

# NUTRITION PROGRAM

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# OVERVIEW - NUTRITION PROGRAM

Welcome to our nutrition manual, which is the foundation for any client wanting to improve their overall health, energy, fat loss and improved mental focus.

Our nutrition protocols vary depending on our clients goals and needs. So this manual has been created to help you get to your goal using our unique nutrition protocols.

We go indepth into each nutrition protocol we use with our clients, by explaining the science of the method, you will learn what how the protocol will make positive changes to your body and why your trainer has picked this nutrtional protocol for you.

Nutrition is the key to any training plan, any athlete wanting to win, any person wanting to be healthy and anyone who wants to lose body fat or gain lean muscle. Our goal long term is to provide you with more energy throughout the day, a healthy body fat % throughout the year, to be t and healthy and with the mind-set that you aren't restricted with the foods you can eat by giving you a balanced and healthy approach to your lifestyle with- out yo-yo dieting.

# STEP ONE UNDERSTANDING YOUR BODY TYPE

Once you understand what your body type is, you will then be able to understand what foods will get you results and what food groups you should cut down.

# What is eating for your body type?

Many people think that "body type" just describes the way someone looks. In fact, your body type can also provide information about how you respond to food intake and about your hormonal and sympathetic nervous system (SNS) characteristics. Physique characteristics can thus be linked to metabolic differences between individuals. Once someone establishes their body type, they can then adjust nutrient intake to maximize body composition and health related goals.

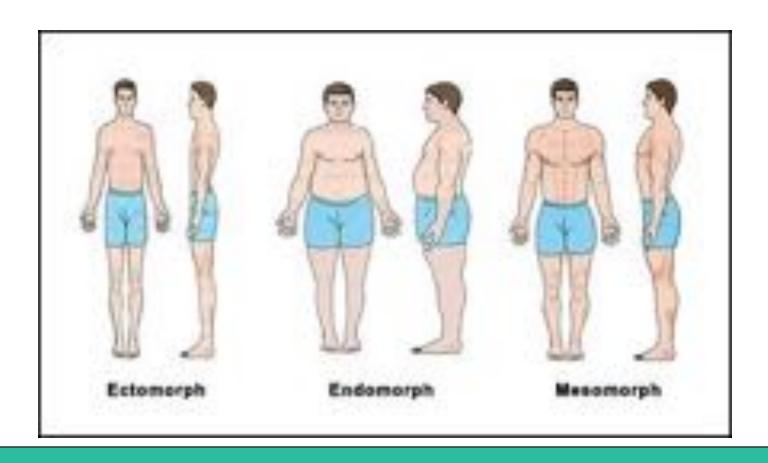
There are three general categories of body types (somatotypes): ectomorph, mesomorph, and endomorph.

Very few people fall perfectly into one of the three categories. People are often a mix of characteristics. Additionally, years of training and good nutrition can change the outward appearance of one's body.

For instance, a bodybuilder might be mistaken for a "natural" mesomorph when in fact, s/he is really an endomorph who's trained and dieted hard; or an ectomorph who's spent years guzzling protein shakes and doing the power lifts.

An ectomorph who's gained a little weight around the middle from a sedentary lifestyle and poor nutrition might assume they're more endomorphic.

However, most folks can find their general tendencies in one of the three groups.



# **ECTOMORPH**

Ectomorphs are thin individuals characterized by smaller bone structures and thinner limbs. Think of a typical endurance athlete. They tend to be thyroid and SNS dominant with either a higher output or higher sensitivity to catecholamines like epinephrine and norepinephrine. This profile is linked to a fast metabolic rate and a high carbohydrate tolerance.

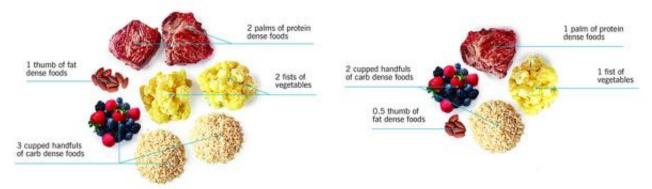
This group generally does best with more carbohydrates in the diet, along with a moderate protein and lower fat intake. A nutrient distribution for this body type might be around 55% carbs, 25% protein, and 20% fat. (But don't drive yourself crazy with the math. Just think "higher carbs and lower fat.")



Here's what that might look like using our portion control guide.

Ectomorph men begin by eating:

- 2 palms of protein dense foods at each meal;
- 2 fists of vegetables at each meal;
- 3 cupped handfuls of carb dense foods at each meal;
- 1 thumb of fat dense foods at each meal.



#### Portions for ectomorph men

Portions for ectomorph women.

Ectomorph women begin by eating:

- 1 palm of protein dense foods at each meal;
- 1 fist of vegetables at each meal;
- 2 cupped handfuls of carb dense foods at each meal;
- 0.5 thumb of fat dense foods at each meal.

# **MESOMORPH**

Mesomorphs have a medium sized bone structure and athletic body, and if they're active, they usually have a considerable amount of lean mass. Many explosive athletes like wrestlers and gymnasts fit these criteria. Mesomorphs tend to be testosterone and growth hormone dominant. This profile leads to a predisposition for muscle gain and the maintenance of a lower body fat. Mesomorphs typically do best on a mixed diet, consisting of balanced carbohydrates, proteins, and fats. A macronutrient split of 40% carbohydrate, 30% protein, and 30% fat can work well.

Here's what that might look like using our portion control guide.

