



An Outline of LTAD

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.

The 10 key factors influencing LTAD

1. The 10-Year Rule
2. The FUNdamentals
3. Specialization
4. Developmental Age
5. Trainability
6. Physical, Mental, Cognitive, and Emotional Development
7. Periodization
8. Calendar Planning for Competition
9. System Alignment and Integration
10. Continuous Improvement

Active Start Stage

Chronological Age
Males and Females 0-6

FUN and part of daily life
Fitness and movement skills development
Focus on learning proper movement skills such as running, jumping, wheeling, twisting, kicking, throwing, and catching
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

FUNdamentals Stage

Chronological Age
Males 6-9 and Females 6-8

Overall movement skills
FUN and participation
General, overall development
Integrated mental, cognitive, and emotional development
ABC's of Athleticism: agility, balance, coordination, and speed
ABC's of Athletics: running, jumping, wheeling, and throwing
Medicine ball, Swiss ball, own body strength exercises
Introduce simple rules of ethics of sport
Screening for talent
No periodization, but well-structured programs
Daily physical activity

Learning to Train Stage

Chronological / Development Age
Males 9-12 and Females 8-11

Overall sport skills development
Major skill learning stage: all basic sport skills should be learned before entering Training to Train
Integrated mental, cognitive, and emotional development
Introduction to mental preparation
Medicine ball, Swiss ball, own body strength exercise
Introduce ancillary capacities
Talent Identification
Single or double periodization
Sport specific training 3 times week; participation in other sports 3 times a week

Figure 1 illustrates the stages of LTAD.

Training to Train Stage

Chronological / Developmental Age
Males 12-16 and Females 11-15

Sport specific skill development

Major fitness development stage: aerobic and strength. The onset of Peak Height Velocity (PHV) and PHV are the reference points

Integrated mental, cognitive, and emotional development

Develop mental preparation

Introduce free weights

Develop ancillary capacities

Frequent musculoskeletal evaluations during PHV

Selection

Single or double periodization

Sport specific training 6-9 times per week including complementary sports



Training to Compete Stage

Chronological / Developmental Age
Males 16-23 +/- and Females 15-21 +/-

Sport, event, position-specific physical conditioning

Sport, event, position-specific technical tactical preparation

Sport, event, position-specific technical and playing skills under competitive conditions

Integrated mental, cognitive, and emotional development

Advanced mental preparation

Optimize ancillary capacities

Specialization

Single, double, or triple periodization

Sport specific technical, tactical and fitness training 9-12 times per week



Training to Win Stage

Chronological Age
Males 19 +/- and Females 18 +/-

Ages are sport specific based on international normative data

Maintenance or improvement of physical capacities

Further development of technical, tactical, and playing skills

Modelling all possible aspects of training and performance

Frequent prophylactic breaks

Maximize ancillary capacities

High Performance

Single, double, triple, or multiple periodization

Sport specific technical, tactical, and fitness training 9-15 times per week



Active For Life Stage

Enter At Any Age

Minimum of 60 minutes moderate daily activity or 30 minutes of intense activity for adults

Transfer from one sport to another

Move from highly competitive sport to lifelong competitive sport through age group competition

Move from competitive sport to recreational activities

Move to sport careers or volunteering

There is a better opportunity to be Active for Life if physical literacy is achieved before the Training to Train stage