Season 2023/2024


# NUTRITIONAL INTERVENTION IN YOUTH TEAMS

# NUTRITION AND SPORTS SUCCESS

- The Benefits of good nutrition to the health and performance of players at all levels o the game of soccer are widely recognized, and optimal nutrition is now key strategy in the preparation of top teams

# GOALS OF NUTRITIONAL INTERVENTION

- Improve post-exercise recovery and optimize gains from training;
- Optimization of body composition;
- Decrease the risk of injury and illness;
- Delay fatigue;
- Increase effective training/playing time;
- Optimization of energetic reserves

# NUTRITIONAL NEEDS

Exercise influences energy needs

Need to adjust food intake

Assure efficient recovery

- Reduce risk of injury and optimize sports performance

# INTERVENTION

1. Planning the menu for the training athletes

**5 Different meals**

**Ensure all nutrients essential to athletes (optimal growth and performance)**

**Variety**

**Quality**

Consider the higher training load days

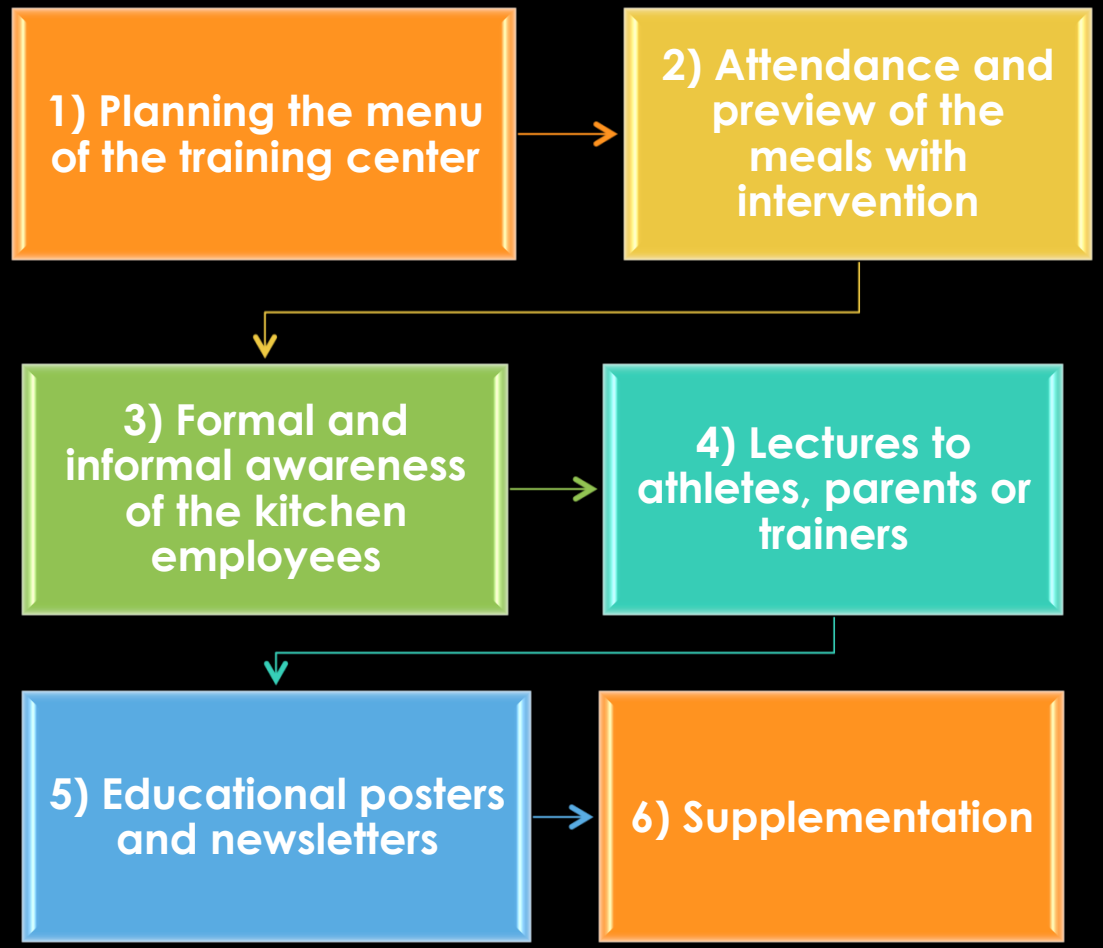
Consider competition days

# NUTRITIONAL NEEDS


Special Needs → Special Care!

