Illness, injury and fatigue are a constant threat to highly trained athletes. At some time in their competitive career, most athletes have experienced the problem of becoming ill at the wrong time of the season. This can have a negative impact on the ability to train and compete. The immune system, which protects the body against illness and infection, is influenced by a wide range of physical, environmental, psychological, and behavioural factors. Consideration of these factors by the coach and athlete forms the basis of managing the health and fitness of an athlete on a daily basis. While environmental (the degree of exposure to other infected individuals), psychological (personality characteristics and group dynamics) and behavioural (diet, hygiene and sleep) factors can impact significantly on immunity and health, the main area that coaches and athletes have direct control over is the physical training programme. Research and practical experience indicate that acute bouts of highly intense exercise and the cumulative effects of long-term training can overload athletes and lead to fatigue, injury and illness. Careful management of training loading patterns is required to maintain the fine balance between maximising fitness and maintaining health. The author outlines some strategies for the management of training to reduce the problems of illness and infection and offers some tips to alleviate the symptoms of the common cold and flu.

Diagnosis and management of asthma in athletics

By Bruce Hamilton
In: Modern Athlete and Coach 41 (2003), 2, 19-20

Asthma is a very common condition, affecting up to 10% of the general population, with typical symptoms that include wheezing, shortness of breath, chest tightness, and persistent coughing. Individuals suffering with asthma will generally fall into one of three categories: atopic, classical, or exercise induced. Atopic asthma is characterised by seasonal variations in symptom severity and is associated with both the presence of antigens in the environment and a history of atopy. By contrast, classical asthma involves perennial symptoms. Exercise induced asthma, EIA (also known as Exercise Induced Bronchoconstriction, EIB) is characterised by symptoms during or after exercise. Athletes may suffer from any combination of these forms of asthma. The author discusses the normal airway function, the diagnosis of exercise induced asthma and its management.
The use of analogies has often been used successfully by teachers and coaches to enhance the instruction-learning process. Analogies work because of the manner in which the human brain functions. Rather than logically mapping "new" information onto "old" information, the brain builds upon what it already knows and understands. The author brings a wealth of experiences as both a teacher and a coach to outline some examples of a useful pedagogical strategy in coaching throwers.

Painting mental pictures to assist young throwers
By Peter Hannan
In: Modern Athlete and Coach 41 (2003), 2, 33-35

This study shows that in the long jump and high jump the velocity of the approach is pretty much the same as the velocity after takeoff. Measurements of the approach speed, horizontal speed in flight, vertical takeoff speed and maximum height attained were taken of athletes ranging from beginner to elite in both events. It was found that almost no energy was lost to the environment and that collision of the takeoff leg with the takeoff surface was almost purely elastic. The takeoff leg does not increase or decrease a jumper's approach velocity. Instead, it serves only to change the direction of the jumper's nearly constant velocity from a horizontal to an inclined angle. In other words, the jumping leg acts for jumpers much like a vaulting pole does for a vaulter. The author also discusses the implications of his findings for a jumper's training.

What does the takeoff leg really do?
By Robert J. Mackenzie
In: Track Coach 164 (2003), 5233-5237