



P.O. Box 505, Kingston 6, Jamaica, W.I.

# Injury Prevention and Management



## THE BIENNIAL GENERAL MEETING IN BRIEF NOVEMBER 18, 2017



On November 18, 2017 the Jamaica Association of Sports Medicine (Main Branch) welcomed its new executive members. Headed by Dr. Kevin Gwyn Jones, Sports Medicine practitioner, Chairman TUE Committee of JADCO and Orthopaedic Surgeon.

The Officers are -

Vice President – Dr. Safiya Franklin

Secretary – Mrs. Audrey Brown,

Assistant Secretary – Dr. Jean Williams-Johnson

Treasurer – Mrs. Patricia Lue-Chin

Floor Members – Mr. Nicholas Ford, Dr. Joan Lorne-Rattray, Dr. Karen Bryan, Mrs. Patricia Thompson and Ms. Audrey McIntosh.

Out-going President, Dr. Praitmanand Singh in his address highlighted the various educational activities that had taken place over the past two years, of special note was the Sports Medicine Conference from September 8 – 10, 2017 which had focussed on “The Child Athlete

Ages 5 -17 years”. He congratulated the Education Sub-Committee members on having deliver an excellent conference.

He expressed the desire for the JASM to spread its wings as far as South Africa so that a joint conference could be held in 2019. He acknowledged the formation of the new Faculty of Sport on the UWI Mona Campus with, colleague, and member of the sports medicine association, Dr. Akshai Mansingh at the helm. It is expected that there will be on-going collaboration between the two groups.

He thanked the members for giving generously of their time and skills by volunteering for the major sporting activities throughout the island and encouraged them to continue to support these activities.

Reports were received from the newly formed Central Chapter which included Clarendon, Manchester and St. Elizabeth; and the Western Chapter.

The Central Chapter was commissioned on November 8, 2015 and launched in March 2016. To date it has 20 members in good standing, including one honorary member Dr. Quida Golding-Beecher (founding member of the JASM). Throughout the 2 year term their members have participated in most of the sports meets/events in central Jamaica and have also participated in international events. They have also organized educational activities.

The report submitted by the Western Chapter indicated that more than 4 years have passed since they were able to convene a general meeting to elect an executive. This has impacted heavily on their ability to recruit new members. However, this has not dulled their spirit of giving, although at times it has been difficult to get doctors to attend events.

Continued on page 4

### Inside this issue:

Psychological preparedness of the athlete post injury	2
Ice Baths	3
Vitamin B—building nerves and muscles	3
BGM IN BRIEF continued	4
Psychological Readiness to Return to sports scale	4
Hanging out with friends	4
Up-Coming Events	4

### Important websites

- [www.ingoodshape.com](http://www.ingoodshape.com)
- <http://www.strengthspeedagility.com/>
- [www.effectivepractice.org](http://www.effectivepractice.org)

# Psychological preparedness of the athlete post injury

Experiencing an injury is never opportune at any stage of an athlete's trajectory. The manner in which he/she is able to rebound, however, and the timeframe within which this occurs are contingent on several individual attributes, as well as contextual factors. Ideally, these variables should be in place before injury occurs in order to reinforce the rehabilitation process and fortify the athlete's psychological readiness for return to play post injury.

Resilience Theory, as presented by Zimmerman (2005), provides invaluable insight into the role of positive individual and contextual variables for healthy development. In applying this theory to the discussion about the determination of the psychological readiness of athletes post injury, an underlying principle, herein proposed, is that an athlete's level of resilience prior to injury is crucial to his/her rehabilitation and psychological readiness for return to competition. Furthermore, it is being proposed that unaddressed Adverse Childhood Experiences (ACEs) will also negatively impact the athlete's ability to compete optimally.

By way of definition, resilience speaks to the process of adapting well in the face of adversity. In other words, it refers to one's ability to *bounce back* from difficult experiences, and /or display *mental toughness* in instances of perceived stress. Within the context of behavioural studies, Resilience Theory posits that *positive / promotive factors* that are available to an individual provide the requisite support for engaging with, and overcoming, adverse circumstances. These promotive factors are divided into two main categories, namely: 1) *assets* - those emanating from the individual, such as self esteem and self-efficacy; and 2) *resources* - factors that are derived from the individual's social context and support system, i.e., parents, coaches, mentors, etc.

