## Newsletter

April 2006

## Pre-run warmup is time well spent

Bruce Deacon Times Colonist March 2006

The first time most of us heard the words "warm-up" was likely in an elementary school gym class. We soon learned it was code for "if you want to play the fun games, you have to do these silly exercises and run laps of the gym."

Our teachers told us it was important, but most of us figured out early on that minimal effort was required. Get it done, goof around with your buddies and move on to the good part of the lesson.

So when we return to regular exercise as adults, it's only natural that we bring our notions that warming up is minimally important. The best people-watching at running events is the 20 minutes before the start of a race. The warm-up routines range from standing in line at the porta potties to elaborate exercises and pre-event rituals.

Research shows warming up makes a difference in performance and injury prevention for one simple reason: warm muscles work better then cold ones. They're more efficient, have greater blood flow and oxygen uptake, have a greater range of motion and contract with greater power.

The time spent warming up is time well spent. However, all warm-ups are not created equal. Some routines are much more effective than others and some exercises can actually increase your risk of injury.

The first part of a sound warm-up routine is to raise the body temperature with 5 to 20 minutes of cardiovascular activity at a gentle effort level. Since the goal is to get warm, you should wear a sweatshirt or running jacket and a pair of track pants.

Once you've finished, its time to ease into some stretching. The traditional approach to warm-up stretching was to have a good 20 minutes of gentle, passive stretching exercises. The thought was that a greater range of motion would help as you moved into more intense aerobic or anarobic exercise. This approach is now being questioned and passive stretching is now recommended for after exercise for recovery or specific flexibility training.

Researchers are finding that over-stretching your connective tissue immediately before intense activity can impair running efficiency and actually hurt your performance. Running is a dynamic activity that requires your legs to act as energy returning mechanisms, transferring the impact-forces into forward motion.

Too much passive stretching before exercise leaves your muscles over-absorbant and reduces your neuromuscular ability to contract your muscles quickly on impact.

Athletes are now moving towards specific and dynamic stretching for their warm-up routines. Instead of a passive hamstring stretch where you reach for your toes, a dynamic stretch might have you stabilizing yourself against a wall as you gently swing your leg in front and back of your body. With each swing, your hamstring is brought to the limits of its range of motion.

Other dynamic exercises might resemble running drills such as running high knee lifts, butt-kicks and lunge walks.

If you're warming up for an intense effort like a race or a speed workout, end the warm-up with a bit of quality work. Do five to eight strides. These are 80 to 120 metre sprints that run at 75 to 90 per cent of your maximum pace. Start gradually and pick up the pace, taking a minute or two between these efforts to allow your body to recover.

Finish your warm-up with a few hops, skips or jumps. That stimulates your central nervous system and gets your muscles contracting quickly.

If truth be told, you probably figured things out quite accurately as a child in gym class. Warming up is what you have to do before you get to the real fun.

What you missed as a child is that the better you warm up, the more fun you'll have.

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