Osteoarthritis and Youth

Osteoarthritis is not a consequence of aging but rather a metabolic change in cartiledge that results in degeneration of the cartiledge. Most researchers agree that injury can predispose a person to the development of osteoarthritis. Pathological changes compromise the joints ability to withstand repetitive loads causing joint space narrowing and eventually joint destruction. The types of injuries reported to have an influence on these changes are fractures, dislocations, meniscal tears, ligament injuries and contusions.

Children of all ages involved in sports are at risk of injury. The growth cartiledge in children is less resistant to micro trauma and can result in overuse injuries. The articular surfaces in children are more susceptible to joint shearing forces and during rapid growth there are periods of decreased flexibility which lead to tight muscle tendon units. When these are taught there is increased risk of injury to muscles and surrounding structures which may lead to osteoarthritis. Due to lack of innervation (nerves) to the cartiledge pain may not be felt until significant unrepairable damage has occurred.

We should be concerned with safe levels of sport participation, prevention and care of injury for children in order to prevent the pain and disability of osteoarthritis in their future. For further information visit www.sportbodybasics.ca.