

Coping with COVID Series: Physiotherapy and Injury Prevention

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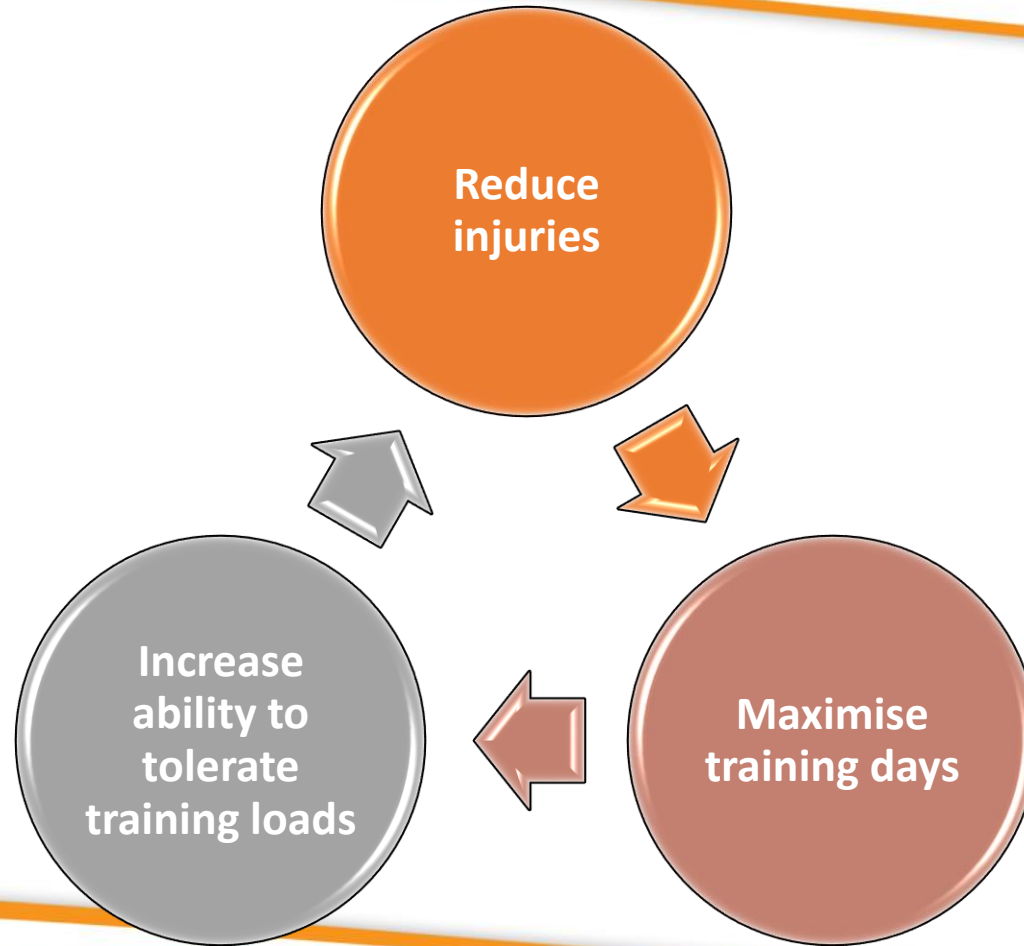


Outline

- Dealing with COVID 19 from an injury prevention point of view:
 - Why injury prevention is so important, especially now
 - Training changes during lockdown
 - How to safely return to training
 - Other things you can do to reduce your risk of injury
- Practical session: foam rolling and mobility work



Why try to prevent injury?



Also leads to improved performance



Why is injury prevention so important now?

- Training load
- Coach availability
- Physio availability
- Uncertainty/planning

