



How to prevent injuries: preparing the body (warm-up, nutrition, sleep and stress management)


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Objectives



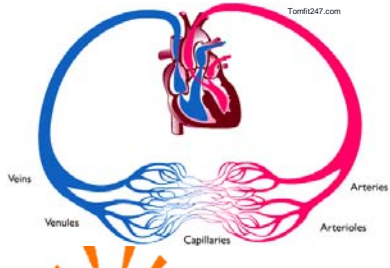
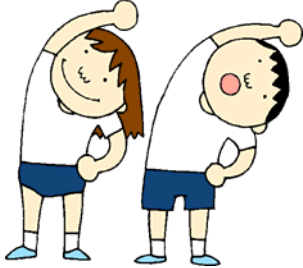
Upon Completion of this course, participants will be able to:

- Articulate what a dynamic warm up is and why it is important for injury prevention
- Define the importance of nutrition in the young athlete and identify best nutrition pre and post activity
- Discuss the importance of adequate sleep hygiene for injury recovery and pain management
- Explain the impact of stress management on overall health and perceived pain.





Why do we warm up?



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What makes a good warm-up?



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Dynamic Stretching for Warm-up

This program is part of a comprehensive warm-up. A warm-up should have at least three things:
1. 5-10 minutes of light cardiovascular work.
2. Dynamic stretches – stretching with movement.
3. Sport-specific or activity-specific agility drills.

Inchworms:

- Start in pushup position, keeping core active.
- Walk your feet forward toward your hands without bending your knees.
- Do not move your hands forward while moving your feet.
- Stop when you can no longer move feet forward and keep knees straight. Let your heels drop.
- Walk your hands out to the start position.



*Repeat for 10 repetitions and perform 2 sets.

Soldier Kicks:

- Start in standing position with core active and arms out in front of you.
- Kick one leg up towards your hands but keeping the knee straight.
- Slowly lower leg to ground with control and take a step.
- Repeat on the other leg.
- When kicking, DO NOT bend the leg you are standing on or go up on your tip toes.



*Repeat for 20 kicks and perform 2 sets.

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Dynamic Stretching for Warm-up

Cradle Walk:

- Start in standing position with core active.
- Bend knee, and grab your shin. Pull upward toward your other shoulder.
- Hold three seconds.
- Lower foot with control and take a step.
- Repeat on the other leg.



*Repeat for 20 grabs and do 2 sets.

Shin Grabs:

- Start in standing position with core active.
- Bend one knee so you can grab your ankle with the same-side hand.
- Pull ankle toward your bottom while keeping your knee pointed at the ground.
- Hold three seconds, then lower foot and take a step.
- Repeat on the other leg.



*Repeat for 20 grabs and do 2 sets.

Lunge Walk:

- Start in standing position with core active.
- Take a large step and lower the back knee to the ground with control. Stop before your knee hits the ground.
- Keep trunk upright. Do not arch back. Do not let front knee move forward past your foot.
- Return to starting position and repeat on other leg.




*Repeat 10 lunges and do 2 sets.


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Cool Down



Slowly lower your heart rate to avoid fainting or feeling sick



Hold stretches 30-45 seconds to reduce stiffness and lactic acid build up

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Nutrition

examples

Multiple languages

tips

Daily checklist

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Fuel Up

What

When

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Recover

What




When

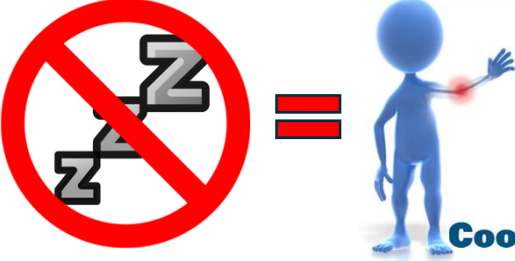
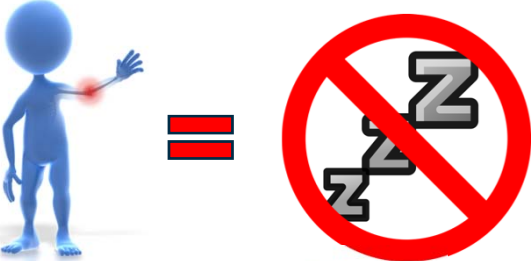


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Sleep Hygiene



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Sleep Hygiene - Handout

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Sleep Hygiene

A good night's sleep is very important.

