

Get Healthy, Stay Healthy with Kinetic Health

February
2014

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Get Rid of Those Reservoirs of Bad Fats

By: Dr. Brian Abelson DC.



Strange as it sounds, most people have reservoirs of **bad fats** in their bodies! In fact since the average North American has been eating the wrong types of fats for so long, their cell membranes have actually become reservoirs of these destructive fats.

The typical North American diet is high in saturated fats, high in arachidonic acid, polyunsaturated fats, and trans-fatty acids. Both saturated fats and trans-fatty acids cause the formation of stiff, non-permeable cell membranes, which decrease cell-to-cell communication and limit transport of nutrients into the cells. All of

these fats are a primary factor in the development of numerous degenerative diseases, cancer, heart disease, arthritis, immunodeficiency, diabetes, hypertension, osteoporosis, connective tissue disease, and obesity. *Article continued on page - 2*

The Dreaded Groin Strain

By: Dr. Evangelos Mylonas DC.



Hockey season is in full swing and with it comes one of the most common sports related injuries we see at Kinetic Health – **groin strains**. Statistically groin strains account for about 10% of all injuries in the NHL. Surprisingly the majority of these injuries **do not** involve a direct hit or contact.

What is a Groin Strain?

A groin strain is an injury to the muscles of the inner hip and thigh (adductor muscles). These muscles fan out from the pelvis to the inner part of the upper leg.

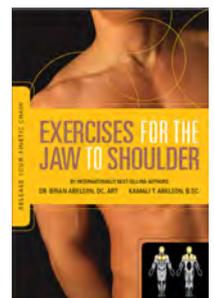
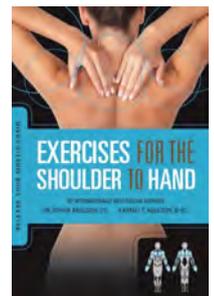
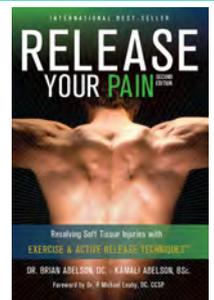
The primary action of these muscles is to pull the leg inwards (*adduction*) and also to help bend and rotate the leg at the hip joint. A strain occurs when one or more of the groin muscles is either stretched too far, or forcefully contracts while it is being stretched, resulting in torn muscle fibers.

Article continued on page - 3



Plan Canada - Gifts of Hope

As we mentioned in our December newsletter, we donated a portion of all patient visits in December and January to **Gifts of Hope with Plan Canada**. We are happy to report that we were able to raise sufficient funds to equip a school with supplies. The funds we raised went towards water pumps, separate latrines for girls, and a cafeteria filled with tables, chairs, pots and pans, and nutritious dried goods for making healthy, filling meals. These funds also helped provide desks, chairs, and blackboards, all the essentials for creating the best possible learning environment. This Gift of Hope program was even more effective since for every \$500 raised, these funds were matched by other organizations, to generate a total purchasing value of \$3000. Thanks to everyone who contributed.



Check out our latest
publications at:
www.releaseyourbody.com

Reservoirs of Bad Fats (continued)

Fats and Inflammation

The 'Fat Equation' is really quite simple. **Good fats** promote anti-inflammatory activity in your body; **bad fats** promote destructive, inflammatory processes.

Keeping inflammation under control is one of the main reasons you should think about the **type of fats** you are putting into your body. Inflammation is part of the body's natural immune response, and is triggered by injury, allergens, disease, or poisonous chemicals. During this immune response, fatty acids are released from your cell membranes. These fatty acids are then transformed into substances called *Eicosanoids*.

There are both good and bad *Eicosanoids*, some will reduce inflammation and encourage healing, while others will create states of destructive inflammation. Eicosanoids also help to control other bodily functions such as blood pressure and immune functions (including inflammatory responses). This behavior is dependent on the types of certain fats stored in your cell membranes. If you have stored healthy Omega-3-fatty acids (obtained through good dietary habits) then your body will heal faster and cope with any aggressive inflammatory states. If you have a history of consuming high levels of Omega-6-fatty acids (bad oils) then destructive Eicosanoids will be released and your body will have to deal with increased aggressive inflammatory states. Lets compare how your body will respond to two different meals one with "Bad Fats" and one with "Good Fats".

Bad Fats Meal: Burger, Fries and a shake.

Produces the hormone Prostaglandin-E2, which:

- Constricts blood vessels.
- Increases pain.
- Increases swelling.

Produces the hormone Thromboxane-A2, which:

- Constricts blood vessels.
- Constricts airways.
- Increases blood clotting.
- Reduces circulation.

Produces the hormone Leukotrienes-4series, which:

- Constricts airways.
- Prolongs duration of inflammation.
- Promotes inflammation.

Solutions to Bad Fats

The solution to this problem is quite simple! Stop consuming the bad fats, start consuming omega-3 fatty acids, and use only pure virgin olive oil. Omega-3 fatty acids can be found in fish, such as salmon (use wild fish if possible), tuna, and halibut. They are also found in certain nuts and nut oils. In addition, throw out any polyunsaturated oils you have in your house. Cooking with only pure virgin olive oil can make a huge difference. Researchers have found that this is one of reasons why the Mediterranean Diet is so effective.