# NUTRITIONAL NEEDS

How to make sure athletes have the nutrients they need



# NUTRITIONAL NEEDS

Rest Recovery period/Adequate sleep (-8hours/day)

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+

Rest Recovery period/Adequate sleep (-8hours/day)

Easting Habits

Optimal growth and physical performance!

# NUTRITIONAL NEEDS

Rest Recovery period/Adequate sleep (-8 hours/day)

Training /Dedication/ Motivation

+

Genetics

Optimal growth and physical performance!

# INTERVENTION

2. Attendance and preview of the meals with intervention

**Record Feedback from athletes about the meals**

**Detect the most frequent food errors they do intervention**

Make sure all the food available is according to what was required

# INTERVENTION

3. Formal and informal awareness of the kitchen/foodservice staff

| Explain the importance they have in athletes meals | | | | |
|---|---|---|---|---|
| Hygiene | Food Safety | Quality | Execute the menu correctly | Trust |

| Encourage the ingestion of foods they know athletes need to eat, but usually don't | | |
|---|---|---|
| Soup | Fish | Vegetables |

Report the most frequent companies to improve the service

# INTERVENTION

4. Lectures to athletes, parents or trainers

**About subjects important to athlete's performance, most frequent mistakes and /or doubts**

**To give parents information about what choices are better for their child as an athlete**

Explain the importance of nutrition, new intervention protocols adopted (example: start/alteration o supplementation) or clarify doubts to coaches

# INTERVENTION

5. Educational Posters, Screen and Newsletters

About different subjects important to athletes

To clarify frequent questions

# INTERVENTION

## 6. Supplements – Our philosophy

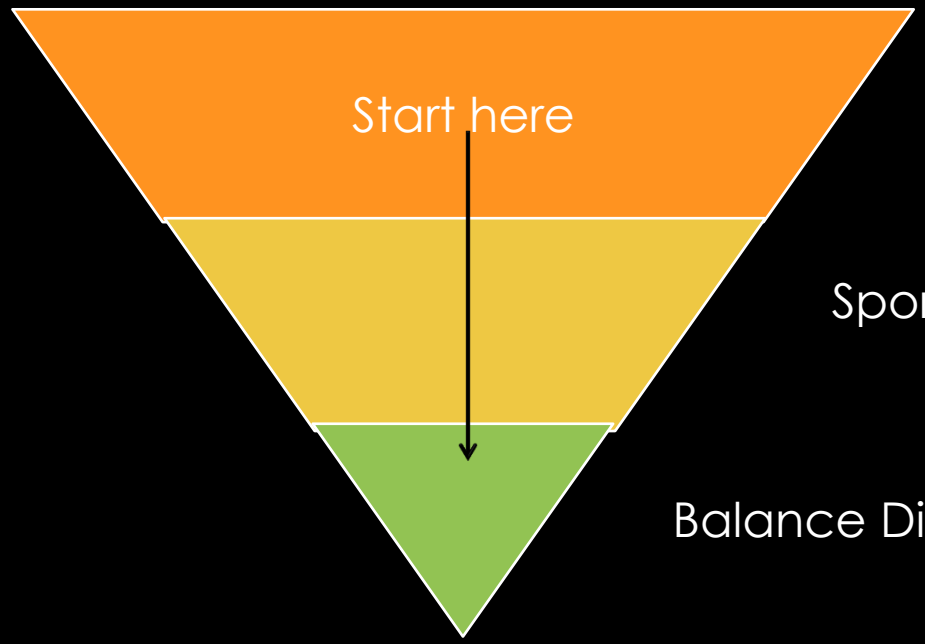
< 16y: Only foods

- Special attention in pre-competition meals/competition days and in recovery from exercise

