

Case Study: “Making Weight” and Recovery for a Weight Class Athlete

Introduction

Weight cutting, or “making weight” for a competition, is a common practice in several different weight-class sports. Research on the safety of various practices and the impact on performance has been published in the last few decades. As a sports dietitian it is important to understand this research as well as the culture of the sport and safety aspects of making weight. Also of great importance is creating a recovery plan between the weigh-in and competition. While weight cutting practices are likely counterintuitive to advice you would give related to your athlete’s health, a sports dietitian is best placed to safely support the athlete within the culture of the sport to achieve their performance goals.

In this activity, you will react to a plan for a Brazilian jiu-jitsu athlete to make weight in the days prior to a competition and develop suggestions for recovery before the match begins. The below scenario is an example from an actual athlete preparing for his match.

Supplemental reading: [SSE #183: Acute Weight Management in Combat Sports: Pre Weigh-In Weight Loss, Post Weigh-In Recovery and Competition Nutrition Strategies](#) (Reale, R, 2018).

Athlete Profile

Name: Maurice	Current Weight: 215 lbs
Age: 21	Target Weight: 205 lbs
Height: 5’8”	Weigh In: Saturday Morning
Sport: Brazilian jiu-jitsu	Recovery: 3 h between weigh in and first match

The Plan to Make Weight

- Low fiber starting Wednesday morning
- Low sodium starting Thursday morning
- Slightly reduced fluid Thursday night after training
- Woke up 211lbs Friday morning
- 150mL (5 oz.) coffee for breakfast, almost no fluid until weigh-in (<100mL, 3.5 oz.)
- High energy, low weight food all day (protein bars, pancake, fried eggs)
- Light training Friday evening to sweat

- Woke up 206lbs Saturday morning
- 15-minute jog on treadmill with extra layers; 204.5lbs
- Still 2 h until weigh-in, 0.5lb under weight
- Breakfast; protein/CHO bar (65g) + 2 pieces of bread with butter & honey (~110g)
Approximately: 120g CHO (~1.2g/kg), 30g pro, 700kcal

Questions

1. Why is Marcus put on low fiber intake in the several days before the weigh in?
2. What is the purpose of sodium and fluid restriction?
3. What is the density of food, and why would an athlete in this situation want high energy, low weight foods?
4. Do you think the match day breakfast is appropriate? Why or why not?
5. Comment on the safety of this approach and any problems to watch for.

Post Weigh-In Recovery

Fill in the following chart. Remember the goal in these 3 hours before the match are to rehydrate and provide energy. You do not need to provide exact numbers for protein, carbohydrate and sodium.

Indicate if the foods and beverages you suggest are high, medium, or low in these nutrients. You should aim for ~2750 mL of fluid, which would replace 100% of his deficit.

Post weigh-in	Food/drink	Protein (H/M/L)	CHO (H/M/L)	Sodium (H/M/L)
Immediate				
+20 min				
+40 min				
+60 min				
+80 min				
+120 min				