**An Outline of LTAD**

LTAD is a training, competition, and recovery framework for individuals at all stages of life.

The first 4 stages, with their respective approximate age ranges, are generally appropriate for all late-specialization sports. In the Training to Compete and Training to Win stages, age ranges vary from sport to sport.

LTAD focuses on the general framework of athlete development with special reference to growth, maturation, and development.

LTAD is a framework for full sport system alignment in Canada, integrating health and education with sport and physical activity.

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<table>
<thead>
<tr>
<th>Active Start</th>
<th>FUNdamentals</th>
<th>Learning to Train</th>
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<tbody>
<tr>
<td>Focuses on learning proper movement skills such as running, jumping, wheeling, twisting, kicking, throwing, catching, skating and sliding. Not sedentary for more than 60 minutes except when sleeping. Some organized physical activity Exploration of risk and limits in safe environments Active movement environment combined with well-structured gymnastics and swimming programs Daily physical activity</td>
<td>Focuses on general, overall development Integrated mental, cognitive, and emotional development Elements of athletics: running, jumping, wheeling, and throwing Medicine ball, Swiss ball, and own body strength exercises Introduce simple rules and ethics of sport No periodization, but well-structured programs Daily physical activity</td>
<td>Major skill learning stage: all basic movement and sport skills (physical literacy) should be learned before entering Training to Train Overall physical, mental, cognitive, and emotional development Introduction to mental preparation Medicine ball, Swiss ball, and own body strength exercises Introduce ancillary capacities Single or double periodization Sport specific training 3 a times week; participation in other sports 3 times a week</td>
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<table>
<thead>
<tr>
<th>Training to Train</th>
<th>Training to Compete</th>
<th>Training to Win</th>
<th>Active For Life</th>
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<tbody>
<tr>
<td>Major fitness development stage: endurance, strength, and speed</td>
<td>Sport, event, position specific physical conditioning</td>
<td>Focus on high performance</td>
<td>Focus on being physically active for life with a minimum of 60 minutes moderate daily activity or 30 minutes of intense activity for adults</td>
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<td>Overall physical, mental, cognitive, and emotional development</td>
<td>Sport, event, position specific technical and tactical preparation</td>
<td>Maintenance or improvement of physical capacities</td>
<td>There is a better opportunity to be Active for Life if physical literacy is achieved before Training to Train</td>
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<tr>
<td>Develop fundamental mental skills</td>
<td>Sport, event, position specific technical and playing skills practiced under competitive conditions</td>
<td>Further development of technical, tactical, and playing skills</td>
<td>Transfer from one sport to another</td>
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<tr>
<td>Introduce free weights</td>
<td>Overall physical, mental, cognitive, and emotional development</td>
<td>Modelling all possible aspects of training and performance</td>
<td>Move from highly competitive sport to lifelong competitive sport through age group competition</td>
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<td>Develop ancillary capacities</td>
<td>Advanced mental preparation</td>
<td>Frequent preventive breaks permitting recovery to avoid injuries</td>
<td>Move from competitive sport to recreational activities</td>
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<td>Frequent musculoskeletal evaluations during PHV (growth spurt)</td>
<td>Optimize ancillary capacities</td>
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<td>Move to sport careers or volunteering</td>
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<tr>
<td>Single or double periodization</td>
<td>Single, double, or triple periodization</td>
<td>Single, double, triple, or multiple periodization</td>
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<tr>
<td>Sport specific training 6-9 times per week including complementary sports</td>
<td>Sport specific technical, tactical, and fitness training 9-12 times per week</td>
<td>Sport specific technical, tactical, and fitness training 9-15 times per week</td>
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"The health and well-being of the nation and the medals won at major Games are simple by-products of an effective sport system."

Istvan Balj PhD

"At the first four stages, our children are competing too often with over-zealous parents and coaches wanting to win, robbing them of the opportunity to have fun and develop skills that will enable them to be successful."

Steve Norris PhD

"Athletes with a disability go through the same stages as all children. They need support and challenges from their parents and coaches to reach their potential."

Colin Higgs PhD

"Parents should understand LTAD and coaches should have knowledge on how to train the developmental athlete."

Charles Cardinal M.Sc.

"First our children need an active start to develop movement and sport skills so they are physically literate. Then they can strive for excellence and or be active for life."

Richard Way MBA

For more information visit www.LTAD.ca
Sports can be classified as either early or late specialization. Early specialization sports include artistic and acrobatic sports such as gymnastics, diving, and figure skating. This outline is for late specialization sports.

"I was involved in many sports growing up, which helped me develop many physical and psychological skills, which helped me when I focused on speed skating at the age of 17. It paid off as I stood on top of the podium 10 years later."

-Catrina Le May Doan, Olympic and World Champion

"As a developing athlete, my coaches encouraged an intense but highly social program that kept our training group hungry for more work, and eager to take on new challenges. We worked hard, but in an environment with a lot of variety, where fun was always a major priority. Success came easily to our group as we made the transition to international competition because another challenge was just what we were looking for."

-Adam Van Koeverden, Olympic Champion

"I have gone through all the same stages of development as Canada’s other elite athletes. From training hard as a teenager, through learning to compete on the international stage, to standing on the Olympic podium, my development has taken time and perseverance."

-Chantal Petitclerc, Olympic, Paralympic, and World Champion

"I knew I always had the ability to perform at the highest levels, but my peaking was always hampered by serious injuries in the middle of the competitive phase. When I came to understand the value of adequate recovery, through regular therapy and regeneration techniques, I was able to perform consistently throughout the year. Being unjured during the competitive season enabled me to spend more time on race specific preparation and modelling practices and that ultimately played a major role in my bronze medal performance at the 2005 world track and field championships."

-Tyler Christopher, World Championship medallist

"Even though one must specialize quite young in my sport - diving - I still had to go through all the stages described in the Long-Term Athlete Development Model. I just had to go through them a bit quicker."

-Alexandre Despatie, Olympic medallist and World Champion

"I believe in the power of play to develop a healthy child. My childhood was very physical, full of fun and creative, self-organised, unstructured play. I tried many different sports, particularly running, and developed a healthy, strong body that loved to move. I was 17 when I first discovered rowing and found that my active childhood had laid the foundation needed for me to be successful competing in a sport I loved."

-Silken Laumann, Olympic medallist and World Champion

"When I was growing up, I trained many, many more times than I played games, which allowed me to develop the skills and the physical conditioning to play at the world’s highest level."

-Owen Hargreaves, England and Bayern Munich, Champion League Winner

"Winning medals in both Summer and Winter Olympics was not easy. I believe the most crucial ingredient to my success as an athlete was my development as a youngster in an incredible range of community and school sports. From ringette to hockey, ballet to gymnastics, softball to soccer, track and field to volleyball, roller speed skating to speed skating and cycling. I was able to develop the attributes that carry me to success on the international playing field. I also learnt how to have fun with sport long before I knew what the pressure of competition entailed. I learnt how to play before I learnt how to win, and now I do both!"

-Clara Hughes, Winter and Summer Olympic Games medallist