

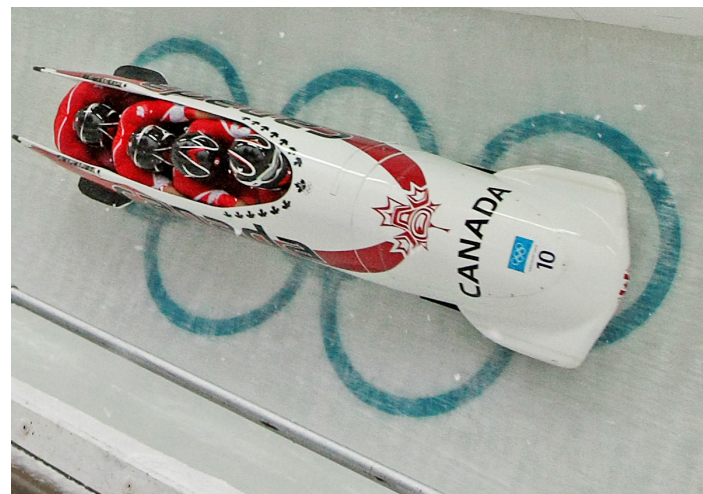


SCHOOL PROGRAM
PROGRAMME SCOLAIRE

TRAINING LOG

— TEACHER'S RESOURCE —

www.olympic.ca/education





INTRODUCTION

Youth obesity rates are staggering, and the long term impact on the Canadian society and healthcare system is difficult to measure. All of the health experts agree that we need to get Canadian children and youth more active and “active for life”. Whether it is developing a passion for sport or a love for an active healthy lifestyle, the early years set the patterns that become lifelong habits.

As a teacher or coach, you are in a great position of influence. You can truly turn a student on to a lifelong active lifestyle or discourage them from participating in future activity. The Canadian Olympic Committee,

through its Olympic School Program is providing you with a resource to help guide and motivate your students and athletes. It is hoped that this will enable you to encourage Canadian youth to adopt a *sport for life approach*, where being active is not just for when they are young, but also carried out throughout their entire lives.

The content of this resource is provided by Canadian athletes and medical support staff of the Canadian Olympic Team. It is hoped that this content will be both informative and inspiring for both the educators and students.





GUIDING YOUTH IN A SAFE WAY

DR. BOB MCCORMACK, CANADIAN OLYMPIC TEAM, MEDICAL DIRECTOR
DR. CONNIE LEBRUN, CANADIAN OLYMPIC TEAM, CHIEF DOCTOR, SOCHI 2014

Your students will have varying levels of motivation towards sport and physical activity. For some, your role will be to encourage them to be more active and to live a less sedentary life. Others might be very motivated, and you may be able to help steer them towards proper physical activity or training decisions. This complex role means that you will need to have a good understanding of what is medically safe for your students.

Some more motivated youth can be unsafe in their approach to physical activity or training. “The key for youth is to gradually build up their training,” says Dr. McCormack. “When planning an exercise or training program I use the acronym F.I.T.T. which stands for Frequency, Intensity, Time, and Type. Whenever you change one of these, you have to allow your body enough time to adjust.”

“Both parents and teachers should pay attention to what the child is saying”, explains Dr. Lebrun. “For example, it is possible that a child who gets out of breath easily during activity may be suffering from some condition like exercise-induced asthma, rather than just being unfit or ‘out of shape’. It is important for the teachers at school not to try and diagnose the problem, or discount what the student is saying. If there are significant symptoms that appear to be affecting the ability to exercise, they should encourage the parent or guardian to take the child to a physician for proper diagnosis and management.”

DEFINING F.I.T.T.

Frequency:

Time and repetition of physical activity and sport (ex five sessions or activities per week)

Intensity:

Amount of effort

Time:

Length of time of the activity or work-out (50 minutes)

Types:

Kind of physical activity such as cardio or strength



“My best school teacher was my elementary school Phys Ed teacher. She created an environment that encouraged teamwork, and emphasized the importance of working together and supporting one another. She was also a great role model as she worked very hard on her own physical fitness.”

-Meaghan Mikkelson, Ice Hockey





EXERCISING DURING TEENAGE YEARS

DR. BOB MCCORMACK, CANADIAN OLYMPIC TEAM, MEDICAL DIRECTOR

When students are going through puberty, it is important to take a moderate approach to training. “Strength and endurance are key parts of an overall fitness program, but puberty is not a time to go to the extremes in either of these areas,” explains Dr. McCormack. “Power lifting or body building doesn’t make sense for this age group, nor does marathon running. But both strength and aerobic work are part of overall fitness. Even play should be aerobic in that you should be breathing hard.”

