Muscle/Strength Gain Nutrition Overview

Disclaimer: It is important that you understand that this guide is only advice. It should not be substituted for medical advice. It is not intended for pregnant or breast feeding women.

What is Most Important?
You cannot out train a bad diet. And yes it is true that abs are made in the kitchen, not in the gym.

There are many things within nutrition to consider. The purpose of this guide is to highlight and educate you on which aspects are most important for you. I have arranged the aspects of nutrition plan by order of importance. Tackle them one by one. Meet aspect number one before you address aspect number two.

Nutrition Hierarchy of Importance
1. Calories
2. Macronutrients and Fiber
3. Micronutrients and Water
4. Meal Timing and Frequency
5. Supplements

1 - Calories - These are your Commandments

You MUST live by these:

- To gain weight I must be in a caloric surplus, I must eat more than I burn.
- To build muscle (and thus strength), at an optimum rate, I must be in a caloric surplus and do progressive weight training.
- I can build muscle, get stronger and lose fat all at the same time, and without changing weight, but my rate of progress will be more gradual.

A calorie increase alone is not enough for muscle gain. You need to weight train in a progressive way for effective muscle gain. Resistance training promotes muscle growth and will reduce fat gain while you’re in a calorie surplus.

Caloric Surplus
A caloric surplus is when your calories in are more than your calories out. Calories in come from food and liquids. Calories out come from any energy your body expends, this includes energy your body expends sleeping, breathing, digesting food, thinking, moving and exercising.

Caloric Maintenance
Caloric maintenance is when your calories in matches your calories out and thus your bodyweight stays the same. If you get bigger and stronger, through weight training, your body is most likely changing shape even if your bodyweight isn’t changing. You will be building muscle and losing fat at the same time.
Tracking and Adjusting
I recommend you take progress pictures and track your bodyweight, and body fat, using this simple online calculator once a month. To calculate your calorie needs you can use this simple online calculator. You use the myfitnesspal app to track your calorie intake. From there you can make the necessary adjustments using the example below.

Sedentary you:
• Burns 2500 calories a day
• You burn more calories in the 23 hours of the day than in the 1-hour of cardio/weight training he does.

You doing 5 hours of exercise a week:
• Burns 2900 cals a day. That’s an additional 400 calories from exercise.
• To gain weight (muscle) you must eat 3400 cals (+500) consistently.

Meals
Aim to eat 3-5 meals a day with protein, fat and carbs at each. I recommend carbs at every meal if you’re really struggling to put on weight. Full fat milk, pasta and bread can be go to options. White pasta, rice and bread are also fine (they are typically less fiber dense and there isn’t a whole lot of difference in nutritional density).

Try and avoid the majority of sugar and processed foods. Typical processed foods include sweets, chocolate, crisps, take away and fizzy drinks.

Tips:
If you’re really struggling to put on weight think about adding bread, milk, nut butter and even ice cream to your daily snacks. These are all calorie dense and easy to consume. The best time to consume these would be after main meals because if they are consumed prior to main meals, you might not finish your dinner! Just don’t eat ice cream every morning for breakfast.

Fullness
If you’re trying to gain weight eat as much as you can as fast as you can at each sitting. Of course be as polite as you can in the process. After about 20 minutes of eating your body sends out signals to quell your hunger.

2 - Macronutrients
Protein is the most important macronutrient to consider, then fat, and then carbs.

Protein
Poultry, Red Meat, Fish, Whey Protein, Eggs
• Meat cuts should be preferably lean, trimmed and skinless.
• If you’re buying ground meat preferably get it lean.
• Fish is generally lean.
• Whey Protein is one of the best sources of protein.
• Proteins main function is growth and repair.
• Aim for 2g of protein per kg of desired bodyweight per day.

Fat
Fish, Nuts, Seeds, Olive Oil
• Saturated, monounsaturated and polyunsaturated fats are al good sources of fat.
• Aim to consume 1/3 saturated, 1/3 monounsaturated and 1/3 polyunsaturated fats in your diet.
• Fish is a great source of good fats.
• Fats play a key role in brain, nerve and hormone function.
• Avoid hydrogenated fat as much as possible.
Carbs
Rice, Porridge, Pasta, Bread, Potatoes

- People’s tolerances to carbs vary dramatically (due to insulin sensitivity). Weight training and high intensity interval training improves insulin sensitivity.
- Carbs are the only non-essential macronutrient, thus it’s typically the macronutrient that is most widely reduced in diets.
- Our main energy source is carbs.

Other Macronutrients: Water, Fiber

3 - Micronutrients
Vitamins and Minerals
You must consume your fruit and veg! Multivitamins are not a substitute!
Eat all the Colours of the Rainbow

Experiment with different coloured fruit and veg. This is incredibly important for both the sporting and general population. Your immune system will be compromised if you don’t eat enough of these. Get to 5 a day, then get to 10 a day and stay at 10 a day. It is well supported that fruit and veg help prevent chronic disease.

4 - Nutrition Timing
Whether you eat everything at one sitting or throughout the day it doesn’t matter, the only thing that matters is your daily total intake.
Whether your post workout meal is 10 mins, 1 hour or 10 hours after your workout it doesn’t matter, the only thing that matters is your daily total intake!

I’m not saying that nutrition timing is completely irrelevant. What I’m saying is that it pales in comparison to your daily total intake of food. There is benefit to eating more than once per day. You should aim to have a meal 3-5+ times a day depending on your goal.

