



THE UNITED STATES OLYMPIC COMMITTEE

## Weight Gain in Sport

An athlete's desire to gain weight, usually in the form of lean muscle mass, should be rooted in achieving ideal body composition for performance. Increasing muscle tissue requires a combination of nutrition strategies, appropriate stimulus on the muscle tissue in the form of weight training, and sleep.

When significant changes in body composition are made, it is favorable to make changes in the off / pre-season since the demands of competition and travel will make consistent body composition changes more difficult to achieve.



## Getting Started

1. **Consult a sport dietitian** to assist you with an individual plan to meet your goals and maximize performance.
2. **Get a baseline assessment** to determine current weight and body composition and to set appropriate goals.
3. **Anabolic preparation** by beginning training sessions well fueled to maximize the anabolic stimulus on muscles during training.
4. **Recovery** is a key element for muscle growth. Prioritize a recovery nutrition snack or meal immediately post-training as well as a bedtime snack.
5. **Increase daily calorie intake** in order to create new muscle tissue by adding in 1-2 snacks OR increasing portion sizes at meal times. Additional calories should come from all nutrients, not just protein.
6. **Choose quality calories** in the form of whole grains, fruit, dairy, veggies, lean animal protein, oily fish, and healthy fats to ensure nutrients are available for muscle growth in addition to training and daily physiological functioning.
7. **Monitor progress** and track your weight on a weekly to bi-weekly basis and have body composition reassessed every 4-6 weeks to ensure weight gain is primarily muscle.

# Tips for Achieving Weight Gain Goals

**Increase protein & leucine** – ensure foods containing the amino acid leucine (meat, fish, poultry, dairy & legumes) are spread evenly through the day, at meals AND snacks, not all at one time, to aid in the growth of new tissue.

**Eat frequently** – aim to eat every 2-3 hours to help increase calorie intake.

**Consistency is key** – as with training, practice consistency with these tips Monday – Sunday.

**Focus on food** – aim to increase calories first with food and supplements as a secondary option.

Consult a sport dietitian to help identify an appropriate weight gain supplement if needed.

**Plan ahead** – outline meals and snacks for the week. Shop at least once per week to have extra calories readily available.

**Eat a bed time snack** – include a source of protein (cereal + milk, smoothie, cheese + crackers).

## Ideas for adding in extra “quality” calories

- 1 slice or 1 oz cheddar cheese = 100 kcals (add to salads, sandwiches, wraps, eggs, and dips)
- ½ avocado = 150 kcals (add to sandwiches, smoothies, and salads)
- 4 Tbsp. hummus + 10 baby carrots = 200 kcals
- Whole wheat bun (200 kcals) or bagel (250 kcals) (use instead of bread for sandwiches)
- ½ cup dried fruit = 200 kcals (add to cereal, yogurt, ice cream, and salads)
- 1 cup whole milk (150) + ½ cup oatmeal (dry 150) = 300 kcals
- 1 cup 4% fat cottage cheese (220) + 1 cup pineapple = 300 kcals
- ½ cup granola (200) + 5.3 oz. low-fat Greek yogurt = 350 kcals
- Cook vegetables and meat in 1-3 Tbsp. olive oil = 120-360 kcals

- 1 medium apple (100) + 3 Tbsp. almond butter = 400 kcals
- ½ cup pistachios, almonds, walnuts, sunflower seeds 350-400 kcals
- 2 Tbsp. peanut butter + whole wheat bagel + 1 Tbsp. honey = 500 kcals
- 4 Tbsp. almond butter + banana = 500 calories
- Smoothie: 8 oz milk (80) + 3 dates (200) + 1 Tbsp. almond butter (100) + 1 banana (100) = 460 kcals
- Smoothie: 6 oz whole milk (115) + 8 oz. low-fat Greek yogurt (230) + ½ avocado (150) + 1 cup frozen berries (70) = 565 kcals
- Smoothie: 8 oz chocolate milk (2%) (120) + 2 Tbsp. peanut butter + 8 oz. low-fat Greek yogurt (230) + 1 banana = 650 kcals

*Athlete Recommendations:*