WEIGHT LOSS AND BODY IMAGE

DR. CONNIE LEBRUN, CANADIAN OLYMPIC TEAM, CHIEF DOCTOR, SOCHI 2014

DR. BOB MCCORMACK, CANADIAN OLYMPIC TEAM, MEDICAL DIRECTOR

Some students may become preoccupied on losing weight. According to Dr. Lebrun, “while it is normal to have weight changes after periods of training, students need to know that muscle weighs more than fat and that a strong athlete may potentially be heavier than his/her less fit peers, but that this is not a problem if the weight gain is due to building more muscle.” Your role as a teacher is to provide sound advice, and link these students with the resources that they require to make smart physical activity decisions.

If active female youth become overly conscious about their weight, there is a real risk of the Female Athlete Triad. The Triad is three separate but linked conditions: low energy availability, menstrual dysfunction and low bone mineral density. If an active female youth cuts out certain foods or excessively restricts caloric intake in order to lose weight, in extreme cases, the athlete might suffer from disordered eating, including full-blown anorexia nervosa or bulimia nervosa.

In many cases, however, the energy deficit happens inadvertently – the exercising athlete is simply not replacing enough calories for her energy needs. The lower energy availability causes a shift in pituitary hormone levels, leading to loss of the normal menstrual cycle and a drop in estrogen levels. Periods may become irregular or even stop completely. Although periods are often infrequent during the first year of puberty, they are an important part of healthy development. If menstrual cycles cease after menarche (onset of menses) and the establishment of regular monthly periods, this should be a red flag, and should prompt referral of the athlete to a physician to eliminate other causes of menstrual dysfunction, and to look at overall energy balance.

“Normal menstrual cycles are important for a young female athlete in order to have the proper levels of estrogen for bone health,” explains Dr. Lebrun. “Peak bone mass happens by age 20-24, and it declines thereafter. There is a window of opportunity during adolescence and early adulthood for the female athlete to build up her bone mass. If the athlete does not have adequate estrogen levels, and/or has not taken sufficient calcium or other nutrients during these critical years, then there can be serious long-term consequences in terms of peak bone density. This can

contribute to current injuries, such as increased risk of stress fracture, but also to problems like earlier onset of osteoporosis. Poor nutrition can also compromise optimum sport performance.”

Coaches, officials and teachers need to know that their comments can lead to the Female Athlete Triad in susceptible individuals. “In some sports, especially aesthetic sports like gymnastics or figure skating, a comment by a coach that the athlete won’t be successful because they don’t have the right body type or are overweight can trigger disordered eating and lead to the Triad,” says Dr. Lebrun. “Athletes in sports with weight categories, such as rowing and the martial arts, are also at risk, as they may try extreme methods to lose weight to make a lower weight category.”



“Because I wasn’t very fast as a young skater I ended up learning to be patient and understanding that we all develop at different rates. For me it just took a little longer, but it was definitely worth the wait!”

-Kristina Groves, Speed Skating – Long Track





AVOIDING INJURIES

RAYMONDE FORTIN, CANADIAN OLYMPIC TEAM, CHIEF THERAPIST

Although avoiding injuries is not always possible, most of the time proper care and common sense can keep students injury-free. “In my practice, I see a lot of young athletes that have traumatic injuries where kids come into direct contact with other players or objects,” says Fortin. “These are often the results of negligence, a lack of respect of the sport’s rules or a sense of invincibility.” Teachers and coaches can make a huge difference in preventing injury by teaching the rules of the sport and enforcing fair play. This includes explaining the dangers associated with careless behaviour.

However, not all injuries come from contact with other players. Some are the result of factors including muscle imbalance, poor core stability/flexibility/coordination, and technical flaws. “I can predict when an injury is likely to occur,” explains Fortin, “when there is a noticeable difference between both sides of the body in strength, flexibility or balance.” When a student athlete is frequently injured, it is worth their while to get some functional movement screening or the Y Balance Test. Fortin recommends that these tests be done with a teacher or coach and that if any major element is identified that the youth see a physiotherapist or athletic therapist. “Injuries often reappear because people assume that the disappearance of the pain means that the injury and risks are gone. But this is not usually true. The injury had a functional cause that has to be addressed through rehabilitation, strength work and flexibility.”

Injuries can also be avoided by using a proper training program, remaining flexible in the hamstrings and calves, and by doing an effective warm up. Coaches and teachers often don’t spend enough time doing a warm up because facility use is limited, but doing a proper warm up can dramatically reduce injuries. A proper warm up should start with a short run or other aerobic activity that will increase the blood flow to the muscles. It should avoid static stretching, and focus instead on dynamic stretching. A 12-15 minutes warm up should engage the whole body. One of the best overall warm ups is the FIFA 11+, developed for soccer (<http://www.f-marc.com/11plus/exercises/>).

