

J & S HEALTH, FITNESS & SPORTS ACADEMY

Health & Fitness Newsletter

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PREFACE

This newsletter is a bi-monthly publication of J & S Health, Fitness and Sports Academy— a gym located in St. James, Barbados. The main purpose of this newsletter is to keep members of the gym informed about current health and fitness trends.

Quote to Remember:

Physical fitness can neither be achieved by wishful thinking nor outright purchase.

Joseph Pilates

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Myositis - The Inflammation & Degeneration of Muscle Tissue



Imagine waking-up one morning to severe muscle pain. Over the next few weeks the pain worsens and is accompanied by increasing muscle weakness making it impossible to execute even the simplest of daily tasks. By now, your doctor's office has become a common sight yet, there can be no diagnosis. No one can seem to figure out what is wrong.

This was the plight of a lady I met recently. After months of complications she was finally diagnosed with Myositis.

What is Myositis

Broadly speaking, Myositis refers to the general inflammation of the muscles. It can be caused by a variety of reasons including infection, injury, certain medications & chronic diseases- and its forms can range from temporary and very mild, to severe or even chronic. However, unfortunately many of the forms of Myositis which are considered 'severe' are idiopathic (that is, the cause is unknown). Below is a listing of the various inflammatory Myositis diseases.

<u>Dermatomyositis (DM)</u> - This is the easiest type of Myositis to diagnose due to the distinctive skin rash which is often seen before any muscle weakness is felt. The muscle weakness begins with muscles that are closest to, and within, the trunk of the body (e.g. neck, hips, trunk, shoulders). Dermatomyositis can occur at any age however, muscle pain is more common in children compared to adults (less than 25% of adults report muscle pain), with more females being affected by this disease than males. One third of persons with this form of the disease also report difficulty swallowing while, some persons also have calcinosis (hardened bumps under their skin) and dry, scaly or rough skin.

<u>Polymositis (PM)</u> - This form of Myositis is characterized by generalized weakness, often without pain. Polymyositis is found mostly in persons over the age of 20, and affects more women than men. The onset of muscle weakness is usually slower than in Dermatomyositis however, it begins in the same areas but some patients also report weakness in muscles further from the trunk (e.g. hands, fingers). Unlike Dermatomyositis difficulty swallowing is a common symptom in Polymyositis.

<u>Inclusion-body Myositis (IBM)</u> - This form of Myositis is very similar to Polymyositis, and is actually commonly mistaken for Polymyositis until the methods of treatment for Polymyositis don't work. Its main difference from Polymyositis is that both the muscles that are close to and further away from the trunk are affected similarly, and atrophy of the quadriceps is common. The onset of muscle weakness is very gradual (usually months or years) and usually begins after age 50, although no age group has been entirely excluded. More males are affected by this form of the disease than females, with some persons experience no pain, while others experience severe pain. There is currently no significantly effective treatment for Inclusion-body Myositis which can ultimately result in the deterioration of the individual's fine motor movements and the need for assistance in everyday activities.

Juvenile Dermatomyositis (JM) - This is the main form of Myositis that is diagnosed in children, or persons under 18 years old. It is first marked by the appearance of a skin rash, with muscle weakness also becoming a symptom days, weeks, or months after the first appearance of the rash. The muscle weakness usually occurs in muscles that are closest to, and within, the trunk of the body, with approximately half of the affected children experiencing pain symptoms. Other symptoms, such as trouble swallowing, hoarse-sounding voice, abdominal pain and arthritis may also occur.



PAGE 2 Meet Nicholas Harris - The Bodybuilding Fanatic

The sport of bodybuilding can be very subjective with everyone having an opinion about the competition. Even the competitors themselves can become frustrated about an outcome and, in some cases, they may even feel cheated. This was the story of Nicholas Harris who, after just his 2nd competition in the Mr. Schoolboy Competition, decided that he was finished with the sport that he loves. Fortunately, in 2011 Nicholas found his way back to the competition stage with a harsh baptism at the Mr. Novice/Bridgetown Competition. However, he rebounding later in the year to win the heavyweight division at the Barbados National Bodybuilding & Fitness Championships. In 2012 Nicholas plans to build on his 2011 success. Anyone who has been around him since his 2011 reintroduction knows that his passion for bodybuilding is stronger than ever and his commitment and dedication to improving his physic and status among the Barbados bodybuilding community is evident.