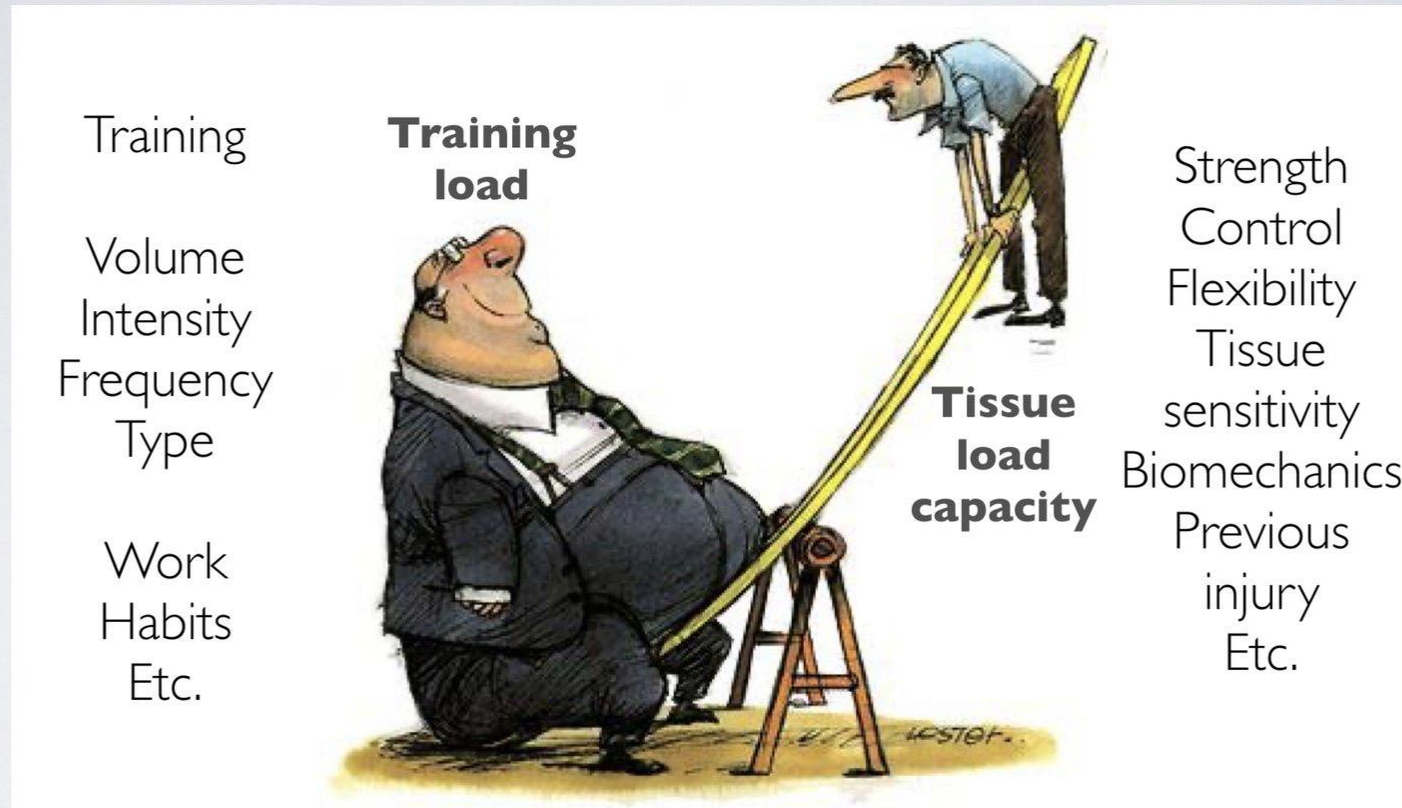


What can we do to prevent injuries?

- Balance training load
- Optimise recovery
 - Nutrition
 - Sleep
- Strength training
- Mobility work *



FINDING THE BALANCE



Workloads that maximise positive adaptations while minimising fatiguing effects will help make athletes more robust to injury.

Training changes due to COVID 19 Pandemic?

- Volume of training
- Intensity of training
- Type of training
- Training surface
- Not having a coach present
- Not having physio or massage

Be careful when returning to 'normal' training.

Practical guidelines for balancing training load



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Keep a training diary.

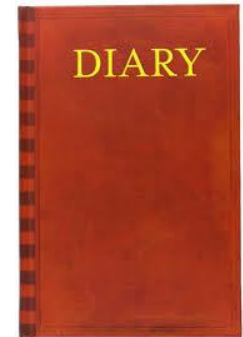
Speak with your coach.

Gradually increase training load.

Avoid sudden increases in training load.

Monitor response to training – adjust if needed.

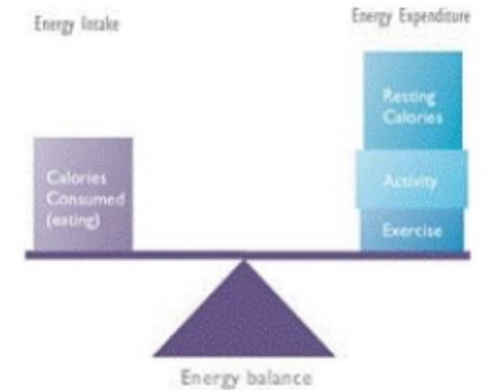
Consider all aspects of training load: eg different surfaces.