Research has shown that, within just 3 months, daily supplementation with omega-3 fatty acids and removal of bad fats from your diet will give you a considerable improvement in insulin sensitivity. This will decrease overall inflammation, allow for faster body repair, decrease pain, decrease the risk of heart disease and diabetes, increase weight loss, and give you a much younger you! This will literally will help to **turn back your biological clock**.

Good Fats Meal: Fish, salad with avocado, flax oil dressing and fresh vegetables.

Produces the hormone Prostaglandin-E1, which:

- Improves circulation.
- Increases protective stomach secretions.
- Reduces blood clotting.
- Relaxes muscle spasms.

Produces the hormone Prostaglandin-E3, which:

- Decreases sensitivity to pain.
- Improves circulation.
- Promotes anti-inflammatory response.
- Relaxes blood vessels.

Produces the hormone Leukotrienes-5 series, which:

- Increases circulation.
- Promotes anti-inflammatory response.
- Relaxes airways.
- Relaxes blood vessels.



PUFA's & Your Biological Clock

Polyunsaturated fats, vegetable oils (except for olive oil) negatively affect thyroid function by blocking thyroid hormone secretion. Thyroid hormones are essential for making anti-aging hormones.



Olive Oil - The Anti-Inflammatory Oil

Olive oil acts very similar to anti-inflammatory drugs in its ability to reduce inflammation. Olive oil contains a chemical called oleocanthal. Oleocanthal, like anti-inflammatory drugs, causes inhibition of COX-1 and COX-2 enzymes, thereby greatly reducing all inflammatory reactions.

The Perfect Gift For Valentines Day Massage Therapy Gift Certificates



Give the perfect gift this Valentines Day. Kinetic Health Massage Gift Certificates can be given in 30 minute, 60 minute, or 90 minute packages. They are a great way to introduce someone to the benefits of deep-tissue therapeutic massage therapy. Over the years this gift has proven to be everyone's favourite at our clinic!



The Dreaded Groin Strain (Continued)

Symptoms of a Groin Strain

Common symptoms of a groin strain are pain with walking, sitting, and when bending at the hip. The pain is often described as achy, burning, and in some cases *electric* in nature (especially if nerve irritation is part of the injury).

Groin strains are usually graded based on how many muscle fibers have been torn and on how much normal activities have been limited.

Grade I Strain: A few muscle fibers are torn, pain is mild, and activities are minimally affected.

Grade II Strain: A moderate number of muscle fibers are torn, pain is moderate, and activities can be limited. There may be moderate bruising and/or swelling.

Grade III Strain: A large number of muscle fibers are torn, or in rare cases, there is a complete tear, pain is severe, and activity is very limited. There may be significant bruising and/or swelling.

Understanding Skating Biomechanics

In order to understand why hockey players are at risk of sustaining a groin injury we need to examine the basic skating stride and the muscles involved in performing this complex movement. A basic skating stride can be divided into two phases: the **Support Phase** and the **Swing Phase**. The Support Phase is when a skater pushes off with one leg and glides. The Swing Phase is when the leg is brought back to center in order to push-off again.

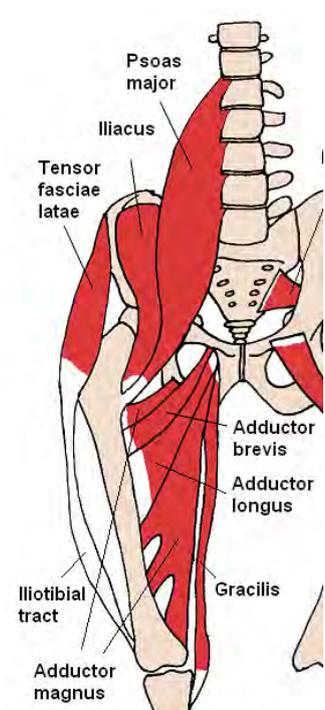
During skating, the groin muscles act to counterbalance the forces generated at the hip, knee, and ankle in order to push a skater forward. When a skater pushes off from side-to-side during the Support Phase, the hip moves back (extension), and outwards (abduction), the knee straightens (extension) and the ankle bends downwards (plantar flexion) resulting in forward motion. In response to these actions, the groin muscles lengthen under tension (eccentrically contract) in order to maintain balance, absorb shock and harness the kinetic energy used to flex the hip and pull the leg inwards (adduction) during the Swing Phase. This ensures that the push-off leg is brought back to center efficiently, and sets up the next push-off with the opposite leg, allowing for a smooth transition between movements and good continuity of motion.

Why Hockey Players are at Risk

During ice skating, muscle imbalances between the hip abductors (*gluteal muscles*) and adductors (*groin muscles*) in combination with muscle fatigue and overuse are the precipitating factors leading to a groin injury. In hockey players, the gluteal muscles are often stronger than the groin muscles and tend to overpower them. This muscle imbalance can lead to injury because strong eccentric contractions by the adductors are required to counterbalance the outward leg motion during skating, and if the groin muscles are weak in comparison to the gluteal muscles, they are often *overloaded and pulled* resulting in a muscle tear.