Mesomorph men begin by eating:

- •2 palms of protein dense foods at each meal:
- •2 fists of vegetables at each meal;
- •2 cupped handfuls of carb dense foods at each meal;
- •2 thumb of fat dense foods at each meal.





# Portions for mesomorph men.





Portions for mesomorph women.

# **ENDOMORPH**

Endomorphs have a larger bone structure with higher amounts of total body mass and fat mass. Football lineman and power-lifters are frequently endomorphs. They tend to be naturally less active. Where the ectomorphs tend to burn off excess calories with near constant movement, excess calories in endomorphs do not seem to cause that same increase in expenditure. This means that excess calories are more likely to be stored as fat. This profile leads to a greater propensity for energy storage, including both lean mass and fat mass. This can also mean a lower carbohydrate tolerance.

Endomorphs typically do best on a higher fat and protein intake with carbohydrate intake being controlled and properly timed (e.g., after exercise). So that's what we recommend: more fat and protein, less carbohydrate.

A nutrient distribution for this body type might be around 25% carbs, 35% protein, and 40% fat. Again, no math gymnastics. Just think higher fats and protein, lower carbs.



2 fists of

Here's what that might look like using our portion control guide:

Endomorph men begin by eating:

- 2 palms of protein dense foods at each meal;
  - 2 fists of vegetables at each meal;
- 1 cupped handful of carb dense foods at each meal;
- 3 thumbs of fat dense foods at each meal.



Portions for endomorph men.

#### Endomorph women begin by eating:

- 1 palm of protein dense foods at each meal;
  - 1 fist of vegetables at each meal;
- 0.5 cupped handful of carb dense foods at each meal;
- 2 thumbs of fat dense foods at each meal.



Portions for endomorph women.

In general, we encourage individuals to experiment with different nutritional strategies until they find what works for them. And this is certainly one way to go about doing things.

Still, if seemingly endless trial and error with food intake doesn't sound like an enjoyable way to spend your weekends, then identifying your body type and eating the appropriate distribution of nutrients might be a smart place to begin.

# WHAT YOU SHOULD ABOUT EATING FOR YOUR BODY TYPE?

Regardless of your body type, body composition, or overall health status, your ability to handle carbohydrate-dense foods is greatly improved the more active you are.

This means that the best time to eat a majority of those starchy (or, less ideally, sugary) foods is when you're most physically active. Depending on your body type, your carb tolerance and needs are different and your strategy should be different to match.

#### High carb tolerance (and needs)

If you're the very carb tolerant type (or high carb needs type), eating a greater percentage of carbdense foods outside the workout window will likely be just fine for you. This means eating more carbs all throughout the day. And you should, of course, ensure you get plenty of carbs around your workout for fuel and recovery. Just think more carbs around workouts and somewhat less carbs at other times. Remember that as carb intake increases, fat intake decreases.

#### Moderate carb tolerance (and needs)

If you have moderate carb tolerance (or needs), you should likely maintain a moderate intake of carb-dense foods outside the workout window. This means you'd make sure you eat some carb-dense foods around your workout. The rest of the meals would consist of less carb-dense foods and more lean proteins, veggies, fruits, nuts and seeds.

#### Low carb tolerance (and needs)

If you're not very carb tolerant (or have low carb needs), your best bet is to minimize carb-dense foods outside the workout window. This means mostly veggies and fruits outside the workout window (along with proteins and fats).

As we approach different stages in our lives, hormones change and our body type can be influenced. This includes stages such as puberty and menopause (as well as the male equivalent, andropause). Carb-dense foods include whole grains (rice, breads, quinoa, amaranth, millet, corn, barley, etc.), dried fruits, yams, sweet potatoes, potatoes, recovery drinks, sugars, etc.

# **SUMMARY AND RECOMMENDATIONS**

Carb tolerance/needs: High Typical body type: Ectomorph

Carb timing ideas: Should include lots of carb-dense foods around exercise. Some starchy, whole grain, minimally processed carbs should also be eaten at other meals. Veggies and/or fruits (~3:1 serving ratio)

should be eaten at each meal.

Carb tolerance/needs: Moderate Typical body type: Mesomorph

Carb timing ideas: Should include carb-dense foods around exercise. Some starchy, whole grain, minimally processed carbs can also be eaten at other meals, though consumed in moderation. Veggies and/or fruits (~4:1 serving ratio) should be eaten at each meal.

Carb tolerance/needs: Low Typical body type: Endomorph

Carb timing ideas: Almost all carb-dense foods should be included around exercise. Veggies and/or fruits

(~5:1 serving ratio) should be eaten at each meal.

All of the aforementioned guidelines are great for muscle gain (assuming overall food intake is high enough), maintenance, and even moderate weight loss/shifting body composition.

# STEP TWO - UNDERSTANDING MACRO'S

# **MACRO'S - WHAT ARE THEY?**

Macros is basically shorthand for macronutrients, a term used to describe the three key food groups we all require for our bodies to function: carbohydrates (to fuel energy), fats (to keep you satiated) and proteins (to build and repair muscle).

Get the right balance of these and you'll not only lose weight, you'll be more effective at burning fat and building lean muscle

And, technically, alcohol is a stand-in fourth

It is essentially to track your macros, because once you know exactly what you are consuming, then you can modify it. So if your goal is fat loss, you can look at the calories and then we could drop the calories a little to ensure fat loss, or we can say you are not sticking to them on weekends which is pushing your overall calories higher. Which is sabotaging your fat loss results.

