Athlete Caloric Needs Calculation

This playbook outlines the process for calculating an athlete's daily caloric requirements. It considers the type of sport, level of training intensity, and the athlete's body composition objectives.

Step 1: **Assess Activity**

Evaluate the athlete's sport and training intensity. Consider factors like duration, frequency, and the physical demands of their sport to categorize the activity level as low, moderate, or high intensity.

Step 2: **Determine BMR**

Calculate the athlete's Basal Metabolic Rate (BMR), which is the number of calories their body needs at rest. Use a BMR formula such as the Harris-Benedict equation or the Mifflin-St Jeor equation, considering the athlete's age, sex, weight, and height.

Step 3: **Calculate TDEE**

Compute the Total Daily Energy Expenditure (TDEE) by multiplying the BMR by an activity factor that corresponds to the athlete's assessed activity level.

Step 4: **Set Goals**

Establish the athlete's body composition goals, whether it's to maintain, lose, or gain weight. Adjust caloric intake accordingly,

typically by adding or subtracting 500 calories per day for weight gain or loss respectively.

Step 5: **Adjust for Sport**

Make additional adjustments based on the specific sport's demands. Endurance sports may require more carbohydrates, while sports emphasizing strength may lead to increased protein intake.

Step 6: **Monitor Progress**

Regularly monitor the athlete's progress towards their goals and make necessary caloric adjustments. Consider using body composition assessments, performance metrics, and consultations with a dietitian.

General Notes

Accuracy

While formulas provide estimates, they may not be accurate for all athletes. It's important to consider individual variability and consult a professional for personalized advice.

Diet Quality

Total caloric intake is important, but so is the quality of the diet. Encourage the athlete to consume a balance of macronutrients and a variety of whole foods.

Hydration

Caloric needs calculations do not cover hydration. Athletes should ensure they are also meeting their fluid requirements, particularly around training and competition.