

# The Bunny Remix: Energizer Edition

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# Assigned Group & Needs

- Female collegiate lacrosse players
  - Avg weight: ~65.9 kg
  - High-intensity intermittent sport

## Energy Needs:

- ~2,300–2,900 kcal/day

## Macronutrient Needs:

- CHO: 5–7 g/kg (330–460 g/day)
- Protein: 1.4–1.7 g/kg (90–110 g/day)



# Pre-Exercise Targets



- **Snack 2–3 hours before training**
- **300–400 kcal**
- **50–70 g carbohydrates**
- **15–25 g protein**
- **Low fat and fiber**

## Goal:

**Support energy +  
digestion**



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# Why Modify the Recipe?

- Original smoothie was assigned
- Good base, but:
  - Low in carbohydrates
  - Low in protein
  - Slightly high in fat

Goal of modification:

- Increase CHO
- Increase protein
- Keep fat low



# Recipe Modifications

- **↑ Carbohydrates**
  - **Banana**
  - **Honey**
- **↑ Protein**
  - **More Greek yogurt**
  - **Higher-protein milk**
- **↓ Fat**
  - **Less peanut butter**



*Focus: Simple, realistic changes*



## Original

- 191 kcal
- 30.2 g CHO
- 7.1 g protein
- 6.6 g fat



## Modified

- 364 kcal
- 62.6 g CHO
- 18.4 g protein
- 7.9 g fat

# Nutrient Analysis



# Key Improvements



**Carbohydrates:** ↑  
(30 → 62 g)



**Protein:** ↑  
(7.1 → 18.4 g)



**Fat: still low**



**Calories:** ↑  
(191 → 364 kcal)



## Extra:

- ↓ **Fiber** → **better digestion**
- ↑ **Calcium, Vitamin D, Potassium**



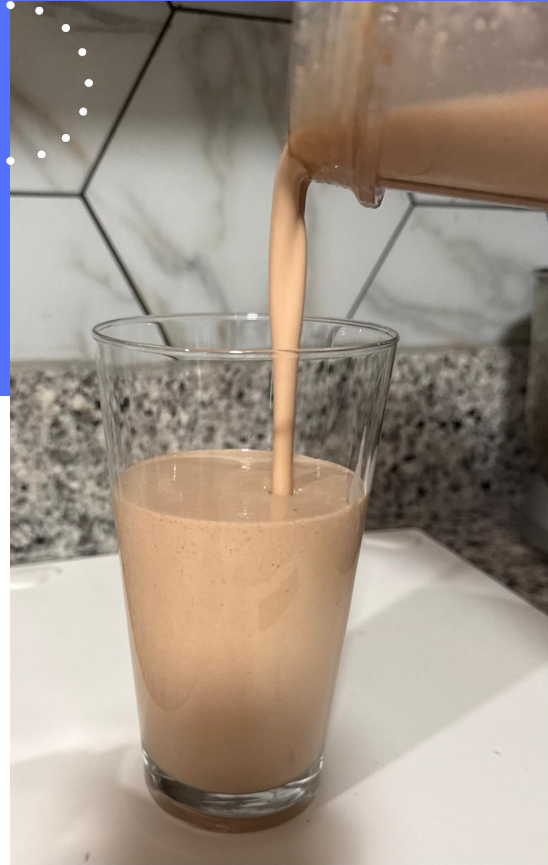
# Recipe Appropriateness

- **Simple and easy to follow**
- **Uses accessible ingredients**
- **Minimal equipment needed**
- **Dorm-friendly**

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## Reinforces:

- **Importance of pre-exercise fueling**



# Sensory Evaluation

- Overall acceptability:  $\uparrow$  (89  $\rightarrow$  92–95)
- Flavor: chocolate + banana
- Smoothness: very high
- Appearance: improved

Texture:

- Slightly more liquid



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# Sensory Takeaway

- Easy to drink before exercise
- More appealing appearance
- Good flavor balance
- Possible improvements:
  - Adjust texture (less runny)
  - Standardize portion size



# Cost & Practicality



- **Cost per serving: ~\$4.99**
- **Total for group: ~\$74.94**
- **Cheaper than commercial smoothies**

**Most Expensive:**  
**Carrots, milk**

**Least Expensive:**  
**Banana, peanut butter**





# Cost Reduction



- Remove carrots
- Add more honey, milk, banana
- Alternative:
  - Add apple slice
    - Lower cost
    - Adds sweetness
    - Controls fiber



# Overall Evaluation



**The modified smoothie improved carbohydrate and protein content while keeping fat low, making it more appropriate for pre-exercise fueling. It remained practical, affordable, and well accepted in terms of taste and texture.**



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# Conclusion

**n** This modified smoothie is a practical and effective pre-exercise option that meets the needs of the assigned group. It balances nutrition, cost, and acceptability, showing that simple choices can support better energy and performance.





# Thank You!

**We'll see you again with a new  
recipe.**