So without tracking, you take away the science and it becomes guess work. Which obviously makes it harder for the trainer to get your results.

# **PROTEIN**

#### What's it do?

Well, adequate protein intake will help build muscle and/or prevent muscle loss if you are in a calorie deficit. It controls appetite and staves off hunger better than fats or carbs as it causes you to feel full longer.

It also requires more energy than other macros for your body to digest, thus effectively burning more calories gram for gram through the digestion process.

All of these reasons make high-protein diets great for fat loss.

Where do I get it?

Meat, fish, eggs, dairy and protein shakes are all good sources.

There are many commonly cited "good" protein sources, like nuts or beans, that are actually terrible sources of protein. Only about 15-20% of the calories in these foods come from protein.

Almonds, for example, are 73% fat and only 14% protein. This is not to say you shouldn't eat almonds, but it explains why "nuts are great protein!" is rarely coming from a credible source.

How much do I need?

It really depends on your weight, bodyfat % and goals – as low as 0.5 grams per pound of lean body mass (per day) and as high as 1.5-2 grams per pound of lean body mass.

Lean body mass is your total bodyweight minus your fat. For example, if you weigh 200 pounds and are 20% bodyfat, your lean body mass is 160 pounds, or 200 – (200\*20%).

So, if you weigh 200 pounds and have 160 pounds of lean body mass, 0.5 grams per day would be 160\*0.5 = 80 grams of protein.

## **FAT**

What's it do?

Fat is an essential nutrient that our bodies require to live; it assists in vitamin absorption, hormone regulation, brain function, and more.

Where do I get it?

Meat, fatty fish, nuts, nut butters, oils and countless other sources.

How much do I need?

Again, it depends on your weight, bodyfat percentage and goal – probably somewhere between 15% and 45% of your total calories. However, it can vary based on your total calories consumed and whether you are in a caloric surplus or deficit. Somewhere between 0.35-0.7g per pound of lean body mass is a good range.

## **CARBS**

What's it do?

Carbs are stored in the liver, brain, blood and muscles as glycogen. Our bodies use carbohydrates for energy.

Where do I get it?

Fruit, vegetables, grains, many processed foods/drinks, and seemingly everything you obsessively craved if you've ever tried a low-carb diet.

How much do I need?

It depends. Technically, you can live on zero carbs. But, bodybuilders or endurance athletes have consumed 700+ grams per day. So, the range is pretty wide.

0.5-2 grams per pound of lean body mass is probably a decent range, again, depending on activity level, weight, bodyfat percentage and goals.

### **ALCOHOL**

What does it do?

Well, it can make you cooler, funnier and more social, or possibly louder, angrier and more violent; all depending on who you are and how much you drink, of course.

In all seriousness, alcohol is not an essential nutrient, but it does contain calories which is why it stands in as a fourth macro.

Where do I get it?

Beer, wine, liquor

How much do I need?

You need zero, but how much you drink is another story.

Remember, all calories come from macronutrients.

Vitamins, minerals, sodium, etc are micro-nutrients and do not contain calories.

ONLY proteins, fats, carbs and booze yield calories.

Each macronutrient yields a certain number of calories.

- One gram of protein yields 4 calories.
- One gram of carbohydrate yields 4 calories.
- One gram of fat yields 9 calories.
- One gram of alcohol yields 7 calories.

If you would please take a peek at the nutrition label below, we uncover the relationship between macronutrients and calories.

- Protein = 13 \* 4 = 52
  - Carbohydrates: 36 \* 4 = 144
  - Fat: 1 \* 9 = 9

144+52+9 = 205 calories

Pretty close, outside of the unavoidable rounding error. This should be easy for you. If it's not, practice on a few items in your cupboard.

Your trainer will work out how many calories you need for your body, and tweak it depending on your goal and time frame.

If you're trying to lose weight, you want this to be a negative number - a "caloric deficit." For instance, if you eat 1500 calories and you burn 2000, you've created a 500 calorie deficit that day. Your main goal for fat loss is to accumulate a significant caloric deficit over the entire week.

In order to build muscle or gain weight, a caloric surplus is the #1 requirement. You learned that a "caloric surplus" means eating more calories than your body needs, which means you need to be above your calorie maintenance level.

#### **Nutrition Facts** Serving Size 172 g Amount Per Serving Calories 200 Calories from Fat 8 % Daily Value\* Total Fat 1g 1% Saturated Fat 0g 1% Trans Fat Cholesterol Omq 0% Sodium 7mg 0% Total Carbohydrate 36q 12% Dietary Fiber 11g 45% Sugars 6g Protein 13g Vitamin A 1% • Vitamin C 1% Calcium 4% • Iron 24% \*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

NutritionData.com

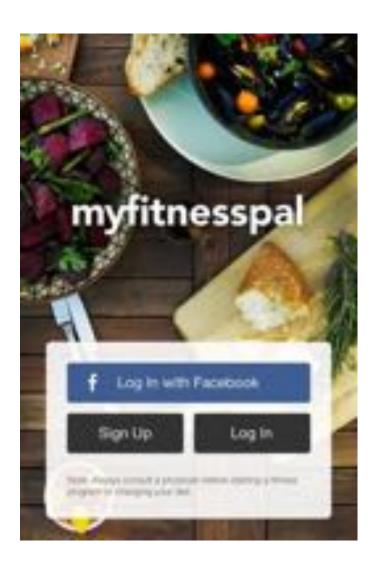
# **USING MY FITNESS PAL**

My fitness Pal is a great free app to record and track all your macros and see how many calories you are eating a day. You can also just scan in products as they have a database of food and it will atomically be uploaded.

