OPTIMIZATION OF WEIGHT AND BODY COMPOSITION FOR HIGH-PERFORMANCE IN ELITE ATHLETES

A Sport-Specific Process Tool for Experts and Coaches

Athletes' weight and body composition can be relevant in elite sports, and this understanding should be based on sport-specific knowledge, such as scientific evidence. At the individual level, decisions regarding the optimization of weight and body composition should be based on a joint evaluation by experts and coaches of the potential benefits and risks- remembering that ultimately athletes have the right to make decisions in matters that concern themselves.

The purpose of this sport-specific analysis and process is to examine and harmonize practices related to optimizing weight and body composition in the sport. The sport-specific process includes three areas that are intended to be developed in a multidisciplinary team.

The Objectives of the Sport-Specific Process to Examine:

- ✓ What is the significance of weight and the benefits of weight optimization in the elite-level sport?
- ✓ What is the basis for these perceptions of the significance and benefits of weight optimization?
- ✓ What are the short- and long-term risks and harms associated with weight optimization?
- ✓ What issues should be considered when evaluating weight optimization?
- ✓ How can weight optimization be implemented, and which aspects would be important to monitor and assess?

Instructions for the Sport-Specific Work

- Name the members of the working group
- Each participant in the process fills in sections 1–3 in advance
- After that, gather to discuss and jointly record sections 1–3

Sport: ..... **Date:** .....

Working Group Experts:

- Coach(es): .....
- Other Sport-Specific Expert(s): .....
- Nutrition Expert: .....
- Medical Doctor: .....
- Psychologist: .....
- Other: .....

SECTION 1

THE ROLE OF WEIGHT IN SPORT AND THE BENEFITS OF WEIGHT OPTIMIZATION

What is the significance of weight in your sport /
What are the benefits of optimizing weight in the sport?

What is this understanding based on (application of physical laws, research, sport-specific knowledge, experience, etc.)?

SECTION 2

RISKS AND HARMS OF WEIGHT OPTIMIZATION

From the perspective of performance, in the short- and long-term?

From the perspective of health, in the short- and long-term?

SECTION 3

WEIGHT OPTIMIZATION IN PRACTICE

a. How is weight optimization currently implemented in sport?

SECTION 3

WEIGHT OPTIMIZATION IN PRACTICE

b. Developing and Harmonizing Practices

How is the process initiated with the athlete?

How is implementation monitored and evaluated?

How are performance-related factors evaluated?

How are health-related factors evaluated?

Checklist for Weight Optimization

WHEN WEIGHT OPTIMIZATION IS NOT RECOMMENDED

- The athlete has disordered eating behavior or an eating disorder
- The athlete has symptoms of RED-S
- The athlete is a child or an adolescent
- Weight and body composition have no proven relevance for performance
- The athlete has recovery challenges
- The athlete lacks multidisciplinary support or sufficient guidance
- The athlete has challenges related to psychological well-being

WHEN WEIGHT OPTIMIZATION IS POSSIBLE

- The athlete is an adult
- Weight or body composition is relevant to performance
- The athlete is in elite level
- Sufficient flexibility in eating and a flexible relationship with food
- Hormonal function is normal
- The athlete has support from a nutrition expert
- Timing is appropriate with respect to the training and competition season

CONSIDERATIONS WHEN PLANNING

- Athlete's age
- Health status
- Psychological development and well-being
- Timing of the training season
- Proven benefit of weight and body composition for performance
- Realistic goals for change in relation to sports' training and competition demands
- Availability of a nutrition expert
- Close cooperation with athlete's coach and the rest of the support team

ENSURE REGULARLY

- ✓ Intake of essential nutrients
- ✓ Adequate intake of energy and carbohydrates
- ✓ Effectiveness of the nutrition plan in relation to training goals
- ✓ Meal timing relative to training

MONITOR SYSTEMATICALLY

- Energy levels
- Recovery
- Mood
- Overall load
- Health status
- Menstrual cycle in female athletes
- Weight and/or body composition

10 PRINCIPLES FOR TALKING ABOUT WEIGHT

1. Assessing weight and body composition is not part of youth sports or recreational sports.
2. Create a safe space when discussing weight or the body, as well as in measurement situations.
3. Discussions about weight and body can take place on the athlete's terms when there is a justified reason.
4. Be aware that talking about weight and the body can evoke various emotions. The topic is rarely met with neutrality.
5. Understand that your talk about nutrition and body affects the athlete, even when it's not about them directly.
6. Do not comment on someone else's or your own appearance, meals, or eating habits, especially if the athlete hasn't asked for advice.
7. Recognize the prevailing appearance and body ideals within your sport.
8. Listen and offer support if needed. The initiative to talk about weight and the body may also come from the athlete.
9. An athlete's relationship with food and body can change due to injuries, health challenges, or life changes.
10. Talking only about weight rarely solves challenges.

More information about weight optimization is available on website **www.kihu.fi**