

MARTINA NAVRATILOVA



"The hardest part is the recovery. You kind of know where your limits are"

ANDRE AGASSI

TENNIS iCOACH

Tennis iCoach is the International Tennis Federation's official coaching platform. Access expert coaching from around the world on technique, tactics, biomechanics, psychology, sports medicine and methodology.

www.tenniscoach.com

[EXPERT ADVICE]

MATURING NICELY...

You may not be as quick across the court as you used to be, but if you train correctly there's no need to hang up your racket yet

Martina Navratilova remembers when she started to slow down. "I could tell I was not moving as well as I used to," said the nine-time Wimbledon singles champion, who played her last match as a professional just before her 50th birthday. "I noticed it when I was in my late 30s. The fast twitch [muscle fibres] just slow down. It's not much, but you do notice it. It's frustrating because you feel the same but the results are not the same."

Decreased speed of movement is just one of the changes that happen to our bodies as they age. While bone strength decreases, body fat is prone to increase and muscle mass drops too. Maximum heart rate and aerobic capacity fall and we become less flexible.

Playing tennis regularly can help delay many of these changes, but reduced strength, speed and flexibility are unavoidable, no matter how often you play. While many senior players enjoy playing recreationally, the likes of John McEnroe, Goran Ivanisevic, Pat Cash and Ivan Lendl compete on the ATP Champions Tour, which came to London's Royal Albert Hall in December for the final event of the 2014 season.

As well as the former professionals, there is a thriving competitive scene for veterans' tennis. The British over-40s women are world champions after winning gold at the ITF Seniors World Team

Championships in Florida, while William Collins, born in 1929, won the over-85 men's singles title at the British Seniors' Grass Court Championships at Aorangi Park in August.

Research shows that tennis can use up to 60% of a veteran's full physical ability, which means that playing tennis regularly can help to decrease the rate of decline in VO₂ max (the rate of oxygen consumption), which occurs with age.

While the physical (not to mention the psychological and social) benefits of tennis are obvious, older players' hearts work harder than those of younger people. Consequently a veteran who plays competitively must be physically fit to play tennis. They should not be playing tennis in order to become physically fit.

Cross-training such as jogging, cycling and swimming will help increase aerobic fitness levels for tennis, but interval sessions, such as fartlek training or a game of squash or racketball, help simulate the irregular patterns of tennis matchplay.

Research also suggests that physical fatigue does not result from muscle lactate accumulation but from a decrease in the speed of heart rate recovery immediately after a point is played. The anaerobic energy system plays a reduced role in veteran singles, so training that invokes high levels of blood lactate should be avoided. Any interval training



GORAN IVANISEVIC



Above: John McEnroe is one of a number of former greats who still play competitively around the world

"THE FAST TWITCH MUSCLES SLOW DOWN. YOU FEEL THE SAME BUT THE RESULTS AREN'T THE SAME" MARTINA NAVRATILOVA

should be at a lower intensity and the work-to-rest ratio should be adapted accordingly.

Strength and flexibility training is recommended at all ages, but exercises can help prevent the vast majorities of injuries sustained by veteran players. Common injuries include tennis elbow and ruptures of the rotator cuff (shoulder), as well as generic muscle tears and ligament degeneration.

As well as reducing the risk of injury and increasing strength and mobility, strength and flexibility training can help slow down the rate of bone mineral loss and reduce the risk of arteriosclerosis (hardening of the artery walls).

A daily stretching routine combined with resistance training three times a week can help play an important role in preventing injury. Exercises should focus on addressing tennis-specific muscular imbalances as well as improving strength and control of the core shoulders, knees and hips.

As your body ages, it takes longer to repair itself. Bones, muscles, joints and ligaments are not what they used to be, and in the event of an injury it is important to give the body time to recover.

However, while the body needs time to heal, rehabilitation will require a balance between adequate rest and the need for active movement to prevent a loss in the range of joint motion that can be exaggerated due to the stiffening of connective tissue with age.

With careful planning, recovery and training, you'll not only be able to play tennis to stay fit and healthy, but stay fit and healthy to play tennis. ■



TOP TIPS FOR STAYING SPRIGHTLY ON COURT

- **WARM UP PROPERLY**
Veteran players typically take longer to warm up before a session
- **COOL DOWN AFTER PLAY**
Don't head straight to the bar after a match
- **PLAN TRAINING SESSIONS**
Factor in rest days and low-impact exercise such as swimming
- **STAY FLEXIBLE**
Stretch on a daily basis to help maintain flexibility and reduce injury risk
- **STAY STRONG**
Use resistance training to maintain strength and slow down loss of muscle mass
- **PLAY WITH THE RIGHT RACKET**
Choose your frame, grip size and string tension carefully
- **THINK ON YOUR FEET**
The right tennis shoes provide support and help reduce injury risk
- **STAY HYDRATED**
Keep drinking before, during and after training sessions and matches

HOW THE STARS STAY FIT Two legends tell us how they have adapted their games with age



ANDRE AGASSI

→ "I don't move quite the same as I did before, but my fitness level is still pretty good and ball striking hasn't left me, thank goodness. That has always been the easy part.

I'll take six weeks heading into a tournament or exhibition event and really start working myself into a place where I can really be out there and enjoy it.

The hardest part is the recovery. We don't seem to respond to doing things that aren't normal quite as easily, whether that is a hard day or activity or staying up too late and paying the price the next day.

You kind of just know where your limits are and you know how to prepare and push yourself and then you know how to give yourself the time you need to not pay too much of a price."

MARTINA NAVRATILOVA

→ "I don't get out on court nearly as much as I would like to. I usually just play when I am getting ready for tournaments such as legend events at all the Grand Slams. I do other things to stay in shape but if there's a chance to play with good players I'll play.

I don't play hard enough for my body to say anything at all! When I play now I don't feel it the next day. When we play the legends events everyone is complaining, this or that hurts, but my body has really done well for me. I do yoga and I think that keeps me pretty supple, I'm as flexible as I've ever been, if not more, so that helps. I play a pretty economical game.

I just don't hit as hard as I used to because I can't. I don't train as hard because I don't need to and wouldn't want to. Whatever I do the body is holding up really well."