Dont worry about the calories is gives you they are just rough estimates and your trainer will give you a correct calorie goal, work out by your goal, body type, and weight.

Also you dont need to track the water, or the exercise, we only want to track the food to make it the quickest process possible.

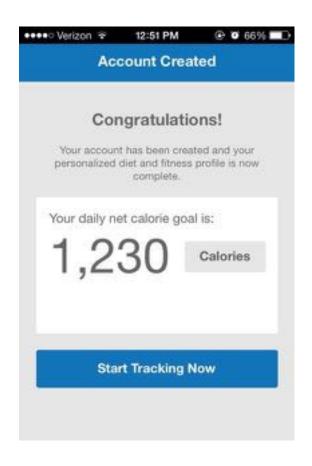
# **STEP 1: SIGNING UP**

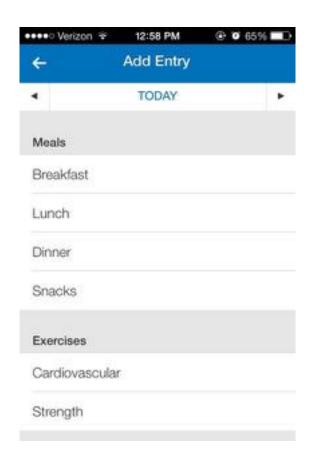


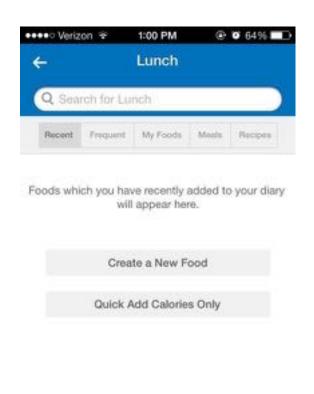
After downloading the MyFitnessPal app from the App Store, open the MyFitnessPal app.

Once filling in the all the variable options we will go straight into how to add foods into the diary so you can track your

## **STEP 2: ADD TO DIARY**







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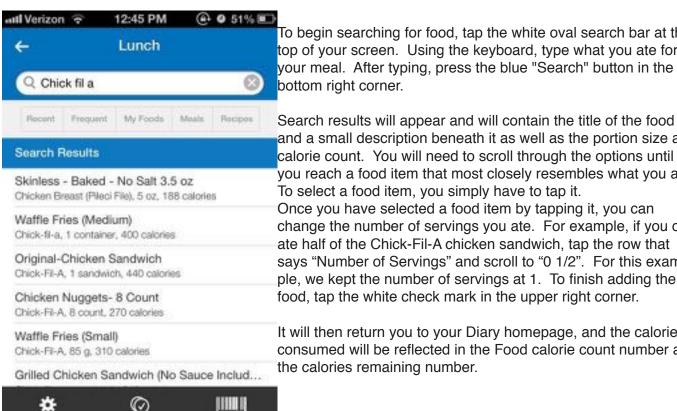
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Search for the food you would like to add by tapping the area that says "Search for Lunch". Then begin typing the food item you wish to enter. The barcode button on the bottom left allows you to scan in any food products direct, this can be anything like rice, eggs or anything you consume.

# **STEP 3: SEARCH AND SELECT FOODS**

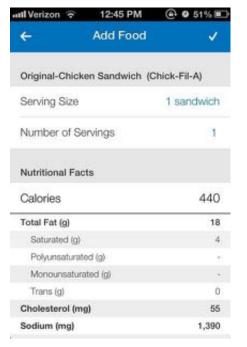


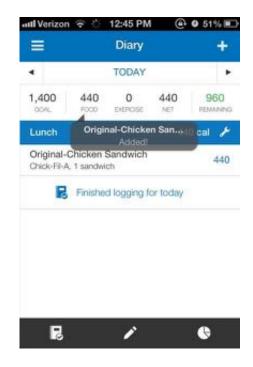
To begin searching for food, tap the white oval search bar at the top of your screen. Using the keyboard, type what you ate for your meal. After typing, press the blue "Search" button in the bottom right corner.

Search results will appear and will contain the title of the food and a small description beneath it as well as the portion size and calorie count. You will need to scroll through the options until you reach a food item that most closely resembles what you ate. To select a food item, you simply have to tap it. Once you have selected a food item by tapping it, you can change the number of servings you ate. For example, if you only ate half of the Chick-Fil-A chicken sandwich, tap the row that says "Number of Servings" and scroll to "0 1/2". For this exam-

It will then return you to your Diary homepage, and the calories consumed will be reflected in the Food calorie count number and the calories remaining number.

# STEP 4: ADD FOOD TO YOUR DIARY





Adding your trainer as a friend

The good news is this allows us to track everything you are consuming, and keep checking up at you at any time as long as you are filling your calories in.

On the app simply press the more button and click on on the friends and add your trainer on.

Go on the sharing and privacy under the settings and then on diary settings, and pop the setting to friends only, so that has a tick next to it.

# STEP THREE DIFFERENT NUTRITIONAL PROTOCOLS

Here we go through the individual nutrition protocols, each one will benefit different body types, so your trainer will help you decide which one is best for you.

