



Highly Commended

Science Writing

Year 5-6

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Avoiding Sporting Injuries – Muscle Injuries

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Paige ran towards the soccer ball, her ponytail sticking to her sweaty neck as she smoothly kicked the ball from her opponent. She dribbled and then kicked to her teammate, Ava. Ava then scored a goal, just as the half time buzzer sounded. All the girls jogged over to their coach.

“Good job girls! We are beating them by five goals!” the coach exclaimed as they drank their water. “Stay hydrated girls. We’re trying to avoid injuries after all [1]!”

Soon enough they were back on the field... but the Whyalla Lions had caught up to the Port Augusta Meerkats. As the ball was kicked between the Lions it was up to Paige (a defender) to stop it. Her opposition ran up to her but quickly dodged, Paige ran to the side to stop the ball but the wet grass from the sprinklers made her slip. A pain shot up her left ankle to her calf making her wince. They played at night to avoid the hot weather [1] but the cold night air made it hurt more.

“Ow!” Paige cried out clutching her throbbing ankle. The Meerkats ran over to help her stand but she soon realised that she couldn’t bare any weight on it. Paige new that those where signs of fractures, sprains and strains [2]. As tears burst into her eyes, she heard her coach call an ambulance.

Once she was at hospital she had an x-ray. Afterwards she was introduced to a radiologist.

“Hi, I’m Dr Foote, I will be doing your ultrasound. I heard you hurt yourself while playing soccer. Although, I’m not surprised soccer is the most popular and fourth most dangerous sport in Australia [3].”

Paige gulped she had never had an ultrasound before.

“You see, an x-ray can scan for fractures, but we couldn’t find anything so we will do an ultrasound to look for any other injuries [4]. But let me ask you some questions first. Did you do a warm up?”

“Yes, of course. My coach says a warm up and cool down is one the most important things to avoid injuries! [1]”

“Nice, has this been an ongoing pain and have you had to strapped it before?”

“No, I am sometimes a bit sore after sport but nothing unusually bad and I haven’t needed to strap it. Some of my friends have strapped their injuries [1],” Paige said.

“Good, that means it is most likely an acute injury and not a chronic injury. An acute injury is something that occurs suddenly. But a chronic injury is caused by overuse [1]. I see you’re wearing soccer boots which is important for playing soccer [2]. Your ultrasound is in an hour.” Dr Foote glanced at her watch and walked out of Paige’s hospital room.

Paige lay on the paper covered bed as she watched as Dr Foote apply gel to a what looked like a rectangular microphone.

“This is called a transducer; it produces sound waves that have frequencies so high that us humans can’t hear them [4]!” Dr Foote said as if reading Paige’s mind. As she lightly scanned, the cold gel made Paige flinch.

“It seems you’ve a torn muscle in your left heel and ankle which is a type of soft tissue injury [2],” Stewart the physiotherapist said an hour later. “Soft tissue injuries are common, accounting for over fifteen percent of sport injuries in Australia [3]. Muscles are made of fibres that shorten and lengthen to produce movement. They are attached to bones by tendons [2]. It is a good thing that you had it checked out. If muscle injuries are untreated, there can be more severe consequences [1].”

Stewart handed Paige a pamphlet about ‘RICE’.

“How can rice help?” Paige giggled to herself.

The pamphlet read: Rest. Icepack. Compression. Elevate [5]. It also said avoid ‘HARM’: Heat. Alcohol. Running. Massage [5].

“Okay that is it for today, we will have another check in next Friday to see how you’re going,” Paige’s physiotherapist, Stewart said a couple of weeks later. “See me again before then if it plays up [1].”

“Hey guys” Paige called out to her teammates

“Yay! You’re playing again this week we missed you!” Ava cheered as she bounded over to Paige, hugging her.

Paige loved her team so was happy to be back.

“Enough chit-chat girls. Paige is going to lead this warm up.” The coach told them.

“Warm ups and cool downs are very important. They increase the muscle temperature and blood flow [6] and they can reduce and limit the amount of none contact injuries [7],” Paige began. “These are some good ones,” she said while giving each of her teammates a pamphlet.