Over the years, there have been many examples of athletes who have tapped into their resilience and utilized psycho-emotional recovery techniques in order to withstand the stress of injury during competition. This was the case

of diver, Greg Louganis at the 1988 Seoul Olympics, who having struck his head following a poorly executed manoeuvre went on to repeat the dive in the finals, and won the gold medal. Similarly, Tiger Woods won the 2008 U.S. Open while suffering from a torn ligament and a double stress fracture to his left tibia. And who could forget Curt Schilling's outstanding performance at the 2004 AL Championship Series, who, while enduring the anguish of a severed tendon that had to be stitched to his sock, lead the Red Sox to victory. It is important to emphasize at this juncture, that resilience as outlined above, is not a personality trait, but rather a skill-set that can be learnt, refined and mastered over time.

As previously mentioned, the second theoretical basis proposed for this discussion is that of Adverse Childhood Experiences (ACEs). These refer to traumatic experiences that can have a profound effect on a child's developing brain and body, with negative repercussions for their long term health, including increased risk for disease and negative health behaviours. Within the Jamaican context, high incidences of abuse (physical, emotional, sexual); neglect (physical, emotional); and household dysfunction (divorce, substance abuse, incarceration, etc.) buttress the need for psychological support for child and adolescent athletes in order to strengthen their resilience prior to their transitioning into professional sports.

Upon experiencing an injury, the athlete, irrespective of age, stage, or status in the game, is overcome with a cascade of emotions. His/her resilience (*assets* and *resources*) will be called into action at this point, as they will be crucial components in the rehabilitation and recovery processes. Depending on the severity of the injury, feelings of grief and loss, self blame and anxiety will abound. As the healing and rehabilitation processes advance, the athlete will also face varying degrees of frustration and a sense of failure, self doubt, and lack of self confidence. In light of the potential negative implications of these psycho-emotional factors,

it is important that the appropriate psychotherapeutic support be provided to the athlete before approval is granted for his/her return to competitive sports.

This recommendation is substantiated by empirical studies that have demonstrated that if left unaddressed, psycho-emotional factors can adversely affect an athlete's ability to perform competitively, with heightened risks of additional injury and / or re-injury.

Over the years, several instruments have been developed to assess athletes' psychological readiness for return to sports, post injury. Confidence based scales, such as the one seen below, requires that the athlete rates his/her overall confidence to return to play.

There are visible pros and cons to the utilization of such a scale. One positive, is that it requires both the athlete as well as the coaching / support staff to give consideration to the psycho-emotional factors that are at play. On the other hand however, asking athletes to self evaluate may not prove successful, given what may be at stake (income, livelihood, scholarships, etc.), and athlete's oftentimes insatiable desire to engage in competition at any cost. It stands to reason therefore, that in addition to the use of these instruments, there is tremendous value to be derived from incorporating the nuanced perspective and skill-set of a clinical psychologist in the pre and post injury work with athletes. Such a holistic approach to athlete preparedness will undoubtedly bolster their resilience pre-injury; maximize their technical and physical abilities; and reinforce their psychological readiness for return to play, post-injury.

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## TIPS FROM THE FIELD—ICE BATHS

Ice baths or cold water immersion is becoming increasingly popular in the sports world. It has been used to assist with muscle recovery after an intensive exercise program as it decreases temperature, blood flow and inflammation which may have developed in muscle tissues.

Recent studies have shown that if a professional athlete needs to build muscle mass and gain strength, this treatment may not be ideal as it may hinder the recovery process. This is so, as when there is a reduction in blood flow, it could slow down muscle protein synthesis. Muscle protein synthesis is vital to the repair of muscle tissue after an injury or strain.

A study carried out by the Liggins Institute (University of Auckland) investigated the effectiveness of an ice bath versus a ten minute warm down regime after exercise. Through a small sample size of nine male participants, results revealed that inflammatory response in the mus-

cles were the same. This is not to suggest that ice baths are not effective but they would be more beneficial to the athlete if they are participating in a series of competitive events and need a quick method



of relieving muscle pain and/or soreness.

