

Calling all Netballers: Why your landing technique is so important in preventing injury

Recently two Physiotherapists from Peninsula Sports Medicine Group Langwarrin, [Emma](#) and Ellie, participated in a clinic run by [Peninsula Waves Netball](#) for young netballers at the grass roots level. During the clinic, the netballers were taught the technique behind how to jump, land effectively, decelerate and change direction based on the guidelines set out by the [Netball Australia 'KNEE Program'](#).

Both Emma and Ellie have a passion for netball and have played for Peninsula Waves in the past, so it was great to combine their passion for netball with their knowledge as physiotherapists to help ensure netballers continue to play the game they love for as long as possible.

Why is injury prevention in netball important?

Netball has one of the highest injury rates per participant of any sport (Fong, 2007). At both an elite and junior level netball injury prevention is vital. During this dynamic fast paced sport, the body is exposed to high forces contributing to lower body injury rates (Mothersole, 2013). A staggering 85% of netball injuries occur at the knee and ankle, of this 45% of these injuries occur during landing (Netball Australia Personal Accident Insurance 2010-14). These statistics highlight just how important the correct jumping and landing technique is to enhance performance and prevent injury.

Conditioning and technique training to effectively mitigate injury risk and improve performance is particularly important amongst the female population (Mothersole, 2013). Recent

figures show females are 4-6 times more likely than males to rupture the anterior cruciate ligament (ACL), and it is estimated that as high as 25% of all major injuries in netball are attributed to ACL alone (Netball Australia, 2017). For netballers this means a costly injury that can result in more than 12 months away from the netball court.

How can you reduce your risk of an injury during netball?

Netball Australia have developed The KNEE Program, aiming to prevent knee injuries from occurring by optimising technique and enhancing efficiency of movement in netball specific landing, change of direction and deceleration . The KNEE program is an adaptable, evidence based, warm up program designed to be implemented at all netball levels; children, recreational and elite.

Below is are some of the key principles as set out by the KNEE PROGRAM which outline how to perform a jump and landing with good technique that, when practiced and implemented, aims to significantly reduce the likelihood of an injury during netball.

Jump Take Off



- Feet shoulder width apart
- Feet facing forwards
- Hips Bent
- Knees Bent
- Knees in line with feet
- Use arms to drive momentum

Jump Landing



- Hips bent
- Knees bent
- Roll down through feet
- Feet straight ahead
- Knees in line with feet
- Trunk Stable

Studies show that by implementing specialised training programs, such as the KNEE program, injury rates can be dramatically improved. These programs can reduce lower body injuries by up to 50% (Netball Australia, 2017). Furthermore, employing this program as a part of your own training has been found to improve performance measures. This is supported by Hopper et al (2017) whom found a 6 week injury prevention program improved speed, agility, power and balance outcomes. For greatest effect, these programs need to be performed total of > 30 minutes per week (Sugimoto et al, 2014).

It is never too early or late to start implementing this program as a part of your netball routine. For more information on how to include The KNEE program in your training session or warm up click on the following link : <http://knee.netball.com.au/>.

Written by Ellie Russo

For more information or to book an appointment contact your [local clinic](#) or [Book Online](#).

References

The KNEE Program. Retrieved From: <http://knee.netball.com.au/>

Fong D, Hong Y, Chan L-P, Yung P, and Chan K-M. A systematic review on ankle injury and ankle sprain in sports. *Sports Med* 37: 73-79, 2007

Hopper et al (2017). Neuromuscular training improves movement competency and physical performance measures in 11-13-Year-Old female netball athletes, *Journal of strength and conditioning Research*. 1165-1176, 31(5)

Mothersole, G. (2013) Ground Reaction Force Profiles of Specific Jump-Landing Tasks in Females: Development of a systematic and progressive jump landing model, Faculty of health and Environmental Sciences. Retrieved from <http://aut.researchgateway.ac.nz/bitstream/handle/10292/5695/MothersoleG.pdf?sequence=3&isAllowed=y>

Sugimoto, et al. (2014). Dosage effects of Neuromuscular training intervention to reduce anterior cruciate ligament injuries in female athletes: Meta-and-sub group analyses, *Sports Medicine*. 551-562, 44(4)

Netball Australia <http://netball.com.au/>