Here is a brief insight into the life of the Nicholas Harris, the 2011 Barbados Heavyweight Bodybuilding Champion. We wish Nicholas all the best success in 2012 and beyond.



Nicholas posing onstage during the 2011 Barbados National Bodybuilding & Fitness Championships

Photographer: Richard Boyce Contact: photographflair@hotmail.com

The most enjoyable aspect of being a bodybuilder competitor is.....

Everything, I love it, it is my hobby and passion

What do you dislike about being a bodybuilder competitor?

What is your general training schedule like?

Right now I train 3 days per week. However, this year my coach and I are considering changing our workout splits and increasing it to 5 days per week as we get closer to competition

My favorite body part to train is my...... And my favorite exercise is the

Legs.....Squats

Cardio!

PROFILE OVERVIEW

Name: Nicholas Harris

Date of Birth: 1987/09/03

Height: 5ft 9in

Weight (Out-Of-Season weight): 260 lbs

(Contest weight): 206 lbs

Competition History

2004 & 2006 - Mr. Schoolboy

2011 - Mr. Novice/Bridgetown Competition

2011 - Barbados National Championships

Best Finish

1st - Heavyweight Division - 2011 Barbados National Championships My least favorite body part to train is my.....

Calves (Yes I realize the irony)

What is your general meal plan consist of when you are preparing for a show?

I don't vary very much in my eating variety, with my carbs being mainly brown rice, my protein source is mainly fish and I eat a lot of vegetables and greens

What is your favorite 'cheat' meal?

Burgers

What is the best advice you can give to someone who is considering entering bodybuilding in Barbados?

Take advice from the stalwarts in the sport, they have a lot of knowledge to pass along, in the same sense, get someone that knows the sport to help and guide you in your training.

What are your 2012 goals?

Retain the Heavyweight title at the Barbados National Championships & Win the Mr. Barbados

title.



Photographer: Mary Gamble

Research the Facts

Lifestyle Factors That Cause Weight Gain

Harvard University examined more than 120,000 people in three, 4 year increments beginning in 1986 and running through 1998, analyzing their intake of specific items and activities to any changes in their weight throughout the study. Throughout this study the average outcome was that people gained more than 3 pounds during each 4 year period, with the food items





analyzed that were linked to the weight gain included potato chips (1.7 pounds), French fries (1.3 pounds), high-sugar drinks (1 pound), red meat (1 pound). For the individuals that demonstrated weight-loss over specific 4 year periods the food items analyzed that were reportedly linked to this outcome included yogurt (-0.8 pounds), nuts (-0.6 pounds), fruits (-0.5 pounds), whole grains (-0.4 pounds) and vegetables (-0.2 pounds). Activity wise, increasing physical activity in general was reported as causing an average 4 year weight loss of 1.8 pounds, while watching television increased weight by 0.3 pounds per hour per day.



(New England Journal Of Medicine, 364: 2392 - 2404, 2011)

Eating Before Exercise Promotes Fat Loss

While many people believe that working out on an empty stomach would be the most effective manner in promoting fat burning and weight loss a study from the University of Padua in Italy discovered the opposite, as their study determined that physical activity after a light meal was best for losing body fat. During the study, the persons ran on a treadmill at 65% MHR for 36 minutes on two different occasions: one after a light breakfast and the other on an empty stomach (fasting state). In all persons their metabolism was higher in the fed condition during, and 12 hours after exercise compared to the fasted condition.

(International Journal Sports Nutrition Exercise Metabolism, 21: 48 - 54, 2011)

Testosterone Levels Do Not Drop As Significantly in Aging Men With Optimal Health



Australian researchers reported in 'The Healthy Men Study' that lifestyle and genetic factors accounted for decreasing testosterone levels in most aging men. They found that decreases in testosterone were greatest in men with chronic illnesses and that the subsequent testosterone supplementation in aging men was overprescribed, with an improvement in lifestyle being a better and more effective way to maximize testosterone metabolism and metabolic health.

