

CURRICULUM SUPPORT

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feature article

Safe stretching

In any physical education class there will be students with different abilities and anatomical strengths and weaknesses. Some may even have postural problems. The following simple guidelines may help you cater for these differences and make the class a safer place.

It is now commonly recognised that a number of movements or stretching positions may cause injury.

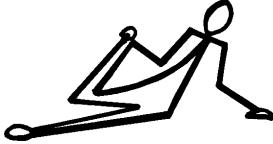
These include:

- performing the stretch incorrectly
- forcing a joint past its range of motion
- excessive speed or bouncing moves in a stretch
- excessive load on a limb or joint
- holding moves too long

- repeating moves too much
- muscle imbalance: working one muscle group excessively.

Here is a list of stretches and movements which are now considered unsafe, as well as a description of the safer alternatives, where they exist.

Unsafe movement	Safe alternative
Deep knee bends The forces exerted on the knee cap and surrounding ligaments, muscles and tendons are multiplied. 	Quarter squats performed slowly. 
Hurdles stretch The medial and cruciate ligaments are twisted unnaturally. 	Bend the leg in front of the body, not behind. 
Burpees and backarches Hyperextension has the potential for lower back damage.  	No safe alternatives
Rotation of the head This may compress the cervical inter-vertebral discs.	Turn head to left and right, forward and backwards in a slow and controlled manner.
Hyperextension of the neck	This stretch should not be performed.
The plough This may cause compression in the cervical area. 	The Cat Stretch is an effective neck and shoulder stretch. 

<p>Windmills and fast arm flings These ballistic movements often cause muscle tears and ligament damage in elbow and shoulder joints.</p> 	<p>Stand tall with correct posture. Move shoulders up, down, back and forwards, slowly and smoothly.</p>
<p>Straight leg raises This may cause disc and vertebral compression and increases the lumbar curve.</p> 	<p>Lie down on the back, knees bent. Hug the knees, tuck in the chin, and rock forward and backwards.</p> 
<p>Straight leg scissors</p> 	<p>Hug one knee to chest, hold and elevate the head. Repeat with the other knee.</p> 
<p>Kneeling quadriceps stretch, then lying backwards. This places too much stress on the articular surface of the knees.</p> 	<p>Lie on side, support with elbow and grasp the foot of the top leg and gently pull the foot to the bottom.</p> 
<p>Cycling This exercise puts excessive strain on the spine.</p> 	<p>No safe alternatives.</p>
<p>Flat bend backs Excessive strain on the spine.</p> 	<p>No safe alternatives.</p>
<p>Standing straight leg toe touches May cause lumbar arching and may cause disc and vertebral compression.</p> 	<p>Sit with one leg extended, the other slightly bent. Stretch the arm over the extended leg and place the other hand on the bent knee. Sit up straight, tilting the pelvis forward, and lean forward gently until you feel a hamstring stretch.</p>

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References

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