The brain during sleep


- Places the day's experiences into memory.
- Improves the ability to learn.
- The body repairs old cells with new ones.
- The body reenergizes organs and muscles.

Without a good night's sleep

- You make more mistakes.
- May have higher stress.
- Have a short temper.
- Have lower motivation.
- Have slower reflexes.

Bed and bedroom

- Comfortable bedding:** Uncomfortable pillows or covers make you toss and turn all night. A hard or lumpy mattress can also stop a good night's sleep.
- Room temperature and ventilation:** Make sure you are warm, not too hot or not too cold.
- Noise:** Sudden, loud noises from inside or outside the home can disrupt sleep. Steady, low sounds like the whir of a fan or air conditioner are soothing because they help block out other noises.
- Light:** Light is one of our body's most powerful time cues. The rising sun can stimulate the brain into wakefulness long before the alarm goes off. A dark room is the best for sleep, day or night.
- Bed only for sleeping:** Do not use your bed as an office, workroom or recreation area. Let your body "know" that the bed is associated with sleeping.



Television

Many people fall asleep with the TV on in their room.

- Watching TV before bedtime is a bad idea.
- TV is stimulating and tends to keep people up.

- We encourage our families to keep TVs out of bedrooms.
- If you have a TV, decide on the time to turn it off.

Radio: Some people feel the radio helps them go to sleep. Since radio is a less engaging medium than TV, this is probably a good idea.

Remember: Use the automatic turn off for both your TV and radio so that they do not play all night.

Before bedtime

- Keep the same schedule:** Going to sleep and waking up at the same time each day trains your body. This makes it easier to go to sleep and wake up.
- Limit daytime naps:** Many people feel sleepy in the late afternoon and take a nap. This is okay but you need to limit your nap to only 30 minutes. Longer naps interfere with your night sleep.
- No caffeine 4 to 6 hours before bedtime:** This includes caffeinated beverages such as coffee, tea, many sodas, as well as chocolate.
- No heavy, spicy, or sugary foods before bedtime:** Do not eat or drink these foods 4 to 6 hours before you go to bed. This food makes it difficult to stay asleep.
- Exercise regularly, but not right before bed:** Regular exercise, especially in the afternoon, can help deepen your sleep. Strenuous exercise within 2 hours before bedtime can make it difficult to fall asleep.

Getting ready for bed

- Try a soothing snack before bed:** Such as warm milk or foods high in the amino acid tryptophan, such as bananas.
- Practice relaxation techniques before bed:** Relaxation techniques such as yoga, deep breathing and others may help relieve anxiety and reduce muscle tension.
- Don't take your worries to bed:** Leave your worries about jobs, school, daily life, etc., behind when you go to bed. Some people find it useful to assign a "worry period" during the evening or late afternoon to deal with these issues.
- Establish a pre-sleep ritual:** Pre-sleep rituals, such as a warm bath or a few minutes of reading, can help you sleep.
- Handle difficulty sleeping:** If you don't fall asleep within 15-30 minutes, get up, go into another room, and read until sleepy.

If you can't sleep

Most people wake up one or two times a night for various reasons.

If you get up in the middle of night and cannot get back to sleep within 15 to 20 minutes, do not stay in the bed "trying hard" to sleep.

What to do:

- Get out of bed and leave the bedroom.
- Read.
- Have a light snack.
- Do some quiet activity.
- Take a bath.

What to NOT do:

- Do not perform challenging or engaging activity such as office work, housework, etc.
- Do not watch television.


You will generally find that you can get back to sleep 20 minutes or so later.

Other problems that upset sleep


- Several physical conditions.** These include: acid reflux with heartburn, arthritis, menorrhagia, hot flashes, headaches.
- Psychological and mental health problems.** These include depression, anxiety and stress.
 - In many cases, difficulty staying asleep may be the only presenting sign of depression.
 - Please call your doctor if you feel this is a concern. Your doctor can help you find the source of these feelings and decide on the best treatment.
- Medicines** Many medicines can cause sleeplessness as a side effect. Ask your doctor or pharmacist if medicines you are taking can lead to sleeplessness.

Notes

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Stress Management: Negative Effects of Stress




Increased stress can cause acute health consequences affecting multiple body systems

Prolonged, untreated chronic stress can result in more serious issues

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- Choosemyplate.gov
- <http://www.apa.org/helpcenter/manage-stress.aspx>