(HealthDay News, June 7, 2011)

- I. True
- 2. False— Egg white protein is the standard against which the quality of other proteins is usually measured
- 3. True
- 4. **False** The overload principle (which helps create strength and fitness improvements) emphasizes that it is necessary to push yourself longer or harder than you can easily manage to get results although not to the point of strain or pain.
- 5. **False** When more protein is eaten that the body needs, it is not stored in the body (similar to fats), so it must be eaten everyday to avoid protein depletion.

Myositis - The inflammation & degeneration of muscle tissue

Continued from Page 1

Diagnosis of Myositis



The accurate diagnosis of Myositis is often a complicated and lengthy process. There are many other diseases which result in muscle weakness and pain (the most common symptoms of Myositis), which are more common than Myositis. This therefore requires the need to eliminate these more probable diagnosis's before a more rare diagnosis, such as Myositis, can be confirmed. Tests to confirm Myositis include:

<u>Blood Tests</u> - Physicians would look for elevated levels of muscle enzymes in the patient's blood, or the presence of abnormal antibodies that may identify an autoimmune inflammatory condition.

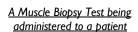


Blood samples to be analysed

<u>Electro-diagnostic Tests (MRIs & EMGs)</u> - Magnetic resonance imaging tests (MRI scans) create an image of the muscles which can be used to reveal inflammation in the muscles and can show changes in the muscles over time. Electromyograms (EMGs) test the response of muscles to electrical nerve signals, therefore allowing physicians to detect changes in muscles that are weakened or damaged by Myositis.

<u>Muscle Biopsy</u> - In this method small samples of muscle tissue of areas your physician believes are affected are analyzed for inflammation, damage and abnormal proteins. This is the most accurate test for diagnosing Myositis, and is commonly used as a final confirmation of the disease.

Antibody Testing - This is a more detailed form of blood testing which can also confirm a Myositis diagnosis due to the discovery of certain Myositis-specific, and Myositis-associated antibodies in initial blood tests.



Treatment

Treatments vary from person to person, and will also change as the disease progresses. Treatment generally consists of a combination of medications, physical therapy/exercise and additional supplements in the diet.

Medications



Corticosteriods: Prednisone is commonly used as a first choice treatment for Myositis as it boots the body's immune system and stops the inflammatory attack on the muscles, skin and other body systems. This allows the patient the ability to control the inflammation and increase muscle strength, while easing the pain they maybe experiencing. Unfortunately, constant, extended use can result in various side effects (e.g. weight gain, depression, mood swings, high blood pressure, diabetes).

Intravenous Immune Globulin (IVIG): This is a blood product derived from large pools of donated human plasma which is used to boosts the body's immune system response. The use of this medication is usually reserved for cases of Myositis which are resistant to other previously mentioned treatments. Some of the side effects associated with the use of Intravenous Immune Globulin treatments are backaches, headaches, fever, joint pain and general discomfort.

TIPS CORNER

Weight loss tip: Eat A Nutritious Breakfast

It's true 'Breakfast is the most important meal of the day'. A nutritious breakfast is crucial for providing your body with the proper re-fueling to break the catabolic state it is in after fasting of 6 - 8 hours (or more) during your nightly sleep.

TIPS CORNER

Muscle Building tip: Monitor Your Body Fat

When aiming to put on size many persons eat whatever, and as much as they want, to create a calorie surplus. However, while additional calories are necessary to increase muscle mass/size, monitoring your body fat levels through this process is a positive measure to ensure that you are truly gaining lean muscles mass as your weight and size increases and not packing on body fat.

Myositis - The inflammation & degeneration of muscle tissue

Continued from Page 4

Immunosuppressants: Methotrexate and Azathioprine are often introduced as a secondary medicine if a patient does not respond favorably to Prednisone, or sometimes also in combination with Prednisone. Some potential side effects of the use of such Immunosuppressants are upset stomach, loss of appetite, skin rash, hair loss and fever.

