

GameFuel: A Dietary Guideline for Student-Athletes

Cover Page

Title: *GameFuel: A Dietary Guideline for Student-Athletes at Basud National High School*

Tagline: *Fuel Smart. Play Hard. Recover Strong.*

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1. Introduction

Welcome to *GameFuel*, your complete nutrition guide designed to empower Basud National High School student-athletes. This eBook serves to provide practical, science-based nutrition advice to help you perform better, recover faster, and stay healthy.

2. Importance of Nutrition in Athletic Performance

- Nutrition fuels energy systems during training and games.
- Helps in muscle growth and recovery.
- Prevents injury and boosts immunity.
- Improves focus and academic performance.

3. Nutritional Needs of Student-Athletes

- **Macronutrients:**
 - Carbohydrates (55–65%) – Primary energy source.
 - Protein (12–15%) – Muscle repair and growth.
 - Fats (20–30%) – Supports hormone production and recovery.
- **Micronutrients:**
 - Iron, calcium, vitamin D, B-complex vitamins.
- **Calories:** Varies by age, sex, and sport. Ranges from 2,000–3,500 kcal/day.

4. Scientifically-Backed Dietary Guidelines

Meal Timing	What to Eat	Why It Matters
2–4 hrs before training	Carbs + protein (e.g., rice + egg)	Fuel energy stores
30–60 min before	Light carbs (banana, granola bar)	Quick energy
During (if >60 min)	Water or electrolyte drink	Maintain hydration
Post-Training (within 30 mins)	Protein + carbs (chocolate milk, sandwich)	Muscle recovery

5. One-Month Meal Plan

Includes daily meal plans with variations for training intensity (Low, Moderate, High) and portion suggestions.

6. Hydration Strategies

- Drink 250–500 mL water 2 hours before activity.
- Sip 100–150 mL every 20 minutes during training.
- For events >60 mins: Include electrolytes (sports drinks, oral rehydration salts).
- Check urine color – pale yellow = well-hydrated.

7. Pre-Game and Post-Game Nutrition

Before Game:

- 3 hours before: Rice + lean meat + fruits
- 30 mins before: Banana + water

After Game:

- Within 30 minutes: Chocolate milk, sandwich
- 1–2 hours after: Balanced meal (carbs + protein + vegetables)
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8. Common Nutrition Myths

- ❌ *“Skipping breakfast makes you lighter for sports.”*
- ✅ *Truth:* Skipping breakfast drains energy stores and hinders performance.
- ❌ *“More protein = more muscle.”*
- ✅ *Truth:* Excess protein won’t build muscle without proper training.

9. Practical Tips for Busy Student-Athletes

- Pack healthy snacks: boiled eggs, trail mix, fruits.
- Avoid energy drinks and sugary sodas.

- Eat rainbow-colored fruits and vegetables daily.
- Don't skip meals—even on rest days.

10. Final Recommendations

- Make small, consistent changes.
- Stay hydrated throughout the day.
- Listen to your body.
- Prioritize sleep and recovery.
- Seek help from coaches, teachers, or health professionals when unsure