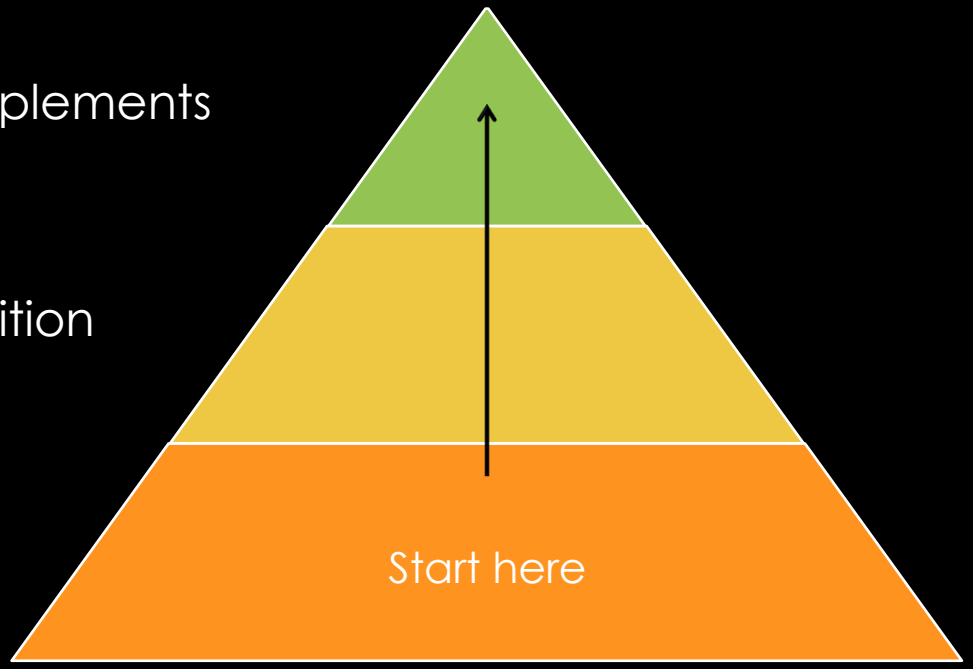
# INTERVENTION

## 6. Supplements – Our philosophy

The sports nutrition pyramid by many athletes (and supplement companies)




Evidence based approach by sports dieticians and other experts




How would you build a pyramid?

# INTERVENTION

6. Supplementation


Let's start the magic?

# INTERVENTION

## 6. Supplementation

**Nutritional Supplementation**

Nutritional supplements might aid recovery, enhance training adaptations and sports performance

Two main categories:

1) Practical forms of achieving Carbohydrate and Protein needs (Ex: Powders, Gainers, etc.

2) Ergogenic supplements (potential direct performance enhancers – ex: creatine and caffeine)

# INTERVENTION

## 6. Supplementation – Our philosophy

16-18y: Food + Sport drinks + Protein/Carbohydrate supplements

1) Match days – Isotonic drink after the warm-up and during
2) Higher training load days (2-3 times /week) – Isotonic drink during training
3) Match and higher training load days – protein /carbohydrate supplements