Physical Therapy



The incorporation of physical therapy is an extremely important part of Myositis treatment plans as these programs help improve physical activity, quality of life and decrease the risk of falls within persons with Myositis. Without proper physical therapy persons who have lost muscle due to Myositis can become sedentary, therefore helping accelerate the effects of the disease on their body.

Each individual is different subsequently, it would be important to find activities and exercises that are appropriate based on the patient's level of function. This would be achieved by using exercises which strengthen muscles and muscle groups not affected by their disease progress, while protecting the I feel so fresh muscles that are affected. The suitability of the exercise used should also be taken into account on a daily basis as this can also vary due to the constant adverse effects of the disease on various A class above the rest muscles.

Most exercises utilized will be at a general low intensity. A high rate of exertion may result in relapses or increased muscle damage. Aquatherapy is a common recommendation due to its reduction of stress on the muscles.

Vitamins & Supplements

No specific supplements have been approved specifically for treating Myositis, however physicians and patients have found various over-the-counter supplements to be helpful in the management of their disease:

Coenzyme Q10: Is produced naturally in the body and effects the metabolism of energy within the body while also acting as an antioxidant

Creatine: Is mainly used to improve athletic performance and to increase muscle bulk in athletes and older persons

Omega-3 fatty acids: Have been found to decrease inflammation and cytokine production

Glucosamine: Helps make proteins in muscles, tendons, cartilage, ligaments and blood vessels

Vitamins: Those that act as antioxidants (e.g. Vitamins A, C, E) are particularly important in cases where low activity results in loss of appetite



SPIN, SPIN, SPIN

Spin spin spin That's the tune that 15 of us sing Spin spin spin That's the way Kathy makes you thin Spin spin spin Oh what a ting

At my very best Best on the west

Kathy is our instructor She makes you sweat Like your in a fete And that ain't nutting yet.

Fast, slow is the way she does flow Stationary But on the go **Tired** But energized Wet But Sweating

Saturday is the best Look I just confessed.

Later dred I'm off to bed

True

Score: _____ out of 5

Written By: Simon Jackson Warren

> A Confession of his love for Kathy's Spin

ASK YOURSELF True or False?

- The body can store fat in virtually unlimited amounts.
- 2. Milk protein is the standard against which the quality of protein is usually measured.
- Phytochemicals are beneficial, non-nutrient substances found in fruits, vegetables and whole grains.
- You should not push yourself to exercise longer or harder than you can easily manage.
- When more protein is eaten than the body needs, it is stored in the body (similar to fats) so that it can used when a person's diet falls short of supplying the day's needs for essential proteins.

Answers can be found on the bottom of page 3

False

<u>True</u>	<u>False</u>
<u>True</u>	<u>False</u>
<u>True</u>	<u>False</u>
<u>True</u>	<u>False</u>

NEWS, NOTICES AND EVENTS

START YOUR DAY WITH SPIN

 Come start your day with spin this and every Tuesday from 5:30 am - 6:15 am. This is a special morning spin class and is instructed by Kathleen Hall. Advanced payments of \$10 for members, or \$15 for non-members are required on or before the Monday preceding each Tuesdays class by 7:30 pm.

* for further information please contact the front desk (231-6792) or visit the gym's website

INDEPENDENCE FITNESS RETREAT

- Premium Performance Training Inc, in association with J&S Academy, will be hosting a 3- Night fitness retreat over the Independence weekend of Thursday November 29th 2012 through Sunday December 2nd 2012. Spaces for this retreat are limited so book early.
- * for further information, or to reserve a space, please visit www.jandsacademy.com or www.premiumperformacetraining.com or contact Jamil Jones (233-6433)

PAST NEWSLETTER EDITIONS

◆ Past editions of J&S Academy's Health & Fitness Newsletter can be downloaded from the gym's website (www.jandsacademy.com).

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WANTED...

Models for the next publication of the Health & Fitness Newsletter

Contact Jamil Jones at 231-6792 (w), 233-6433 (c)

or jamiljones@jandsacademy.com.

Let Us Know What You Thought Of This Issue

Read something that you disagreed with, that you did not understand or that was really helpful? Send your feedback to jamiljones@jandsacademy.com