# **KETOGENIC DIET**

The ketogenic diet (often termed keto) is a very low-carb, high-fat diet that shares many similarities with the Atkins and low-carb diets.

It involves drastically reducing carbohydrate intake, and replacing it with fat. The reduction in carbs puts your body into a metabolic state called ketosis.

When this happens, your body becomes incredibly efficient at burning fat for energy. It also turns fat into ketones in the liver, which can supply energy for the brain.

Ketogenic diets can cause massive reductions in blood sugar and insulin levels. This, along with the increased ketones, has numerous health benefits.

It take 7-10 days to enter ketosis, once you enter ketosis, if eat over roughly 30 grams of carbs then you will be out of ketosis and will not see any benefits. So you need to ensure you plan and are committed before starting it.

# AVOID COMPLETELY: FOOD RICH IN CARBS, FACTORY FARMED MEAT AND PROCESSED FOODS.

Ketogenic Diets for Diabetes and Prediabetes

Blood Glucose Meter and Strips

Diabetes is characterized by changes in metabolism, high blood sugar and impaired insulin function

The ketogenic diet can help you lose excess fat, which is closely linked to type 2 diabetes, prediabetes and metabolic syndrome

One study found that the ketogenic diet improved insulin sensitivity by a whopping 75%.

Another study in patients with type 2 diabetes found that 7 of the 21 participants were able to stop all diabetes medications .

In yet another study, the ketogenic group lost 24.4 lbs (11.1 kg), compared to 15.2 lbs (6.9 kg) in the higher-carb group. This is an important benefit when considering the link between weight and type 2 diabetes.

Additionally, 95.2% of the ketogenic group was also able to stop or reduce diabetes medication, compared to 62% in the higher-carb group.

# WHAT TO EAT AND WHAT TO AVOID

In short, you should eat REAL food (meat, eggs, nuts, yogurt, vegetables and occasionally some fruits). Apart from the obvious limitation of net carbs content in food, it is also recommended to avoid processed food and any food that may contain preservatives and colourings.

KetoDiet is not just about losing weight at any cost; it's about adopting a healthier lifestyle.

### **EAT FREELY**

Grass-fed and wild animal sources

Grass-fed meat (beef, lamb, goat, venison), wild-caught fish & seafood (avoid farmed fish), pastured pork and poultry, pastured eggs, gelatin, ghee, butter - these are high in healthy omega 3 fatty acids (avoid sausages and meat covered in breadcrumbs, hot dogs, meat that comes with sugary or starchy sauces) offal, grass-fed (liver, heart, kidneys and other organ meats)

Healthy fats, saturated (lard, tallow, chicken fat, duck fat, goose fat, clarified butter / ghee, butter, coconut oil)monounsaturated (avocado, macadamia and olive oil) polyunsaturated omega 3s, especially from animal sources (fatty fish and seafood)

Non-starchy vegetables -leafy greens (Swiss chard, bok choy, spinach, lettuce, chard, chives, endive, radicchio, etc.)some cruciferous vegetables like kale (dark leaf), kohlrabi, radishes celery stalk, asparagus, cucumber, summer squash (zucchini, spaghetti squash), bamboo shoots avocado

Beverages and Condiments - water (still), coffee (black or with cream or coconut milk), tea (black, herbal) pork rinds (cracklings) for "breading" mayonnaise, mustard, pesto, bone broth (make your own), pickles, fermented foods (kimchi, kombucha and sauerkraut (make your own)

All spices and herbs, lemon or lime juice and zest, whey protein (beware of additives, artificial sweeteners, hormones and soy lecithin), egg whiteprotein and gelatin (grass-fed, hormone free)

## **EAT OCCASIONALLY**

Eat Occasionally Vegetables, Mushrooms and Fruits

some cruciferous vegetables (white and green cabbage, red cabbage, cauliflower, broccoli, Brussels sprouts, fennel, turnips, rutabaga / swede)

nightshades (eggplant, tomatoes, peppers)

some root vegetables (parsley root), spring onion, leek, onion, garlic, mushrooms, winter squash (pumpkin), sea vegetables (nori, kombu), okra, bean, sprouts, sugar snap peas, wax beans, globe or French artichokes, water chestnuts berries (blackberries, blueberries, strawberries, raspberries, cranberries, mulberries, etc.) coconut, rhubarb, olives

#### Grain-fed animal sources and full-fat Dairy

beef, poultry, eggs and ghee (avoid farmed pork, it's too high in omega 6s!)

dairy products (plain full-fat yogurt, cottage cheese, cream, sour cream, cheese) - avoid products labeled "low-fat", most of them are packed with sugar and starch and have little sating effect bacon - beware of preservatives and added starches (nitrates are acceptable if you eat enough antioxidants)

#### Nuts and seeds

macadamia nuts (very low in carbs, high in omega 3s)

pecans, almonds, walnuts, hazelnuts, pine nuts, flaxseed, pumpkin seeds, sesame seeds, sunflower seeds, hemp seeds

brazil nuts (beware of very high level of selenium - don't eat too many of them!)