# INTERVENTION

## 6. Supplementation – Our philosophy

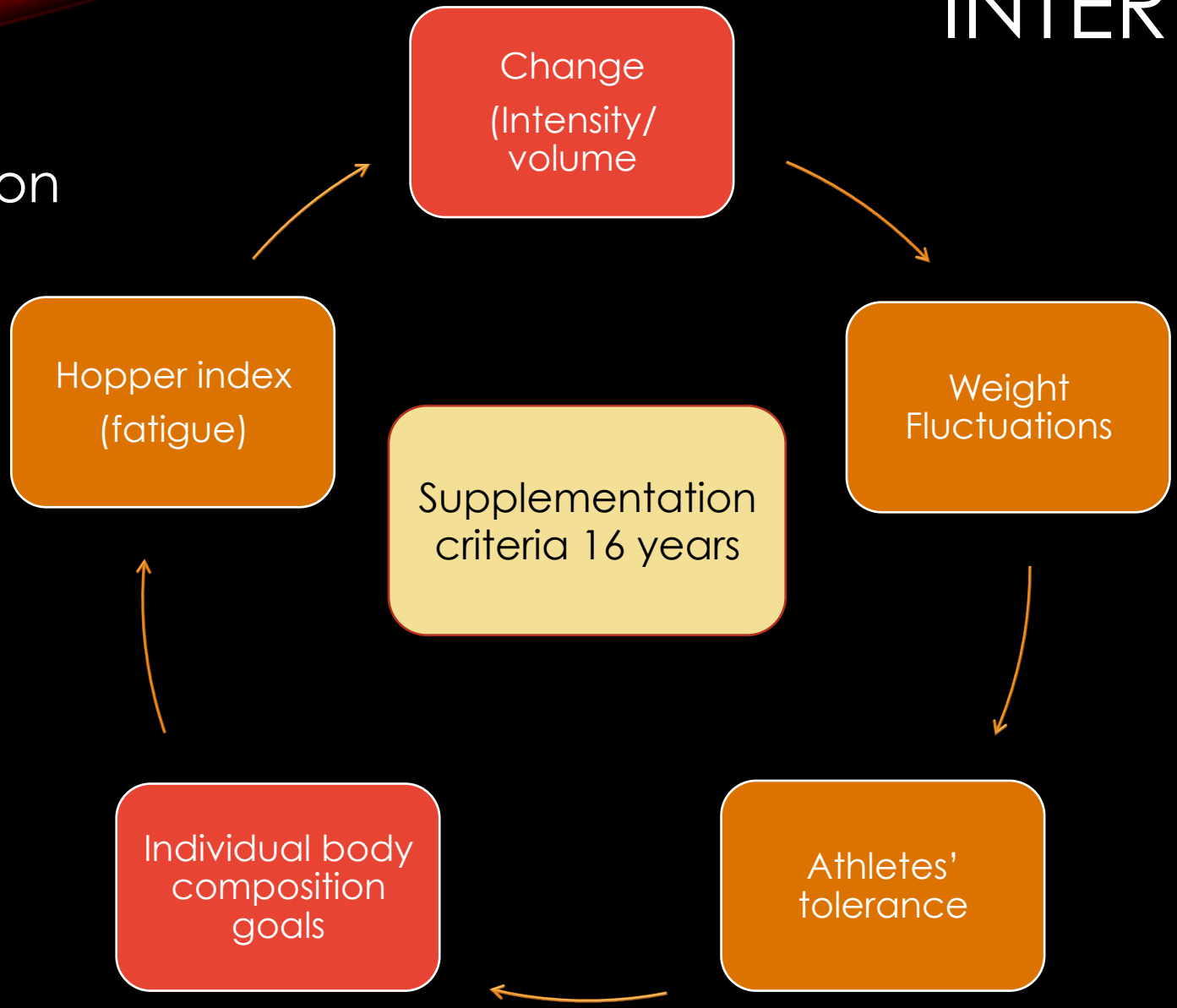
> 18y: Food + Sport drinks + Protein/Carbohydrate supplements + **Ergogenic substance**

<u>Most commonly ergogenic substances uses:</u>

1) Creatine
2) Caffeine

# INTERVENTION

6. Supplementation



# INTERVENTION

How to make sure athletes have the nutrients they need?

