

Gaining Muscle:

Many parents and athletes have asked about how to gain muscle in a safe and healthy way. The first thing to keep in mind is that gaining muscle, much like losing fat, should be done gradually. Don't be discouraged if you don't see radical changes right away; muscle can usually be added at a rate of a half pound to a pound per week. Usually, the off-season is the best time to add muscle due to an increased amount of time to focus on building mass, and a reduced caloric burn rate as a result of swimming less. Keep in mind that when you are trying to build muscle, your calorie intake needs to be equal or greater than your caloric burn rate. If this stipulation is not met, your body may start to metabolize your muscle in an effort to provide energy to your body.

Tips:

1. **Track your intake or macros.** Make sure your diet is balanced between food groups. Try to even out your intake among food groups and make sure that you are consuming more calories than you are burning per day.
2. **Eat or drink some protein and carbohydrates after working out.** These two nutrients work together to build muscle.
3. **Don't only rely on protein.** Keep in mind that your body can only use .45g/lb of protein per day. The rest of your caloric intake should come from carbs or healthy fats.
4. **Add a meal or two extra snacks per day to help boost calorie intake.**
5. **Spread out your protein intake over the day.** This will help your body absorb all of the protein you consume.
6. **Eat, don't fill up on liquids.** Wait until you have eaten a good amount of nutrient rich food before consuming heavier beverages like milk or juice.
7. **Set goals and track progress.** Don't be discouraged if you miss your goals. Many teens have a hard time adding muscle due to skeletal growth. Use your goals to get into good habits and the muscle will come!
8. **Use supplements, but DO THOROUGH RESEARCH.** There are many supplements available online or in stores, but many have not been evaluated by scientists or the FDA. Please make sure to research supplements and consult your physician before starting any supplement regimen. Be aware that there are many "paid content" posts on the internet that look like reviews, but are actually ads.

9. **Get 7-8 hours of sleep every night to give you muscles adequate time to recovery.**
Your body repairs itself best during sleep.

Food Ideas:

The key to eating to gain muscle is to create a wide range of dishes that all contain a good balance of carbs and proteins while not ignoring greens. One easy way to do this is to introduce a daily smoothie to your diet. This smoothie (rough recipe below) should include greens (spinach or kale), fruits (bananas & berries), yogurt (low fat & high protein), granola, nut butter, and milk (regular, almond, coconut, etc). You can also add supplements or other grains like vitamins or flax seeds. This is a great way to start your day off balanced, but you should make sure your meals throughout the day continue to stay balanced. Use snacks like trail mix to spread out your protein intake over the day. Take a look at the lists below to see what you can add to your meals to increase your nutrient intake.

Danny's Smoothie Recipe:

- 1 banana (not frozen)
- 1 cup of frozen fruits
- ¼ cup of natural peanut butter
- ½ cup of plain greek yogurt
- 1 cup of frozen spinach
- 1 ½ cup of almond milk
- ¼ cup of granola (with flax & chia)

Just blend and enjoy! I will sometimes make an egg or two as well, but only if I am not working out in the morning. If I am, I pack a post-gym protein rich snack (usually a protein drink) to get a blast of protein in the morning.

Adding Protein to Meals:

- Nuts
- Milk (any variety, but whole is best)
- Eggs (whites are best)
- Nut butter
- Avocado
- Cheese
- Tofu
- Yogurt (replace sour cream with plain yogurt)
- Hummus

Adding Healthy Calories to Meals:

- Consume juices (not from concentrate)
- Dried fruit
- Coconut or olive oil
- Whole wheat bread
- Honey
- Bananas
- Smoothies (with greens like spinach)
- Jam

Adding Nutrients to Meals:

- Quinoa
- Flax Seeds
- Chia Seeds
- Granola
- Hemp Seeds