

PHYSIO'S ROOM

Philip Newton advises on how injuries can be avoided

Being unable to play the sport you enjoy and love due to injury can be a devastating experience. Avoiding all injuries is of course an impossibility, as bad luck and misfortune are simple facts of life. But the good news is that you can significantly reduce your risk of sustaining an injury by implementing some on and off-court training strategies.

Injury risk-reduction programmes can be split into technical and physical. The technical aspect involves making sure that you move well around the court and can hit the ball efficiently. I believe this aspect of injury prevention to be the most important, so my advice would be to get some good quality, regular

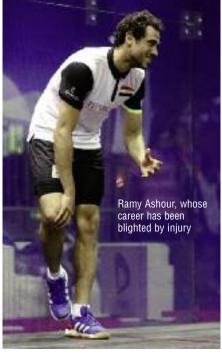
coaching. Learning how to move well and to hit shots efficiently can reduce the forces that your body is exposed to, which in turn should reduce your injury risk.

During the 15 years I worked with the England Squash elite playing group I was often complimented for my presumed part in keeping the players fit and injuryfree. But this wasn't down to me or to any other physios in the players' lives. Instead, it was the physical robustness of the players that was the key factor for injury prevention, which had been developed with regular off-court training routines devised and delivered by their strength and conditioning coaches.

Over recent years

scientific systematic reviews and meta analyses have indicated that the key components of this off-court training that help to prevent injuries are the strengthening elements. These develop and maintain body strength and robustness. Off-court training usually consists of many elements, from good old-fashioned weightlifting sessions through to more functional and squashspecific movement drills.

Training programme design and the permutations of exercise selection, load, frequency and intensity are infinite. Unfortunately, there isn't a 'one size fits all' solution. Even for players at the elite end of the squashplaying spectrum there is a big element of trial and error before they hit on the formula that works for them. However, the ideal scenario seems to be a well-designed off-court strength and conditioning programme that



incorporates plenty of squash-specific strengthening work and complements the allimportant technical input from the coach.

THREE STEPS TO AVOID INJURY

- Learn how to move well around the court
- Learn how to hit the ball efficiently
- Increase your strength



FITNESS Q&A

Gary Nisbet answers some of your questions on fitness and training

How can I get faster on court? I do lots of ghosting and court sprints, but while I feel that I'm getting fitter, I don't really feel like my speed is increasing.

Speed training can be of great benefit to the squash player, but it is an element of conditioning that is frequently misunderstood and inadequately addressed. For speed training to be effective, efforts need to be short and intense, and recoveries longer – working very much on the principle of 'quality over quantity'.

Try introducing a couple of sessions a week of five sets of six to eight ghosts or four to six court sprints at 100% intensity, interspersed with recovery periods of around 90 seconds (maintaining a work:rest ratio of 1:5).

Is a sports drink really necessary for me to drink while I'm playing/training, or is just plain water good enough?

Most sports drinks contain a combination of carbohydrates and various electrolytes (minerals necessary for proper functioning of the body). Carbohydrates in the form of various sugars can be useful for energy replenishment during or after tough games/sessions lasting beyond 60 minutes, but are generally unnecessary for exertions anywhere less than this.

The need for electrolyte replenishment (primarily sodium) exists on a similar timescale, but can be affected by how profusely you sweat. If the body's

electrolyte balance is shifted too far through fluid loss due to heavy sweating, it can result in muscle cramps, fatigue and nausea, so those who sweat a lot may need to consider electrolyte replenishment, even for activities of considerably less than 60 minutes.

In general, though, for most people playing at a standard intensity level for anything less than an hour, water should suffice for general hydration purposes. Carb/electrolyte replenishment needs can then be addressed postsession through diet.

Is taking in caffeine from coffee or energy drinks a good idea before I play my squash matches?

Caffeine has a lot of solid research supporting its performance-boosting effects and can be a useful tool for those needing a bit of a lift before a game or training session. Most people report mental and physical benefits from a dosage of around 1 to 3mg per kilogram of

bodyweight (up to a maximum of around 5mg/kg) taken around 30 minutes before playing/training. There can be a high level of individual variance, however, so it's worth experimenting with different amounts and timings. If used too much, a tolerance can potentially develop, which may affect results, so it's best to be used sparingly and your caffeine tablets/coffee/ energy drinks kept for just big games/training sessions.

I'm sometimes pushed for time getting to the squash club for my matches. Will skipping my warm-up really make much difference?

A properly constructed 10-15 minute warm-up, focusing on increasing muscle temperature and mobilising joints through dynamic flexibility exercises, can not only go some way to helping prevent certain injuries, but, can also help boost your physical and mental performance.

THE SQUASH PLAYER