



Stittsville Vicious Fish Masters Swim Club

Vicious

Fish Food

.....For Thought



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## Knee Injury Prevention

### Keys to Injury Prevention:

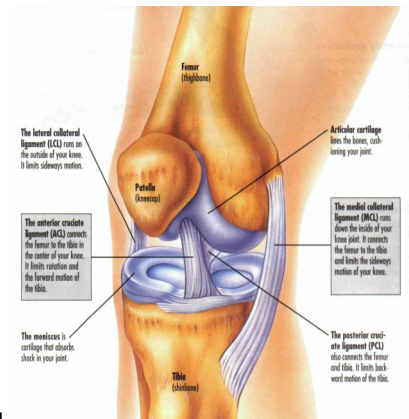
- Proper stretching and warm-up!
- Cross training and strengthening of the joint
- Proper swimming form
- Listen to the Music .....uhh.....your body!

Typically, knee injuries are relatively uncommon among swimmers as compared to athletes who participate in weight bearing exercises. Athletes who participate in contact and collision sports are more susceptible to knee injuries due to the incidence of direct blows to the knee joint. However, swimmers who focus on the breaststroke have been known to suffer from discomfort and pain on the inside of the knee during whip kick. This pain and discomfort has been commonly termed as “breaststrokers knee” due to the incidence of injury while performing whip kick. Because of the motion of the whip kick it causes a level of stress and strain on the knee that if not taken care of can be very painful and uncomfortable.



In general, the knee is a very stable joint. It has a great deal of

musculature in order to support the joint. The knee, for our considerations here, has only two motions, flexion and extension (bending and straightening) which is beneficial for increased stability. However, when performing whip kick it is necessary to extend the knee, push outwards and then quickly pull it back towards the body in a fluid motion in order to get the whipping motion to propel the body forwards. It is this lateral motion that causes distress in the knee. The outward and inward motion puts a great deal of stress on one of the major ligaments of the knee. Ligament is made of tough fibrous tissue that by definition holds one bone to another. In this case, the medial collateral ligament (MCL) holds together the bone of the thigh (femur) to one of the bones of the lower leg (tibia). The MCL runs between these two bones on the



inside of each knee. When the whip kick is performed the MCL becomes stretched and will tear very slightly in some cases. This can be what is causing the pain on the inside of the knee. In most cases, this pain will go away very quickly once the kick is discontinued. However, if continued this can turn into major problems and may require medical attention. Fortunately, in most swimmers this injury will not occur unless the swimmer is performing hours of whip kick a day for 5 – 6 days a week.

The key to any pain and injury is to listen to what your body is saying. If you’re finding that the discomfort doesn’t subside quickly or with some light massage and ice and heat therapy then it is perhaps time to take a break and even talk to your doctor or a physical therapist for their opinion!

Happy and healthy swimming!

Stay fit!

## About the Author

Andrew McLean is a fourth year Human Kinetics student at the University of Ottawa. He is a specialist in human physiology and will be continuing on with a Master’s degree in Human Kinetics once he has completed his bachelor’s degree in June. Currently Andrew is com-

pleting an internship with SVFM. Andrew is here to help answer any questions you may have regarding exercise and human physiology, injury prevention and rehabilitation. Personal training sessions and consultation are available by request. You may reach him at [mcleana@magma.ca](mailto:mcleana@magma.ca)

