

Ask the Professional – Hot or Cold?

Now that we are well into spring, with summer just around the corner, more people are getting outside and getting active. It is also the time of year for soccer, baseball, golfing, gardening and the associated aches, pains and injuries that are commonly caused by these activities! I often am asked whether or not to apply heat or cold to a sore/injured area, for how long and why. Although there has been a lot of research done on the efficacy of cold application (also called cryotherapy) and heat application, with mixed reviews as to whether or not these treatments actually do what they are proposed to do, they can be very effective when used properly. Generally, cold therapy is utilized for new or recent injuries where there is active inflammation (swelling, redness and increased temperature) in order to help reduce the inflammatory reaction. However, it can also be used on an area that has been injured in the past following an activity that stresses the area. Thus, someone with long standing knee problems can ice following a run prophylactically. The application of cold results in vasoconstriction of the blood vessels (causing them to narrow) and can also help to limit the amount of bleeding and inflammation of an injured area following injury. Typically when applying cold, follow the 'golden rules of 10,' where the ice is placed on the affected area for 10 minutes, taken off for 10 minutes then reapplied for 10 minutes. This gives the skin and tissues time to rewarm to their normal temperature before subsequent cold is applied. Be sure to place a thin towel between your skin and the cold in order to avoid frost bite (athlete's listen up, as you are notorious for giving yourself frostbite in you enthusiasm to get back to your pre injured state as fast as possible!). For long standing or chronic injuries, where there is no longer an active inflammatory reaction occurring, the application of heat can be very beneficial in order to help alleviate pain and discomfort associated with tight and stiff muscles and joints. Heat application helps to stimulate blood flow by opening up the blood vessels (also called vasodilation) and can help to increase the elasticity and flexibility of the connective tissues and musculature of the joints. Typically, heat is applied longer than cold, with application for upwards of 15-20 minutes. Be sure to place a thin towel between your skin and the heat in order to avoid burning your skin. It can also be applied prior to an activity in order to warm the area as much as possible, whereas following the application of ice you should not return to activity until the tissues have completely rewarmed and there is no evidence of residual inflammation that could cause worsening of an injured state. Bear in mind that people who have problems with circulation and diminished skin sensation should always contact their health care professional prior to initiating any type of cold or heat therapy.

For more information on the application of hot or cold, please contact;



Dr. Dana Selby BPHE, CK, DC
Active Choice –Rehabilitation Centre
38 Mill St. E., Acton, ON, L7J 1H2
519 853 2244 dr.dselby@gmail.com

Dr. Dana Selby is an alumni from the Faculty of Physical and Health Education at the University of Toronto, the Canadian Memorial Chiropractic College (CMCC), is a Certified Kinesiologist through the Ontario Kinesiology Association (OKA) and is certified in clinical acupuncture with the Acupuncture Council of Ontario (ACO) and is currently taking a 3 year fellowship in rehabilitative sciences.