

## Weight Gain in Sport

Weight gain goals ideally focus on increasing lean body mass and strength in order to achieve/improve body composition to aid in performance. To facilitate gains in muscle mass, sufficient calories, protein, and muscle stimulus must occur.

## Getting Started

- ▶ Consult a sport dietitian to review your weight/body composition goals. A baseline body composition assessment is recommended.
- ▶ Growth of muscle mass is influenced by genetics, training stimulus and nutrition. If all are optimized, initial gains of 0.25-0.5 kg per week may be possible. Gaining weight more quickly than this can lead to increases in body fat.
- ▶ Ideally, muscle mass gains should occur during the off-season or early preseason. A strength and conditioning coach can help you develop an effective training program to achieve the right balance between resistance and other training.
- ▶ Monitor your progress by tracking your weight weekly and monitoring body composition changes every 4-6 weeks with assistance from a sport dietitian.

## Nutrition Tips for Achieving Weight Gain Goals

- 1. Increase daily caloric intake** in order to create new muscle tissue. This can be accomplished by:
  - Increasing the frequency of your meals and snacks
  - Eating more energy-dense snacks and drinks to increase your energy intake without having to significantly increase the volume of food you're eating
  - Planning ahead to avoid missed meals or snacks or resorting to convenient "junk food" options
- 2. Recovery** nutrition is key for muscle repair and growth. Prioritize a recovery snack or meal immediately post-training. Be sure to include both complex carbohydrates and protein.
- 3. Spread your protein** throughout the day and include protein as part of your recovery snack to achieve a positive protein balance, promoting muscle growth.
- 4. 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.
- 5. Focus on food** - aim to increase calories with food first and dietary supplements as a secondary option. Consult a sport dietitian to help identify an appropriate weight gain supplement if needed.
- 6. Include a bed time snack** - studies have shown that consuming casein protein (found in milk and dairy products) prior to sleep can increase muscle protein stimulus. Examples include: cereal + milk, smoothie, cheese + crackers, yogurt.

## Ideas for Adding in Extra "Quality" Calories

- 1 slice or 1 oz cheddar cheese = 100 kcals (add to salads, sandwiches, wraps, eggs, and dips)
- 1/2 avocado = 150 kcals (add to sandwiches, smoothies, and salads)
- 4 Tbsp. hummus + 10 baby carrots = 200 kcals
- Whole wheat bun or bagel = ~225 kcals (use instead of bread for sandwiches)
- 1/2 cup dried fruit = 200 kcals (add to cereal, yogurt, ice cream, and salads)
- 1 cup whole milk + 1/2 cup oatmeal (dry) = 300 kcals
- 1 cup 4% fat cottage cheese + 1 cup pineapple = 300 kcals
- 1/2 cup granola + 5.3 oz. low-fat Greek yogurt = 370 kcals
- Cook vegetables and meat in 1-3 Tbsp. olive oil = 120-360 kcals
- 1 medium apple + 3 Tbsp. almond butter = 365 kcals
- 1/2 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 kcals



### Smoothies

- 8 oz. whole milk + 3 dates + 1 Tbsp. almond butter + 1 banana = 560 kcals
- 6 oz. whole milk + 7 oz. full-fat Greek yogurt + 1/2 avocado + 1 cup frozen berries = 500 kcals
- 8 oz. 2% chocolate milk + 2 Tbsp. peanut butter + 8 oz. low-fat Greek yogurt + 1 banana = 622 kcals
- *Super Green Shake*: 8 oz. full fat milk + 1/2 cup spinach + 1/2 avocado + 1 small banana + 1/2 cup pineapple + 1 scoop unflavored or vanilla whey protein = 417 kcals

*Athlete Recommendations:*