Things to consider when doing an Ice Bath:

- The temperature should be between 8—15° C
- Duration—6–8 minutes but no longer than 10 minutes
- Cold threshold for persons may vary so it is important for the athlete to know what they can tolerate.
- The athlete should not rush to take a warm shower after an ice bath. Instead, they should wear warm clothing.
- If training to build muscle mass and to gain strength the athlete should refrain from ice baths and do warm down sessions post exercise instead.

*Prepared by Justine Edwards,  
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## Nutrition— Vitamin B, building nerves and muscles

Vitamin B complex is a group of nutrients which are essential for the working of certain enzymes in the body. The main B-vitamins are thiamine, riboflavin, niacin, important in the regulation of energy metabolism; B<sub>6</sub>, B<sub>12</sub> and folate, important in the structure and manufacture of red blood cells. These vitamins are critical for athletes and athletic performance especially since their need increases when more energy is required and blood volume increases in the body during exercise. Therefore, adequate intake of the B vitamins is important to ensure optimal energy production and recovery. Frank deficiency rarely occurs but sub-clinical deficiencies may present as moodiness, irritability and lack of focus. Low dietary levels in athletes may result in early fatigue, decreased ability of tissue repair and to build muscles.

Low intakes of B-vitamins are not unusual since they can be found widely in foods from both plant and animal sources. Vitamin B<sub>12</sub> is the only exception being found in animal products only such as eggs, dairy, lean meat, poultry and fish.

The common sources include whole and enriched grains, dark green vegetables (DGLV), nuts, animal and dairy products. Peanuts are probably the rich-



est source of niacin; milk is the richest source of riboflavin; vitamin B<sub>6</sub> is found in chicken, fish, organ meats, wheat and corn and dark green leafy vegetables. Niacin can be made in the body from the amino acid tryptophan in animal foods especially milk, cheese, egg, lean meats

More recently discovered vitamins have been grouped with the B vitamins and promoted as ergogenic aids but the evidence that they enhance athletic performance is weak. These include inositol, para-amino benzoic acid (PABA), pangamic acid, laetrile, coenzyme Q<sub>10</sub>, lipoic acid and choline, many promoted as anti-oxidants and often added to sports products. Some have side effects in large quantities although being water soluble, they are easily excreted except for vitamin B<sub>12</sub> which is stored. Some supplements may have impurities. Many persons take vitamin supplements before visiting a certified nutritionist to learn about supplementation. If supplementation is required ensure a sports nutritionist is contacted to advise you accordingly.

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## PSYCHOLOGICAL READINESS TO RETURN TO SPORT SCALE

Please rate your confidence to return to your sport on a scale from 0 - 100.

Source : [www.pdhpe.net](http://www.pdhpe.net)

0 = no confidence at all

50 = moderate confidence

100 = complete confidence

1. My overall confidence to play is \_\_\_\_
2. My confidence to play without pain is \_\_\_\_
3. My confidence to give 100% effort is \_\_\_\_
4. My confidence to not concentrate on the injury is \_\_\_\_
5. My confidence in the injured body part to handle to demands of the situation is \_\_\_\_
6. My confidence in my skill level/ability is \_\_\_\_

Total \_\_\_\_

Add total and divide by 10 = \_\_\_\_

Scores between 50 and 60 suggest the athlete is psychologically ready to return to sports. Scores below 50 suggest that the athlete may not be ready psychologically to return to sports and needs more time to recover.



### Continued from page 1

The members of the Western Chapter have provided medical coverage at 4 major athletic events - Western Milo Relays, Western Champs, the Council of Community Colleges of Jamaica Track and Field and Cheerleading event

On December 6, 2017 the membership of the Central Chapter elected new officers for the 2017—2019 period.

### Members of Central Chapter

President - Mrs. Pier Ann Brown

Vice President - Dr. David Hanson

Secretary - Ms. Owenee Ferguson

Assistant Secretary - Ms. Domoniek Smart

Treasurer - Mrs. Andrea Graveney-Saunders



Killing me softly with music



Friendly banter

## Up-coming sporting events



Movie Time—"Murder on the Orient Express"  
(Sunday, March 25, 2018)