Fermented soy products

if eaten, only non GMO and fermented soy products (Natto, Tempeh, soy sauce or paleo- friendly coconut aminos)

Edamame (green soy beans), black soybeans - unprocessed

#### Condiments

healthy "zero-carb" sweeteners (Stevia, Swerve, Erythritol, etc.)

thickeners: arrowroot powder, xanthan gum (keep in mind xanthan gum is not paleo-friendly - some people following the paleo diet use it, as you only need a very little amount) sugar-free tomato products (puree, passata, ketchup)

Cocoa and carob powder, extra dark chocolate (more than 70%, better 90% and beware of soy lecithin), cocoa powder

beware of sugar-free chewing gums and mints - some of them have carbs

Some Vegetables, Fruits, Nuts and Seeds with Average Carbohydrates - depends on your daily carb limit root vegetables (celery root, carrot, beetroot, parsnip and sweet potato) watermelon, Cantaloupe / Galia / Honeydew melons pistachio and cashew nuts, chestnuts

Only very small amounts, better avoided completely: apricot, dragon fruit (Pitaya), peach, nectarine, apple, grapefruit, kiwifruit, kiwi berries, orange, plums, cherries, pears, figs (fresh)

#### Alcohol

Dry red wine, dry white wine, spirits (unsweetened) - avoid for weight loss, only for weight maintenance

# AVOID COMPLETELY: FOOD RICH IN CARBS, FACTORY FARMED MEAT AND PROCESSED FOODS.

- 1) All grains, even whole meal (wheat, rye, oats, corn, barley, millet, bulgur, sorghum, rice, amaranth, buckwheat, sprouted grains), quinoa and white potatoes. this includes all products made from grains (pasta, bread, pizza, cookies, crackers, etc.) sugar and sweets (table sugar, HFCS, agave syrup, ice creams, cakes, sweet puddings and sugary soft-drinks)
- 2) Factory-farmed pork and fish are high in inflammatory omega 6 fatty acids and farmed fish may contain PCBs, avoid fish high in mercury.
- 3) Processed foods containing carrageenan (e.g. almond milk products), MSG (e.g. in some whey protein products), sulphites (e.g. in dried fruits, gelatin), BPAs (they don't have to be labeled!), wheat gluten
- 4) Artificial sweeteners (Splenda, Equal, sweeteners containing Aspartame, Acesulfame, Sucralose, Saccharin, etc.) these may cause cravings and other issues
- 5) Refined fats / oils (e.g. sunflower, safflower, cottonseed, canola, soybean, grapeseed, corn oil), trans fats such as margarine.
- 6) "Low-fat", "low-carb" and "zero-carb" products (Atkins products, diet soda and drinks, chewing gums and mints may be high in carbs or contain artificial additives, gluten, etc.)
- 7) Milk (only small amounts of raw, full-fat milk is allowed). Milk is not recommended for several reasons. Firstly, from all the diary products, milk is difficult to digest, as it lacks the "good" bacteria (eliminated through pasteurization) and may even contain hormones. Secondly, it is quite high in carbs (4-5 grams of carbs per 100 ml). For coffee and tea, replace milk with cream in reasonable amounts. You may have a small amount of raw milk but be aware of the extra carbs.
- 8) Alcoholic, sweet drinks (beer, sweet wine, cocktails, etc.) you can try my healthier versions of popular cocktails and drinks.
- 9) Tropical fruit (pineapple, mango, banana, papaya, etc.) and some high-carb fruit (tangerine, grapes, etc.) Also avoid fruit juices (yes, even 100% fresh juices!) better to drink smoothies if any, but either way very limited. Juices are just like sugary water, but smoothies have fiber, which is at least more sating. This also includes dried fruit (dates, raisins, etc.) if eaten in large quantities.
- 10) Mainly for health reasons, avoid soy products apart from a few non-GMO fermented products which are known for their health benefits. Also avoid wheat gluten which may be used in low-carb foods. When you give up bread, you shouldn't eat any part of it. Beware of BPA-lined cans. If possible, use naturally BPA-free packaging like glass jars or make my own ingredients such as ghee, ketchup, coconut milk or mayonnaise. BPA has been linked to many negative health effects such as impaired thyroid function and cancer. Other additives to avoid: carrageenan (e.g. almond milk products), MSG (e.g. in some whey protein products) and sulfites (e.g. in dried fruits, gelatin)

# **KETODIET FOOD PYRAMID**





Good example of the calorie split for ketosis

# CARB CYCLING

The carb cycling diet is very simple. It works like this: Throughout the week, you rotate through high-carb, moderate-carb, and low/no-carb days. All days require a high protein intake. Your fat intake is inversely related to your carbohydrate intake.

So this means when your body requires the extra carbs after hard workouts you can consume them and use them to fuel the workout or help recovery. Then when you are having rest days and you don't need the extra energy foods you can just eat normally.

This gives you the best of both worlds, helps you build muscle and gives the fuel you need for building muscle on training days. Whilst, it also helps you burn fat as you are not over consuming calories on your rest days.

#### Here's what to know.

- 1 High Carb Days Should Be Placed On Your Heavy Training Days.
- 2 Expect To Experience Some Water Weight Gain.
- 3 Choose Carbohydrates Highest In Glucose Or Complex Carbs.
- 4 Decrease Fat Intake On High Carbohydrate Days.
- 5 Maintain Your Target Weekly Calorie Level For Fat Loss



# INTERMITTENT FASTING

Intermittent fasting (IF) is currently one of the world's most popular health and fitness trends. People are using it to lose weight, improve health and simplify their healthy lifestyle.

Many studies show that it can have powerful effects on your body and brain, and may even help you live longer.

# WHAT IS INTERMITTENT FASTING? (IF)

Intermittent fasting (IF) is a term for an eating pattern that cycles between periods of fasting and eating.

It does not say anything about which foods you should eat, but rather when you should eat them.

