



SCULPT STRONG FITNESS

UNDERSTANDING CALORIES & MACRONUTRIENTS



My aim is to educate you on how to properly structure your eating choices WITHIN your current lifestyle.

As you move forward, read each section and make the changes that best suit your goals and lifestyle. Be patient, and understand that true change takes time. I am never about “quick fixes”—and you shouldn’t be, either.

Remember that everyone’s body responds differently to change. Therefore, when you make a change, track your own personal feedback and response. If this is in line with the progress you desire, continue on your way. If not, make the appropriate change.

In the end, several small scale changes will lead to a much better overall LIFESTYLE. I firmly believe—and have proven—that **this is a recipe for SUCCESS in any nutritional endeavour.**

What is a Calorie?

A Calorie is a unit of energy equivalent to the heat energy needed to raise the temperature of 1 gram of water by 1 °C. The amount of energy in an item of food or drink is measured in calories. When we eat and drink more calories than we use up, our bodies store the excess as body fat. If this continues, over time we may put on weight.

Calories and energy balance

Our bodies need energy to keep us alive and our organs functioning normally. When we eat and drink, we put energy into our bodies. Our bodies use up that energy through everyday movement, which includes everything from breathing to running.

To maintain a stable weight, the energy we put into our bodies must be the same as the energy we use through normal bodily functions and physical activity.

An important part of a healthy diet is balancing the energy you put into your bodies with the energy you use. For example, the more physical activity we do, the more energy we use.

Despite so much conversation in the fitness world right now being centred around “macros,” calories are still king. A proper macronutrient prescription will always add up to an appropriate amount of calories **period!**

While the old “calories in vs. calories out” holds true, it’s important to note the following: calories themselves will determine weight loss or gain, but **the composition of those calories (macros) will determine the type (i.e., fat or muscle) of weight lost or gained.** Yes, the Twinkie diet *does* produce weight loss; but no—it does *not* produce a great physique.

If you **lose weight**, you are in a **calorie deficit** or you've eaten less food than your body has used.

If you **gain weight**, you are in a **calorie surplus**, or you've eaten more food than your body has used.

Finally, if you **didn't lose or gain weight**, you are eating at approximately **maintenance** level calories, or you've eaten the same amount of food that your body has used, so it is balanced out.

PROTEIN

All About PROTEIN

Protein is a macronutrient that is **essential** to building muscle mass. It is commonly found in animal products, though is also present in other sources, such as nuts and legumes.

I recommend that every meal you consume contains a protein source.

There several reasons I start with protein, and why it is so important:

- **Protein has a very high thermic effect.** *Thermic effect* is the energy required to digest, absorb, and distribute nutrients in the body. Foods and nutrients with a high thermic effect, such as protein, require more energy—i.e., calories—to digest. Therefore, foods with lots of protein burn more calories in digestion.
- **Protein is a very satiating (filling) nutrient.** Eating is a hormonally driven behaviour, and fats, carbs, and proteins all produce different hormonal responses which can leave us feeling hungry or full. It's important to know that, when it comes to feeling full, *protein is king!*
- **Protein is responsible for the repair of skeletal muscle tissue.** If your goal is to achieve higher levels of performance, then you are most likely doing a decent amount of resistance training. While this is certainly in line with your goals, it can also become detrimental without adequate protein intake.
- **Training is simply an act of breaking down lean muscle tissue.** But without adequate nutrient (protein) intake to repair this tissue, over the long term, your body won't be able to create the adaptive response we are after. In this case, protein is ESSENTIAL to making progress.

- **Protein is a major factor in maintaining or adding lean body mass.**

There will be times when you are looking to shed fat or add muscle.

Regardless of the goal, proper protein intake will be essential.

- **Protein stimulates the release of glucagon, the “release” hormone.**

Unlike insulin, the “storage” hormone, glucagon will allow us to *release* stored energy for use. Clearly, releasing stored energy (and not storing new calories) will prove favorable to body composition and aesthetics.

Protein Sources

Some food sources of dietary protein include:

- lean meats – beef, lamb, veal, pork, kangaroo
- poultry – chicken, turkey, duck,, goose,
- fish and seafood – fish, prawns, crab, lobster, mussels,
- oysters, scallops, clams
- eggs
- dairy products – Milk, yoghurt (especially Greek yoghurt),
- cheese (especially cottage cheese)
- nuts (including nut pastes) and seeds – almonds, pine
- nuts, walnuts, macadamias, hazelnuts, cashews, pumpkin seeds,
- sesame seeds, sunflower seeds
- legumes and beans – all beans, lentils, chickpeas, split
- peas, tofu.

FAT

All About FAT

Firstly, fat does **NOT** make us fat. In fact, fats are an essential nutrient, without them, we would eventually break down and die.

We'll look at all types of fats, and the benefits of certain types. As you will see, dietary fats play a great role in various bodily processes—including hormone control and production, lean tissue acquisition, reduction of inflammation, and fat loss.

TYPES OF FATS

Let's first examine the four major types of fats:

Polyunsaturated Fatty Acids: These come from fish, flax, canola, and other industrial seed oils, among other sources. Polyunsaturated fatty acids oxidise (become rancid) very easily, and can be either inflammatory (omega6) or anti-inflammatory (omega3). As much as possible, we should always be looking to maintain a favourable ratio of omega3 to omega 6 fats in our diets (i.e., more omega 3 fats consumed compared to omega 6 fats).

Monounsaturated Fatty Acids: These come from olive oil, certain tree nuts like macadamia nuts, and avocados, among others. It is also important to note that the fat composition of red meat is 50% monounsaturated.

