



**Body Matters**

## GROW OLDER, RACE FASTER

WHY KEEPING IT SHORT AND SWEET MIGHT  
BE BETTER AS YOU CLIMB THE AGE GROUPS

### Meet the expert

**Garth Fox**

Garth is a triathlete and cyclist, with a masters degree in sports science

**WE'VE ALL** been there, being passed in the latter stages of a triathlon by someone who's much younger than we are. 'That's it, I'm getting slow, Ironman here I come'

you mumble to yourself between gasps of air. Numerous studies have shown you can maintain top-end endurance performance until about 35. After that, it gradually decreases until about 60 years of age and from then on it falls off more and more rapidly. Ageing affects most of the body's physiological systems including cardiovascular, neuromuscular, respiratory, hormonal and metabolic.

But don't despair, because the good news is that being a triathlete, you can

expect these declines to be slower.

Consistent training slows down the rate of decline in many of the body's systems. As an endurance athlete, you can expect the fall in your VO2 max to be between 5% and 10% per decade. But the real advantage for the older athlete is that all those turbo sessions and hours staring at the black line in the pool tend to result in an aerobic capacity much greater than a sedentary person of the same age. As such, once the inevitable decline begins, the seasoned

Photo Getty

athlete has a larger VO<sub>2</sub> max for the ageing process to chip away at. In later years, this may be the difference between playing football with the grandchildren and fearing a flight of stairs.

So age may rob us of our speed, but at least our endurance will be rewarded at Ironman level, right? Well, not according to the latest research that shows that Ironman performance drops off with advancing years more than racing at Olympic distance. So if you think getting older means learning to take your foot off the gas, think again.

## IS SIZE IMPORTANT?

Triathletes often make the presumption 'going long' is key to better performance as you age. Ask yourself this: if you had to get up at 6am tomorrow to get in a 100km ride or report to the start of a 10km run race, which would you prefer? After a certain age, long and steady training somehow just feels right, whereas racing hard can feel like purgatory. Surely that's a signal you should now be racing longer distances? A team of

French researchers from the University of Bourgogne tackled this proposition: grow older, go longer, perform better? The research involved averaging the top 10 finishing times in each age group from the 2006 and 2007 ITU Olympic-distance world champs and then comparing these results with the top 10 finishing times in each age group for the Ironman world champs for the same two years. Surprisingly they concluded there was a more significant drop in performance with age in Ironman distance than in Olympic distance.

## DECLINE IN PERFORMANCE

To understand why the older Ironman athlete underperforms the older Olympic-distance triathlete, researchers also analysed the average swim, bike and run splits for each distance. They found the decline in swimming performance with age was about the same for both Olympic and Ironman distances. They suggest this is because swimming is the first discipline and so accumulated fatigue has not set in.

Running performance showed the biggest decline with age in both distances, but most so in Ironman. Cycling performance declined the least of the three disciplines, but again, Olympic-distance performance was better than for Ironman.

## BIKE TO RUN RATIO

The researchers believe this is because older athletes simply spend more time on the bike than they do running. Cycling is a non-weight-bearing activity that results in fewer injuries to muscles and connective tissue, so older triathletes tend to run less and cycle more in training. As a result, the extra wear and tear, and accumulated fatigue in the latter stages of the Ironman marathon takes its toll on the older athletes, and forces them to slow down at a faster rate than they do at the end of the 10km run in Olympic-distance. Simply put, endurance does decline with age. The greater the race distance and the older the athlete, the more this will be the case. However, there's no harm in trying to prove them wrong!

## Turn back the years

Regardless of the type of races you prefer the key to hanging on to performance as the years roll by is to keep training. It really is a case of use it or lose it. Here are four specific steps you can take to maintain and even improve performance as you get older.

### 1 HIGH INTENSITY INTERVAL TRAINING

These sessions involve repeated bursts of high intensity training, and are important for maintaining your VO<sub>2</sub> max (the maximal amount of oxygen you can use). Try to increase the intensity and quality of your interval sessions over time, irrespective of age. The effort level should be high, with long enough recoveries to allow the work intervals to be of consistent quality. For example 6x400m hard repeats on a running track, 12x100m in the pool, or 10 efforts of one minute hard/one minute easy on the bike.

### 2 MAINTAIN MUSCLE MASS AND LOW BODY FAT

Excess fat is dead weight, which drags down your relative VO<sub>2</sub> max and reduces performance. Ageing also reduces the size of your muscle fibres, and as a result your lean muscle

mass declines. A further consequence of this is your metabolic rate slows and gaining fat becomes easier. The best way to counteract this is to do sport-specific resistance training, which helps preserve muscle fibre size. Middle age spread is a choice, not an obligation!

### 3 CROSS-TRAIN

As a triathlete, you have this sorted. After all, our sport is the definition of cross-training. But why is it so important? Injury reduces training time and research has shown that those veteran athletes who can maintain their training volume and intensity deep into old age, show the least decline in most physiological systems. Mixing up your endurance training activity allows continued aerobic training stimulus, while giving the various mechanical structures of the body a chance to recover. Anyone paying attention to the off-season 'tweets' from Lance Armstrong may have noticed

that he spent as much time hiking as he did cycling during the winter months!

### 4 THE 3 Rs - RECOVERY, RECOVERY, RECOVERY

Over the age of 40, recovery after hard sessions will take longer than it did when you were 20. Accept it. That is just how it is. Fortunately, you can still push yourself as hard as ever during your hard sessions, just follow them with as many easy ones as necessary before getting back to the hard stuff. As an active triathlete, you are already putting yourself in a position to, as the physiologists call it, 'age successfully'. No matter what distances you prefer to race, if you can maintain the consistency and quality of your training while making only a few concessions to the advancing years, there is no reason why your best performances should not be ahead of you.

## FOUR ATHLETES WHO DEFIED THE YEARS

Advancing years needn't mean declining performances. Check out how these four athletes achieved results that would make most 20-year-olds jealous.

### 1 Dave Scott



The legendary triathlete came out of retirement in 1994 at the age of 40 to take second place in the Hawaii Ironman World Champs. In 1996, at age 42, he returned again to place 5th, running the marathon in 2:45.

### 2 Cameron Brown



Won his ninth Ironman New Zealand title in March this year in a record time of 8:21:52, at the age of 37.

### 3 Ed Whitlock



Ran the Toronto marathon in 2004 in 2 hours 54 minutes at the age of 73. This would have placed him in the top 1% of finishers of the New York marathon in the same year. Whitlock runs 2 hours every day.

### 4 Jeannie Longo



The French road cyclist and 12-time world champion came fourth in the Beijing Olympics at the age of 49. In 2010, now aged 51, she has just won the French elite women's time trial championship.