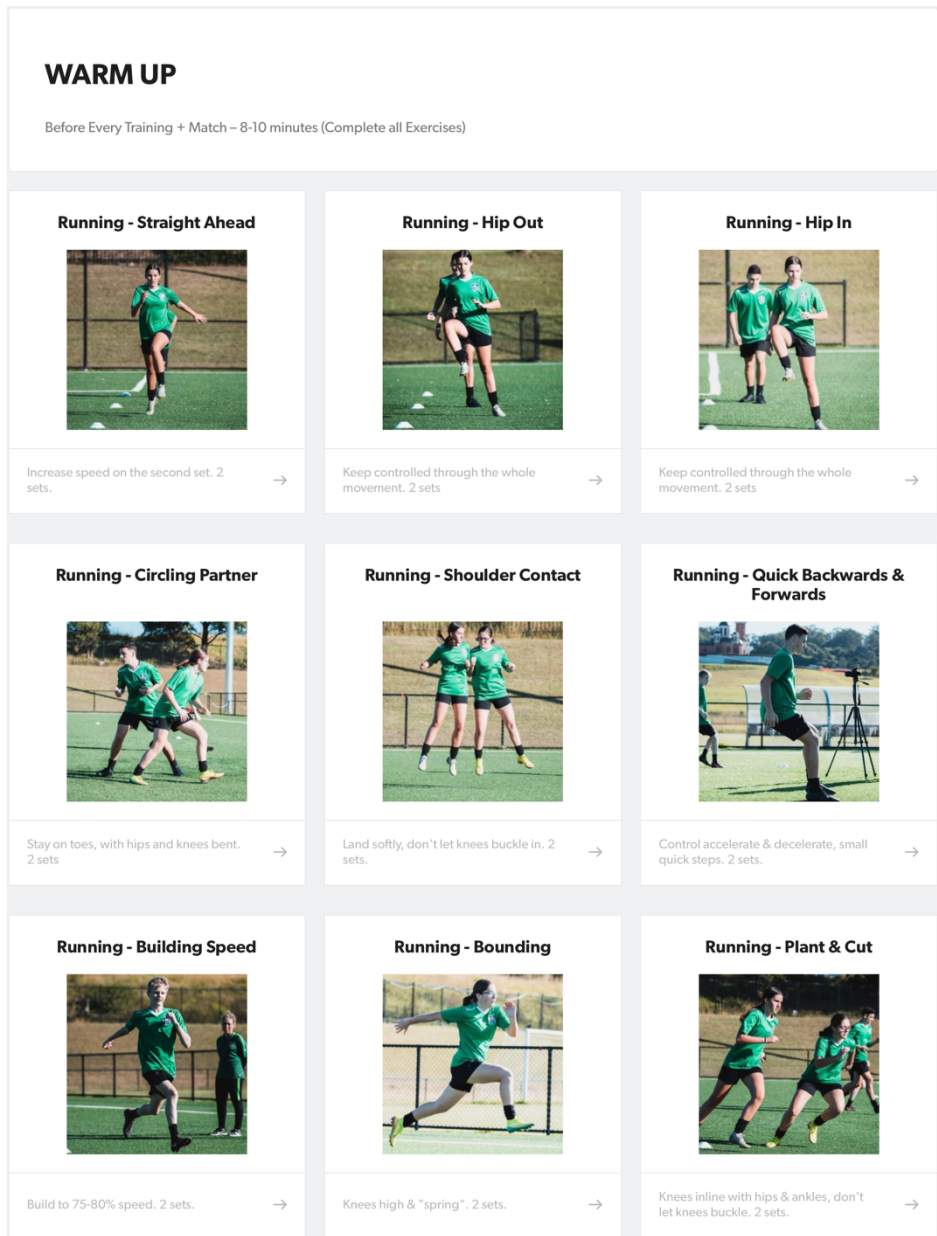


Image 1: Football Australia Warm Up [8] (The pamphlet)

“Cool!” Ava cried.

“It’s important no one else gets a soft tissue injury,” said their coach. “Especially those of you who have had one before. A previous soft tissue injury is one of the biggest risk factors for getting another, [2]” he said eyeing Paige.

When they finished their warm up they put on their mouth guards and padding [1] and ran on the field, hoping for a good, safe game.

The end.

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