Saturated Fatty Acids: Saturated fatty acids are found in coconut, butter, and animal fats. While saturated fats have been vilified in the public eye, this is mostly unfair and baseless. These fats are essential for the production of certain hormones like testosterone, as well as a host of other bodily processes.

Trans Fatty acids: We've all heard how awful trans fats are, but once again, the media isn't telling us the whole truth. There are certain types of trans fats like CLA (conjugated linoleic acid) that actually confer huge health benefits (and potentially fat burning effects, too).

FATS TO BE INCLUDED IN YOUR DIET

Coconut oil: Coconut oil is a medium chain triglyceride(MCT). MCTs are preferentially used as energy instead of simply being stored, making them a good energy source, especially for those looking to lose weight. In fact, MCTs are believed to have thermogenic (fat burning) properties.

Butter (REAL butter!): Butyric acid(from which butter gets its name) is a great saturated fatty acid that is beneficial to GI health. As mentioned earlier in our discussion about food quality, GI health is essential! Remember, we can eat all the red meat and broccoli in the world, but if we don't digest it well, then it isn't doing us any good!

Avocado and extra virgin olive oil (EVOO): Both of these foods are great sources of monounsaturated fats. As noted earlier, these are important for hormone production as well as fuel after exhaustion of glycogen reserves, and offer many general cardiovascular benefits. They also assist in the uptake of micronutrients—specifically, fat soluble vitamins from foods like spinach, almonds, and berries.

Fish: Fish is a great source of high quality protein, but it's also an excellent wholefood source of omega 3 (anti inflammatory) fatty acids. It is also very rich in micronutrients, which are often overlooked in nutritional prescription.

Flax and chia seeds: Flax and chia seeds are rich in many nutrients. However, speaking purely about their fat content, they consist primarily of

polyunsaturated fatty acids, but convert very poorly to EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), which is why they are not high on my list.

CARBOHYDRATES

All About CARBOHYDRATES

In the media, carbs seem to be the source of most controversy, and are the most misunderstood macronutrient in the nutritional world. They come in all forms; they're in fruits, vegetables, and of course the ever popular starches.

Here's a very quick look into different types of carbs:

Glucose: The most basic and most easily utilised sugar. Glucose is broken down from starches like potatoes, rice, etc.

Fructose: This is the simple carb found in fruits. Fructose is preferentially stored as liver glycogen, *not* as skeletal muscle glycogen.

Lactose: This is found in dairy, and is derived from glucose and galactose. As we know, dairy (specifically, its lactose) can cause problems in certain populations.

Despite their bad reputation, carbohydrates are vital to your health for many reasons.

Providing energy

Carbohydrates are the body's main fuel source. During digestion, sugars and starches are broken down into simple sugars. They're then absorbed into the bloodstream, where they're known as blood sugar (blood glucose).

From there, glucose enters the body's cells with the help of insulin. Glucose is used by the body for energy. Glucose fuels your activities — whether it's going for a jog or simply breathing and thinking. Extra glucose is stored in the liver, muscles and other cells for later use. Or extra glucose is converted to fat.

Protecting against disease

Some evidence suggests that whole grains and dietary fibre from whole foods help lower your risk of heart disease and stroke. Fibre may also protect against obesity, colon and rectal cancers, and type 2 diabetes. Fibre is also essential for optimal digestive health.

Controlling weight

Evidence shows that eating plenty of fruit, vegetables and whole grains can help you control your weight. Their bulk and fibre content aids weight control by helping you feel full on fewer calories. Despite what proponents of low-carb diets claim, few studies show that a diet rich in healthy carbs leads to weight gain or obesity. **Choose your carbohydrates wisely**

Carbohydrates are an essential part of a healthy diet, and they provide many important nutrients. Still, not all carbs are equally good for you.

Here's how to make healthy carbohydrates work in a balanced diet:

- **Focus on eating fibre-rich fruits and vegetables.** Aim for whole fresh, frozen and canned fruits and vegetables without added sugar. Or have measured portions of fruit juices and dried fruits, which are concentrated sources of natural sugar, but have more calories. Whole fruits and vegetables have many health benefits. They add fibre, water and bulk, which help you feel fuller on fewer calories.

- **Choose whole grains.** Whole grains are better sources than refined grains of fibre and other important nutrients, such as B vitamins. Refined grains go through a process that strips out parts of the grain — along with some of the nutrients and fibre.
- **Stick to low-fat dairy products.** Milk, cheese, yoghurt and other dairy products are good sources of calcium, protein, vitamin D, potassium, and other vitamins and minerals. Consider the low-fat versions to help limit calories and saturated fat. And watch out for dairy products that have added sugar.
- **Eat more beans, peas and lentils.** Beans, peas and lentils are among the most versatile and nutritious foods. They are typically low in fat and high in folate, potassium, iron and magnesium. And they have useful fats and fibre. They are a good source of protein and can be a healthy substitute for meat, which has more saturated fat and cholesterol.
- **Limit added sugars.** Added sugar probably isn't harmful in small amounts. But there's no health benefit to having any amount of added sugar, such as in cookies and pastries. The Dietary Guidelines for Americans recommend that less than 10% of calories you eat or drink every day come from added sugar. Eating or drinking too many foods with sugar can also cause you to take in more than the calories you need each day.

So choose your carbohydrates wisely. Limit foods with added sugars and refined grains, such as sugary drinks, desserts and candy. These are high in calories but low in nutrition. Instead, select fruits, vegetables and whole grains.