ONLINE

Examples of functional movement and balance screening tests are available at:

- www.youtube.com/watch?v=ZxjKe-goqQI
- www.youtube.com/watch?v=MdypNR9Hx9Q
- www.youtube.com/watch?v=NWNZOyko3gl
- www.youtube.com/watch?v=UxDBm7_CWec

SPORTS PSYCHOLOGY

DR. KIMBERLEY AMIRAUULT-RYAN, CANADIAN OLYMPIC TEAM, MENTAL PERFORMANCE LEAD

As a teacher, you are a big influence in the lives of your students. “A child’s belief in their self is largely a reflection of the extent to which they see significant others believing in them,” explains Dr. Amirault-Ryan.

“Competent adult guidance helps develop character, leadership, sportsmanship, and self-esteem.”

The way that you interact with students around their physical activity and sports participation will affect their motivation and whether they feel empowered to enjoy physical activity and sport. Help your students find activities that they find fun and where they can experience some success. Emphasize skill development and learning over winning and losing. “Instead of asking if they won the game, ask them what went well and what they could improve next time,” suggests Dr. Amirault-Ryan.



Alexandre Bilodeau | Vancouver 2010





The highest dropout time for sport participation is between ages 12-17 (higher drop-out rates for females). According to Dr. Amirault-Ryan, there are a number of reasons why teens leave sports during this period. “It has stopped being fun. They feel too much pressure and a general sense of failure in sport.” As a teacher and coach, you can help prevent this by keeping the focus on the student’s personal improvement and team philosophy. Encourage students to find a sport or activity that they really enjoy. Teenagers who stay with sport have discovered how to enjoy and find satisfaction in deliberate practice. They are constantly learning and are focused on the process and enjoyment of self and team improvement.

USING THE CANADIAN OLYMPIC SCHOOL PROGRAM TRAINING LOG

Most of your students will not be “training” for anything in particular. However, they may have sport goals or fitness goals. Encourage them to be regular and methodical in their physical activity and training over an 8 week period. Use the Training Log as a motivator for those who are not active and need a little push to get off the couch and away from the screen that includes computer games and social media tools.

Introduce the Training Log by brainstorming some fitness or sport goals that could be achieved in 8 weeks. This might follow fitness testing or precede a fitness or weight training unit. Encourage the

students to set realistic S.M.A.R.T. goals. The Training Log can be given to the students as a complete booklet or one page per week for 8 weeks.

While this resource is intended for students from grades 7 to 12, it could be used for younger students. However, many of the articles will not relate well to younger students. Further, the Canadian Sports for Life’s Long Term Athlete Development Model discourages structured training for children. The emphasis at these ages should be having fun and experiencing success through learning skills.

A SMART GOAL IS

- S** - Specific, significant, stretching
- M** - Measurable, meaningful, motivational
- A** - Achievable, agreed upon, attainable, acceptable, action-oriented
- R** - Realistic, relevant, reasonable, rewarding, results-oriented
- T** - Time-based, timely, tangible, trackable

“An important training tip for any youth is simply to make it fun. Too often a young athlete can feel a lot of pressure to perform. Since they are developing not only as athletes but as people, it’s important to teach young athletes perspective, to work with them to develop goals, and to remind them that sport is a blast.”

-Devon Kershaw, Cross Country Skiing





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CANADIAN OLYMPIC COMMITTEE

Ty Greene
Derek Kent
Julie Mahoney
Kate Moorhouse
Nathaniel Miller
Olya Ovtchinnikova
Sandra Sassine
Paulo Senra
Tys van der Drift

MEDICAL MISSIONS STAFF

Dr. Kimberley Amirault-Ryan
Kelly Anne Erdman
Raymonde Fortin
Dr. Connie Lebrun
Dr. Bob McCormack

FEATURED ATHLETES

Alex Bilodeau
Kristina Groves
Alex Harvey
Devon Kershaw
Jesse Lumsden
Meaghan Mikkelson
Dylan Moscovitch
Christine Nesbitt
Manuel Osborne Paradis
Maëlle Ricker
Marianne St-Gelais
Benjamin Thomsen
Caroline Truchon

WRITER

Bruce Deacon

GRAPHIC DESIGNER

Andy Maier

WEBSITE

Todd Denis
Mark Nadolny
Georgia Sapounas

TRANSLATION

Célyne Malette, Editor
Pascale Seide Legros
Anne-Marie Lemieux

Left to right: Manuel Osborne-Paradis | Vancouver 2010 Alex Harvey | Vancouver 2010 Christine Nesbitt | Vancouver 2010