In this respect, it is not a "diet" in the conventional sense. It is more accurately described as an "eating pattern."

Common intermittent fasting methods involve daily 16 hour fasts, or fasting for 24 hours, twice per week.

Humans have actually been fasting throughout evolution. Sometimes it was done because food was not available, and it has also been a part of major religions, including Islam, Christianity and Buddhism.

When you think about it, our hunter-gatherer ancestors didn't have supermarkets, refrigerators or food available year-round.

Sometimes we couldn't find anything to eat, and our bodies evolved to be able to function without food for extended periods of time.

If anything, fasting from time to time is more "natural" than constantly eating 3-4 (or more) meals per day.

Bottom Line: Intermittent fasting (IF) is a term for an eating pattern that cycles between periods of fasting and eating. It is currently very popular in the health and fitness community.

# **HOW TO DO INTERMITTENT FASTING? (IF)**

Intermittent fasting has been very popular for many years and several different methods have been used.

All of them involve splitting the day or week into "eating periods" and "fasting periods." During the fasting periods, you eat either very little or nothing at all.

These are the most popular methods:

- The 16/8 Method: Also called the Leangains protocol, it involves skipping breakfast and restricting your daily eating period to 8 hours, for example from 1 pm to 9 pm. Then you "fast" for 16 hours in between.
- Eat-Stop-Eat: This involves fasting for 24 hours, once or twice a week, for example by not eating from dinner one day until dinner the next day.
- The 5:2 Diet: On two non-consecutive days of the week, only eat 500-600 calories. Eat normally the other 5 days.

By making you eat fewer calories, all of these methods should make you lose weight as long as you don't compensate by eating much more during the eating periods.

I've personally found the 16/8 method to be the simplest, most sustainable and easiest to stick to. It is also the most popular.

# HOW INTERMITTENT FASTING AFFECTS YOUR CELLS AND HORMONES

When you fast, several things happen in your body on the cellular and molecular level. For example, your body changes hormone levels to make stored body fat more accessible.

Your cells also initiate important repair processes, and change the expression of genes. Here are some changes that occur in your body when you fast:

- \* Human Growth Hormone (HGH): The levels of growth hormone skyrocket, increasing as much as 5-fold. This has benefits for fat loss and muscle gain, to name a few.
- \* Insulin: Insulin sensitivity improves and levels of insulin drop dramatically. Lower insulin levels make stored body fat more accessible.
- \* Cellular repair: When fasted, your cells initiate cellular repair processes. This includes autophagy, where cells digest and remove old and dysfunctional proteins that build up inside cells.
- \* Gene expression: There are changes in the function of genes related to longevity and protection against disease.

These changes in hormone levels, cell function and gene expression are responsible for the health benefits of intermittent fasting.

Bottom Line: When you fast, human growth hormone levels go up and insulin levels go down. Your body's cells also change the expression of genes and initiate important cellular repair processes.

# IF IS A POWERFUL WEIGHT LOSS TOOL

Weight loss is the most common reason that people try intermittent fasting.

By making you eat fewer meals, intermittent fasting can lead to an automatic reduction in calorie intake.

Additionally, intermittent fasting changes hormone levels to facilitate weight loss. In addition to lower insulin and increased growth hormone levels, it increases release of the fat burning hormone norepinephrine (noradrenaline).

Because of these changes in hormones, short-term fasting may actually increase your metabolic rate by 3.6-14%.

Studies show that intermittent fasting can be a very powerful weight loss tool. In a review study from 2014, it was shown to cause weight loss of 3-8% over periods of 3-24 weeks. That is actually a very large amount compared to most weight loss studies.

According to this study, people also lost 4-7% of their waist circumference. This indicates that they lost significant amounts of the harmful belly fat that builds up around the organs and causes disease.

There is also one study showing that intermittent fasting causes less muscle loss than the more standard method of continuous calorie restriction.

However, keep in mind that the main reason this works, is that it helps you eat fewer calories overall. If you binge and eat massive amounts during the eating periods, then you may not lose any weight at all.

Bottom Line: Intermittent fasting may boost metabolism slightly, while helping you eat fewer calories. It is a very effective way to lose weight and belly fat.

# **HEALTH BENEFITS OF IF AND PRACTICAL USE**

Many studies have been done on intermittent fasting, in both animals and humans.

These studies have shown that it can have powerful benefits for weight control and the health of your body and brain. It may even help you live longer.

Here are the main health benefits of intermittent fasting:

- \* Weight Loss: As mentioned above, intermittent fasting can help you lose weight and belly fat, without having to consciously restrict calories.
- \* Insulin resistance: Intermittent fasting can reduce insulin resistance, lowering blood sugar by 3-6% and fasting insulin levels by 20-31%. This should protect against type 2 diabetes.
- \* Inflammation: Some studies show reductions in markers of inflammation, a key driver of many chronic diseases.
- \* Heart Health: Intermittent fasting may reduce LDL cholesterol, blood triglycerides, inflammatory markers, blood sugar and insulin resistance. These are all risk factors for heart disease.
- \* Cancer: Animal studies suggest that intermittent fasting may help prevent cancer.
- \* Brain Health: Intermittent fasting increases a brain hormone called BDNF, and may aid the growth of new nerve cells. It may also protect against Alzheimer's disease
- \* Anti-aging: Intermittent fasting can extend lifespan in rats. Studies showed that fasted rats live as much as 36-83% longer

Keep in mind that the research is still in its early stages. Many of the studies were small, short in duration or conducted in animals. Many questions have yet to be answered in higher quality human studies

Bottom Line: Intermittent fasting can have many benefits for your body and brain. It can cause weight loss, and may protect against type 2 diabetes, heart disease and cancer. It may also help you live longer.