Our Treatment Approach

Groin injuries can be very painful, especially in the Acute Stage. At Kinetic Health, for the first two days we advise our patients to rest and avoid activities that aggravate their condition and to apply ice for 15-20, minutes 3-4 times a day. Treatment type and recovery is directly related to the degree of injury, so once we have examined the injured area and determined where and what the problem is, we can apply the correct treatment strategy in order to help you recover as quickly as possible. We often use a combination of Active Release and Fascial Manipulation, in conjunction with a functional exercise program.



Resolving Groin Injuries...

Ultimately, balance throughout your kinetic chain is the key to resolving your condition. Muscle strength, tissue texture, flexibility, and function as well as the biomechanics of the pelvis, hip, knee, ankle, and spine must all be evaluated and treated accordingly. Through progressive treatments and rehabilitative exercises, we can ensure that the injured groin muscles heal properly and that they are strengthened gradually. In doing so, we minimize the chance of re-injury and help our patients to achieve their goals of becoming stronger, more efficient skaters, and return to the sport they so passionately pursue.

Exercise Examples



Kettlebell - Straight Leg Deadlift
Excellent exercise for the glutes and hamstrings. This exercise is not recommend for individuals during the acute stage of an injury.

<http://youtu.be/8myzVraaux4>



PNF - Adductor Stretching
Excellent exercise for stretching the adductor muscles of the groin.

<http://youtu.be/tqtSZziE4-M>

Check out our informative websites, blogs, and YouTube channel...



www.kinetichealth.ca

Welcome to our **Kinetic Health Clinic** website. Kinetic Health is located in northwest Calgary, in the community of Edgemont. Our information-rich site provides you with extensive healthcare information about the conditions we treat, our treatment methodologies, conditions we can help resolve, contact information, and information about our staff. You can also download **Admittance Forms** for Dr. Abelson, Dr. Mylonas, and our Registered Massage Therapists.

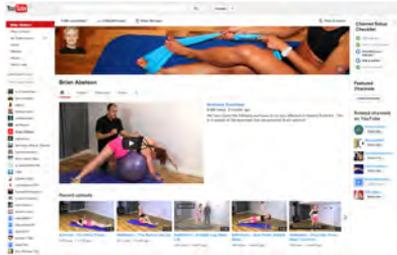
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www.activerelease.ca

This popular site is dedicated to providing you with information about one of the most effective and popular treatment methods we use in our clinical practice - **Active Release Techniques (ART)**. We bring extensive expertise in ART. Dr. Abelson was an instructor in ART for over 10 years, has co-authored the international best-seller about ART "**Release Your Pain**", and contributed to the **ART Biomechanics Manual** that is currently used to instruct ART practitioners. Both Dr. Abelson and Dr. Mylonas are fully certified in all ART techniques.



www.youtube.com/kinetichealthonline

This is the link to our **YouTube** channel. We are constantly updating our channel with videos about new exercises, conditions, biomechanical analysis, local races (marathons, triathlon's), and even cultural events and travel. Please check us out, and feel free to *share* our videos with anyone that you think could use this information.

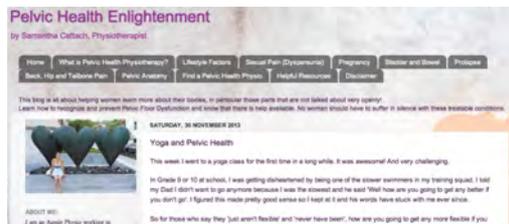


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www.releaseyourbody.com is where you can find all our latest publications. Our best selling books can be purchased in both **hard-copy** and **eBook** formats from this site. Get your copy of:

- Release Your Pain: 2nd Edition
- Exercises for the Shoulder to Hand: Release Your Kinetic Chain
- Exercises for the Jaw to Shoulder: Release Your Kinetic Chain
- A Quest for Healing - A Story of Love

Local services, resources, and events we highly recommend.



Pelvic Health Enlightenment

This blog is written by a fantastic Aussie physiotherapist Samantha Cattach. " **This blog is all about helping women learn more about their bodies, in particular those parts that are not talked about very openly! Learn how to recognize and prevent Pelvic Floor Dysfunction and know that there is help available.** " Samantha practices in Northwest Calgary and is a great resource for our female patients. We highly recommend her services. <http://pelvichealthphysio.blogspot.ca>



Calgary International Salsa Congress March 27-30

We are always talking about hip activation, now is your chance to give it a try. The 2014 Salsa congress is coming up fast. Great event that is really worth checking out. We are getting our dancing shoes ready. <http://www.calgarysalsacongress.com>



Calgary Comic & Entertainment Expo April 24-27

Yes, the *Big Bang Theory's* Fan Club is coming to Calgary, and we are dressing up for the event. Come join us for the 2014 Comic & Entertainment Expo. Always a sold out event so book early. I hear Dr. Mylonas is going as Yoda! <http://www.calgaryexpo.com/blog/category/the-calgary-expo/>