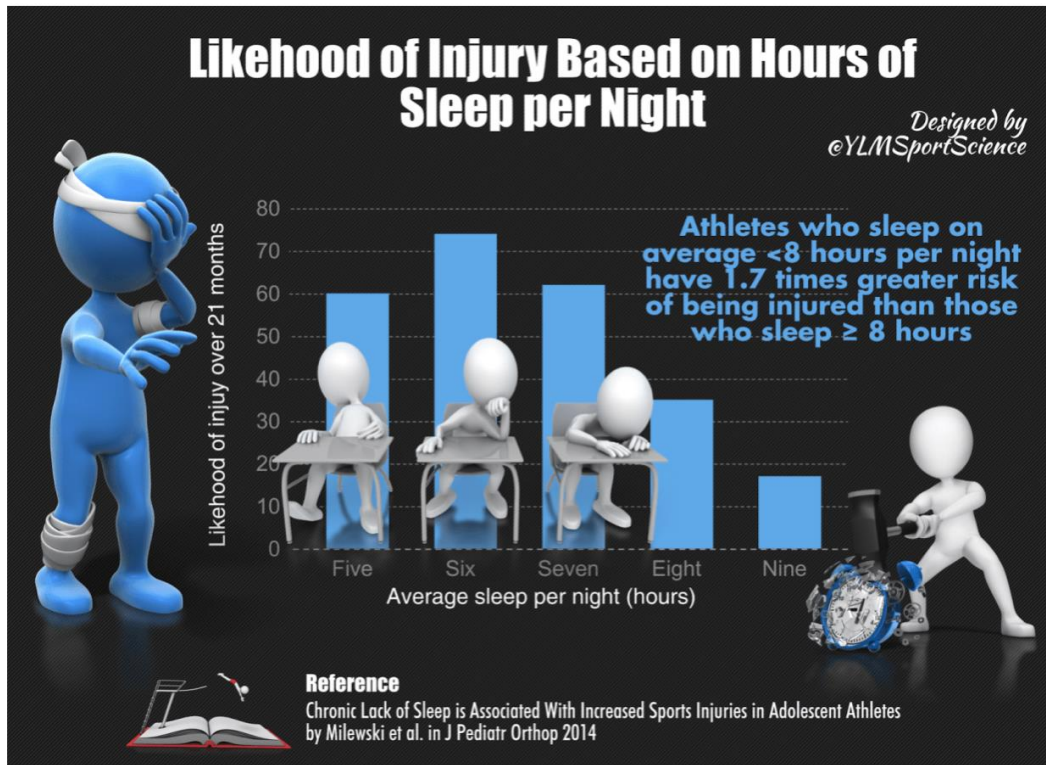
Recovery is

Nutrition

- Make sure you are eating enough.
 - Remember to take training AND your daily activities into account (eg cycling to school etc.)
 - Eat more on hard training days.
- Time your protein and carbohydrate intake around training.
 - BOTH protein and carbs are important for repair



Sleep



- Athletes who sleep less than 8 hours per night have 1.7 times greater risk of sporting injury than their counterparts who sleep for 8 or more hours.
- When an **increased training** intensity and volume was coupled with **shorter sleep** in **elite adolescent** athletes, injury risk increased twofold.

Summary

- Get back to 'normal' training gradually - plan
- Prioritise your recovery especially sleep and nutrition
- Foam rolling and mobility work can be used when access to physio and massage is limited



Questions?



Practical Session

Foam Rolling and Mobility

AAI MOBILITY PROGRAM

Flexibility refers to the range of movement available at a specific joint, whereas mobility is the range that a joint can work through during dynamic activities such as running. Having adequate mobility particularly around the ankles, hips and thoracic spine is important for runners to ensure that a sound posture can be sustained during the gait cycle. This program aims to enhance mobility across these areas using a combination of Active Stretches and Dynamic Mobilisations.



1 KNEE TO WALLS

Aim: Stretch the whole medial and lateral the ankle joint.
Technique:
 Stand facing wall.
 Place one leg forward with your foot 12-15cm from the wall.
 Keep your feet on the ground and push your knee forward towards the wall.
Hold for 3-4 sec.
Repeat x 10 each side.



7 LUMBAR ROTATIONS

Aim: To mobilise the lumbar spine.
Technique:
 Lying on back with knees bent up and arms out at 90 degrees.
 Keeping knees to get your legs drop to the side.
Hold for 3-4 sec and then return to starting position.
Repeat x 5 each side.



