we run slower and possibly get injured more frequently. As a “master” runner you have to realize this normal physiological phenomenon and adjust your running accordingly. We are no longer the flexible, muscular gazelles we once were. Our running times are slower. Our limbs are not as flexible—they’re stiffer. Our muscles are weaker. We are more prone to minor injuries and in some situations more prone to major injuries. But, it is important for a number of reasons to keep active: cardiovascular (there is a reduced death rate from heart attacks in runners); musculoskeletal (there is a decreased incidence of osteoporosis in recreational runners); and psychological (there is less depression in runners and those who keep active.)

In this particular case regarding pain with running, the questioner would have to look at his or her running program. Remember to start slowly, take walk breaks for any runs that last over 60 minutes. Walk breaks are especially important for the master runners. Keep hydrating. Recovery time is equally important; therefore, rest after a run. Doing tempo runs too close together will result in increased injuries and increased pain. Pre- and post-run stretches are important but not always necessary for your short runs.

Research indicates that runners who remain fit can expect a 0.5-1% decline in performance per year from age 35 to 60. After age 60, performance decrement tends to be at a faster rate. On the positive side, appropriate training tends to decrease this performance decrement compared to inactive seniors. A study described in the British Journal of Sports Medicine (August 2004) showed that after analyzing 415,000 runners in the New York City Marathon from 1983 to 1999, male and female masters continued to improve running times at a greater rate than the younger athletes, whose performance levels have plateaued!

Many runners continue to run into their 60s and 70s and beyond with minimal or no pain complaints (Anne Lotz 75-80 years; Female; 5:08, John Cahill 80-85 years; Male; 5:05, New York City Marathon 2004). Age, therefore, should not be a deterrent to running. Pain during and after your runs may suggest that you are running too hard, too fast, etc. Running should not give you pain, and if it does, it should be a “pleasant” pain only.

As John Stanton, founder of the Running Room, once said, “I may feel 30 years old but I look much older”!

Conclusion – Run less, run slower, hydrate, take walk breaks, include swimming and cycling in your training schedule and don’t let age stop you! In fact, let age stimulate you!