1) Planning the menu of the training center

2) Attendance and preview of the meals with intervention

3) Formal and informal awareness of the kitchen employees

4) Lectures to athletes, parents or trainers

5) Educational posters and newsletters

6) Supplementation

# INTERVENTION

Anthropometric measurements

Body Fat – Skinfolds

1) Use of ISAK protocol which uses the sum of eight skinfolds
2) Cut off values: 30 – 70 mm depending on the type of athlete evaluated

# INTERVENTION

Anthropometric measurements


Body Fat – Skinfolds

1) Measures the compressed thickness of a double layer of skin and the underlying subcutaneous adipose tissue:
   - Non invasive method, inexpensive:
   - Not influenced by electrolyte balance;

2) Very consistent values if evaluated by a trained anthropometrism

# INTERVENTION

Anthropometric measurements

Height

Weight


Body Fat

- Skinfolds
- DXA

# INTERVENTION

How do we evaluate if they are physically optimized?

Anthropometric measurements periodically

Interpretation of data

- Athletes with excess of weight /fat mass
- Athletes with low weight

Anthropometric measurements periodically

# INTERVENTION

Adequate body composition –why so important?

Fat mass

**“ Dead weight” bigger load and tension Over muscles tendon and joints**

Postural changes

More Strenuous Training

Make the changes of direction harder

Decrease of sports performance

+

Greater predisposition to sports injured

# INTERVENTION GENERAL GUIDELINES

**1. Eat 5 to 6 meals during the day**
- **Start with breakfast**

2. Always make a snacks after training session

**3. Eat plenty of vegetables:**
- **soup or salad at lunch /dinner**
- **Fruits at meals and snacks at least 3 to 5 a day**

6. Include protein sources in all meals
- Lunch/dinner : meat /fish/eggs
- Snacks: milk/yogurt/cheese/ham

# INTERVENTION GENERAL GUIDELINES

**7. Eat more complex carbohydrate**
**Rice/pasta/potatoes/been//Chicken peas/bread/cereals**
**And less simple sugars/candy/ice-cream/desserts/sodas**

**8. Eat more carbohydrate when you train harder or have fatigue/eat less when you don't train /train lighter/ less fatigued**

9. Drink water /fluids throughout the day 1,5 to 2,5 Liters/day

# INTERVENTION

How to maintain it?