2 INCH WORMS

Aim: To stretch through your calf, hamstring and lower back.
Technique:
 Begin in a press-up position. Walk your feet forward slowly, after raising your left and your right, ensuring you drop your heels towards the floor with each step. As you do so, bend only at the hip, keeping your legs straight. Keep your feet in an inverted V position. When you find yourself in the position of your maximum stretch start making your hands forward relative to the press-up position.
Hold for 3-4 sec.
Repeat x 5.



8 CRUCIFIX STRETCHES

Aim: To stretch Glutes and Lower Back.
Technique:
 Lying on back with arms out to side and legs straightened.
 Pull your right knee up towards your chest and rotate to the left keeping your feet on floor.
Hold for 3-4 sec and return to start position.
Repeat x 5 times each side.



3 HAMSTRING STRETCH – STRAIGHT KNEE & BENT KNEE

Aim: Stretch the hamstring muscles.
Technique:
Straight Knee: Lie on your back.
 Using your hands to assist the stretch, draw one leg towards you ensuring you keep the knee straight. **Hold for 3-4 sec.**
Bent Knee: Lie on your back at a 90 degree angle to your chest.
 Using your hands to assist the stretch, try to straighten the knee while maintaining the 90 degree. **Hold for 3-4 sec.**
Repeat x 10 each side.



9 PIGEON STRETCHES

Aim: To stretch glutes and lower back and mobilise the hip joint.
Technique:
 Front knee bent 90 degrees with hip, rear leg extended 90 degrees.
 Bring front thigh over to a wall position to stretch rear leg.
 Push forward to stretch front leg.
Repeat x 5 times each side.



4 QUADRICEPS & HIP FLEXOR STRETCH

Aim: To stretch quadriceps & hip flexors.
Technique:
 Adopt a kneeling lunge position. Place one foot on a bench or chair.
For Quadriceps: Pull your posterior foot & push backwards bringing your heel to touch your foot. **Hold for 3-4 sec.**
For Hip Flexors: From the same position bring your front foot to the floor and push your feet forward and down. **Hold for 3-4 sec.**
Repeat x 5 each side.



10 KNEELING LUNGE THORACIC ROTATION

Aim: Mobilise the Thoracic Spine.
Technique:
 Adopt a kneeling lunge position on facing a wall.
 With your left knee forward bring your right hand forward to touch the wall.
 Rotate the thoracic spine by bringing your left arm backwards to your arms are in line.
Hold for 3-4 sec and then return to starting position.
Repeat x 5 each side.



5 CHILD POSE

Aim: To mobilise ankles, hips & thoracic spine.
Technique:
 Adopt a 4 point kneeling position (on your hands and knees) if resting your hands in contact with the floor.
 Sit back onto your heels.
Hold for 3-4 sec then return to 4 point kneeling position.
Repeat x 10.



11 WALL ANGELS

Aim: To improve thoracic and shoulder mobility.
Technique:
 Stand against a wall ensuring your back is flat against it and your arms down by your side.
 Bring your arms up to the W or HEAD position.
 From here extend arms against wall keeping them in contact with the wall at all times.
Hold for 3-4 sec and then repeat the movement in reverse.
Repeat x 10 times.



6 ADDUCTOR STRETCH

Aim: Stretch the Adductor muscles and mobilise the hip joint.
Technique:
 Adopt a half kneeling position. Bring one leg out to the side.
 Maintaining an ankle-dropped knee on the supported leg at least up to your head, using your arms to support your upper body.
Hold for 3-4 sec and then return to the starting position.
Repeat x 5 each side.



12 BENCH ROCKERS

Aim: To mobilise the thoracic spine and shoulders.
Technique:
 Start in a kneeling position with your arms extended and resting on a bench or bench.
 Stretch your shoulders and thoracic spine by bringing your trunk downwards towards the floor.
Hold for 3-4 sec.
Repeat x 10 times.

https://www.athleticsireland.ie/downloads/other/AAi_Coach_Injury_Prevention.pdf

Practical Mobility Session
Foam rolling TSpine
Foam rolling lats and back of shoulder
TSpine mobility – kneeling rot and thread the needle
Lat stretch
Book opens (arms bent – pecs)
Self release gluteals with ball
Pidgeon stretch
Lower back crossover
Foam rolling quads and hamstrings
Quad to hip flexor to hamstring stretch
Calf foam rolling
Peroneal foam rolling
Plantar fascia self release
Calf stretch x 2
Knee to wall mobilisations
Combined movements:
90/90 hips + side flexion and reach (yoga)
Bretzel
Lunge with Tx rotation
Warrior