5 – Supplements
I recommend taking vitamin D and fish oils as general health supplements. These provide benefits for bone structure support, mood state, blood pressure and much more.

Vitamin D
1,000 - 2,000 ius in the morning with breakfast. Take this alongside a fish oils supplement if you are taking both. If you’re spending a day in the sun you don’t need to take a vitamin D supplement.

Fish Oil
Nine grams on a teaspoon in the morning with breakfast. Take this alongside a vitamin D supplement if you are taking both. If you have a diet high in oily fish you do not need to take this supplement.

Learn more about fish oils.

Additional Supplements
These are not necessary. However the two supplements I would recommend for muscle gain are Creatine (5g/day with a meal) and Whey Protein to assist in reaching your daily protein needs.

Learn more about vitamin D.
**Food Choices**
This is your list of foods that are in and foods you should try and avoid. You will see from this list that there is an emphasis on unprocessed whole foods over processed foods.

### Protein (*and good fat*)

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other sources</th>
<th>Try and avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean red meat</td>
<td>Chicken thigh/leg/wing*</td>
<td>Processed meat or fish</td>
</tr>
<tr>
<td>Lean poultry (skinless chicken and turkey)</td>
<td>Other red meet*</td>
<td>Heavily packaged meat or fish (chicken nuggets, fish fingers)</td>
</tr>
<tr>
<td>Lean fish* (wild salmon, tuna)</td>
<td>Cottage cheese*</td>
<td>Beef mince</td>
</tr>
<tr>
<td>Eggs*</td>
<td>Nuts and seeds*</td>
<td>Overly Fatty meat</td>
</tr>
<tr>
<td>Protein supplements</td>
<td>Plain Greek yogurt</td>
<td></td>
</tr>
</tbody>
</table>

### Vegetables and Fruits (non starchy carbs)

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark leafy greens</td>
<td>Mixed Beans</td>
</tr>
<tr>
<td>Cruciferous vegetables</td>
<td>Pasta</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Bread</td>
</tr>
<tr>
<td>Mixed berries</td>
<td>Sugar</td>
</tr>
<tr>
<td>Apples, oranges</td>
<td></td>
</tr>
<tr>
<td>And any others you can think of!</td>
<td></td>
</tr>
</tbody>
</table>

**Quick Tip:** Be aware that vegetables typically have fewer calories than fruit.

### Fats

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocado</td>
<td>Meat and fish provide a lot of dietary fat</td>
</tr>
<tr>
<td>Extra Virgin Olive Oil</td>
<td>Milk and dairy products</td>
</tr>
<tr>
<td>Fish oil</td>
<td></td>
</tr>
<tr>
<td>Flax Seed</td>
<td></td>
</tr>
<tr>
<td>Nuts (unsalted and raw)</td>
<td></td>
</tr>
<tr>
<td>Nut Butters</td>
<td></td>
</tr>
</tbody>
</table>

**Try and avoid:**

- Crisps
- Deep fat fried anything
- Anything hydrogenated

### Starchy Carbs

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Mixed Beans</td>
</tr>
<tr>
<td>Oats (whole)</td>
<td>Pasta</td>
</tr>
<tr>
<td>Quinoa</td>
<td>Bread</td>
</tr>
</tbody>
</table>

### Herbs and Spices

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage</td>
<td>Sage</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Rosemary</td>
</tr>
<tr>
<td>Turmeric</td>
<td>Turmeric</td>
</tr>
<tr>
<td>Chile pepper</td>
<td>Chile pepper</td>
</tr>
<tr>
<td>Ginger</td>
<td>Ginger</td>
</tr>
<tr>
<td>Cinnamon</td>
<td>Cinnamon</td>
</tr>
<tr>
<td>And any others you can think of!</td>
<td>And any others you can think of!</td>
</tr>
</tbody>
</table>

### Drinks

<table>
<thead>
<tr>
<th>Main sources</th>
<th>Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbal tea (green tea)</td>
<td>Herbal tea (green tea)</td>
</tr>
<tr>
<td>Water</td>
<td>Water</td>
</tr>
<tr>
<td>Green vegetable drinks</td>
<td>Green vegetable drinks</td>
</tr>
<tr>
<td>Almond, rice, coconut milks</td>
<td>Almond, rice, coconut milks</td>
</tr>
<tr>
<td>Milk</td>
<td>Milk</td>
</tr>
</tbody>
</table>

**Try and avoid:**

- Fizzy drinks
General Tips

Go for
- Few ingredients (preferably 1-3)
- Whole foods
- As unprocessed as possible
- As local as possible
- Organic if possible

Try to avoid
- Sugar
- Sweeteners, additives, preservatives, and colouring
- Highly processed
- Hydrogenated and fractionated oils (Cottonseed, corn or palm oil)

Be skeptical if you see
- “Syrup”, “natural”, “naturally sweetened”, “sugar-free”, “trans fat free”, “fiber-fortified”, “fortified”, “made with/contains real fruit”, words ending in “ose” (sucrose, glucose, fructose, etc.) and anything with more than 3 ingredients.

Example Daily Food Plate

The majority of your meals should look like this. The overall size of the plate will depend on the size of the person. The ratio of starches to vegetables usually depends on how many calories you need to consume.

Example After Exercise Food Plate

Your meal after exercise should look like this. The overall size of the plate will depend on the size of the person.