Eat right

+

Eat in the right timings

# PRE-COMPETITION

Choose meals high in carbohydrates and moderate protein

Avoid meal with a high fat content (exclude fries, stews/ roasts with lot of fat

Choose familiar food athletes know they will tolerate well

Make a good hydration

# PRE-COMPETITION

Dinner before competition

+

+

+

+

# PRE-COMPETITION

Breakfast before competition

2-3 hours before competition

Protein

+

Carbohydrates

+

# PRE-COMPETITION

Pre- competition Lunch

3-4 hours before competition





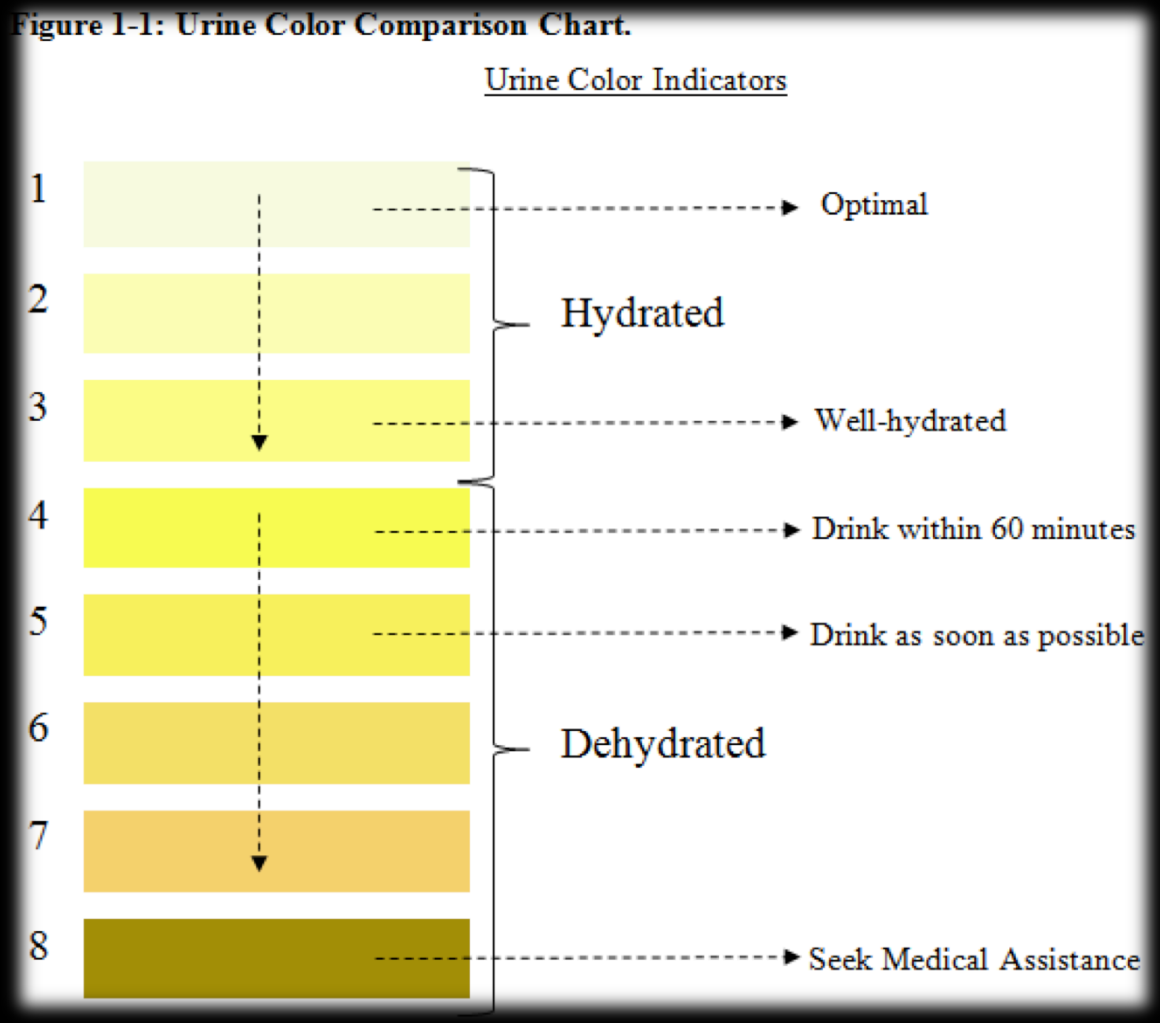



Easy digestion

# HYDRATION

Urine volume and color are a good way of accessing hydration status

URINE CHART
LEVEL OF HYDRATION



# POST COMPETITION

Dinner










# POST COMPETITION

Snack – Until 30 to 60 minutes after competition

**Promotes:**

Good recovery from exercise

Replenishment of energy stores and minerals lost in sweat

Body Hydration

Synthesis/Repair of muscle mass


+

+

+

+

+

# DEHYDRATION CONSEQUNCES

Faster Installation of Fatigue

VELOCITY
CONCENTRATION

RESISTENCE

CRAMPS, NAUSEA,
HEADACHES

PASSING/SHOOTING
ABILITY

# LEARN TO MAKE THE RIGHT CHOICES


Energy
Performance

# BE RESPONSIBLE

Energy
Performance

# BE RESPONSIBLE

"Good food choices will not make a mediocre athlete into a champion, **but poor food choices may prevent a potential champion from realizing his or her potential**"

Ron Manghan

# HYDRATION

## Water

Main component of the human body - ESSENTIAL

- A good hydration status is crucial for optimal sports performance
- Thirst is a physiological sign of dehydration that should be avoided