This webinar is recorded and will be available later.

Post any questions to Zoom Q&A or the Triathlon Live chat.

FUNDAMENTAL MOVEMENT SKILLS FOR TRIATHLON

STARTING SOON
Physical Characteristics - RECAP

• The performance factors in Sprint and Olympic distance triathlon races and its influence on the overall performance have been previously described.

• The biomotor abilities enable athletes to develop the motor capacities to an optimal level for sports performance, and therefore, should be identified and tested in order to define strengths and weaknesses of the athletes’ fitness.

• Beside the components of fitness, balance, coordination and flexibility have been shown as important capacities that should also be assessed and trained accordingly to the specific needs of the sport.
Fundamental Movement Skills for Triathlon

Basic Motor Skills (BMS)

1. Build the foundation
2. Guarantee the development of high-performance sport-specific movement pattern
3. The gross motor skills underpin the development of the more specific sport skills
4. Physical literacy
Essential Fundamental Motor Skills

**Locomotor Skills**
- Run
- Jump
- Hop
- Gallop
- Roll
- Horizontal jump
- Slide
- Swim

**Manipulative Skills**
- Catch
- Kick
- Vertical Jump
- Overhand Throw
- Underhand roll
- Ball bounce

**Stability Skills**
- Balance
- Twisting
- Turning
- Bending
Assessment of Fundamental Motor Skill

- The primary purpose of the FMS Assessment is to differentiate between individuals whose skills are developing typically and those whose skills are lacking in development.

## Stages of Athletic Development

| Age | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Tri Category | Tri-Start | TS1 | TS2 | TS3 | Youth | Junior B | Junior C | Senior D |
| Sport Focus    | Sampling many different Sports | Specialising 2-3 sports | Investment in one sport |
| Training Structure | Low Structure | Moderate Structure | High Structure | Athlete led |

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- Adapted from The Youth Physical Development Model
- Strength and conditioning Journal June 2012 Rhodri Lloyd, Jon Oliver
Specific skills for triathlon

1. Triathlon is a multi-discipline sport consisting of swimming, cycling, running and transitions.

2. The economy of movement of each discipline will play a vital role in the athlete's performance.

3. Apart from the proper technique of each discipline, athletes must possess a series of specific skills for each segment of the triathlon.

4. Any lack of these skills will negatively affect the overall performance of the race.
SWIM

The aim is to swim in the first group or exit the water as close to the lead swimmer as possible.

World Triathlon has developed a unique Swim Technique Analysis Sheet that can be used as a guideline to run a swim stroke analysis properly.
BIKE

Cycling usually makes up slightly more than 50% of the duration of a triathlon

Factors which impact race outcomes:

1. Race tactics
2. Physical capabilities
3. Interaction with other triathletes
4. Bike handling skills

BIKE SKILLS

- Pedalling, cadence and gears
- Braking and cornering
- Climbing and Descending
- Group Riding
- Eating and Drinking
RUN

When considering running, it comes at the end of the race, and so is often perceived as the discipline that makes the most significant difference to overall performance.

Running analysis is the study of the specific movements required for running.
TRANSITIONS

Transitions require different skills from swimming, cycling, and running. More fine motor skill use is required to perform specific skills.

**T1 - SWIM - BIKE**
- Exit the swim.
- Remove cap and goggles.
- Run to the transition area.
- Find transition spot and place cap and goggles near the bike.
- Put on any clothes, if required (most athletes race in their bathing suits, singlets, or triathlon suits).
- Put on the helmet (must be fastened BEFORE touching the bike).
- Put on shoes.
- Unrack bike (unhook it from the bike racks).
- Run or walk the bike to the exit of transition (NO riding in transition).
- Mount the bike at the mount line and begin cycling.

**T2 - BIKE - RUN**
- Dismount bike at dismount line (slow down before dismount!)
- Run or walk the bike through the transition to the transition spot.
- Rack bike BEFORE removing the helmet.
- Take off the helmet.
- Change shoes if necessary.
- Put on a hat if necessary (e.g. in the hot sun).
- Run out of transition to begin the last leg of the triathlon (run).
Take Home Message

- The specific skills needed for a triathlon, range from basic level to more advanced exercises.

- It is the task of the coach to assess them and prescribe the necessary training for the athletes to master their weakest areas.

- It is essential to note that each athlete will need his/her own time for developing specific abilities

- Setting and individual skill profile will help coaches prescribing the right task for each athlete, and therefore, will guide them tailor-making a series of exercises to improve their skills and performance.
Any questions not discussed during the webinar will be answered and posted on the WT Education Hub within 24 hours.

World Triathlon Education Hub
Open Content
https://education.triathlon.org/

World Triathlon Development Webinars
Past and Upcoming

Triathlon Live
https://www.triathlonlive.tv/
WE WILL BE BACK IN SEPTEMBER

LET US KNOW WHAT YOU THINK - SURVEY
Main references