Eating healthy is simple, but it can be incredibly hard to stick to.

One of the main obstacles is all the work required to plan for and cook healthy meals.

If you do intermittent fasting, this gets easier because you don't need to plan, cook or clean up after as many meals as before.

Intermittent fasting is actually very popular among the "life hacking" crowd because it improves your health while simplifying your life at the same time.

# **SAFETY AND SIDE EFFECTS**

Bottom Line: People who are underweight or have a history of eating disorders should not fast. There is also some evidence that intermittent fasting may be harmful for some women EG If you have problems with fertility and/or are trying to conceive, then consider holding off on intermittent fasting for now. Intermittent fasting is probably a bad idea when pregnant or breastfeeding.

Hunger is the main side effect of intermittent fasting.

You may also feel weak and that your brain isn't performing as well as you're used to.

This may only be temporary, as it can take some time for your body to adapt to the new meal schedule.

If you have a medical condition, then you should consult with your doctor before trying intermittent fasting.

This is particularly important if you:

- \* Have diabetes.
- \* Have problems with blood sugar regulation.
- \* Have low blood pressure.
- \* Take medications.
- \* Are underweight.
- \* Have a history of eating disorders.
- \* Are a female who is trying to conceive.
- \* Are a female with a history of amenorrhea.
- \* Are pregnant or breastfeeding.

All that being said, intermittent fasting does have an outstanding safety profile. There is nothing "dangerous" about not eating for a while if you are healthy and well nourished overall.

# **FREQUENTLY ASKED QUESTIONS ABOUT IF**

Here are answers to the most common questions about intermittent fasting.

1. Can I drink liquids during the fast?

Yes. Water, coffee, tea and other non-caloric beverages are fine. Do not add sugar to your coffee. Small amounts of milk or cream may be okay.

Coffee can be particularly beneficial during a fast, because it can blunt hunger .

2. Isn't it unhealthy to skip breakfast?

No. The problem is that most stereotypical breakfast skippers have unhealthy lifestyles. If you make sure to eat healthy food for the rest of the day then it is fine.

3. Can I take supplements while fasting?

Yes. However, keep in mind that some supplements (like fat-soluble vitamins) may work better when taken with meals.

4. Can I work out while fasted?

Yes, fasted workouts are fine. Some people recommend taking branched-chain amino acids (BCAAs) before a fasted workout.

5. Will fasting cause muscle loss?

All weight loss methods can cause muscle loss, that is why it is important to lift weights and keep protein intake high. One study shows that intermittent fasting causes less muscle loss than regular calorie restriction.

6. Will fasting slow down my metabolism?

No. Studies show that short-term fasts actually boost metabolism. However, longer fasts (3 days or more) can suppress metabolism.

7. Should kids fast?

That's probably a bad idea

### **HOW TO START**

Chances are that you've already done many "intermittent fasts" in your life.

If you've ever eaten dinner, then slept late and not eaten until lunch the next day, then you've probably already done a 16+ hour fast.

Many people actually instinctively eat this way. They simply don't feel hungry in the morning.

I personally find that the 16/8 method is the simplest and most sustainable way to do intermittent fasting. I recommend that you try that one first.

If you find that it is easy and you feel good during the fast, then you can try moving on to more advanced fasts like 24-hour fasts 1-2 times per week (Eat-Stop-Eat) or only eating 500-600 calories 1-2 days per week (the 5:2 diet).

Another approach is to simply fast whenever it is convenient. As in, skip meals from time to time when you're not hungry or don't have time to cook.

There is no need to follow a structured intermittent fasting plan to derive at least some of the benefits.

I recommend that you experiment with the different approaches and find something that you enjoy and fits your schedule.

Bottom Line: It is recommended to start with the 16/8 method, then perhaps later move on to longer fasts. It is important to experiment and find something that works for you.

#### **SHOULD YOU TRY IF?**

Intermittent fasting is not something that anyone needs to do.

It is just one of many lifestyle strategies that can improve your health. Eating real food, exercising and taking care of your sleep are still the most important factors to focus on.

If you don't like the idea of fasting, then you can safely ignore all of this. Just continue to do what works for you.

At the end of the day, there is no one-size-fits-all solution in nutrition. The best diet for you is the one you can stick to in the long run.

Intermittent fasting is great for some people, not others. The only way to find out which group you belong to is to try it out.

If you feel good when fasting and find it to be a sustainable way of eating, then it can be a very powerful tool to lose weight and improve health.

# IF IT FITS YOUR MACROS(IIFYM)

Flexible dieting, or "If It Fits Your Macros" (IIFYM), has taken root in fitness culture and gone mainstream. IIFYM is a based on the principle of "calories in, calories out", which means you won't gain weight, regardless of food choice, so long as you don't exceed your total caloric needs for the day.

IIFYM speaks specifically to fat loss from a macro nutrition and thus a caloric stand point and is purely a means to improve body composition. IIFYM does not address health concerns of the heart, brain or other organs and does not put an emphasis on so called 'healthy eating'.

Regardless if you like to eat pizza, or boiled chicken breasts, IIFYM teaches us that if you eat less calories than your body requires (while getting adequate protein, carbs, fat based on your goals and the energy needs of your body) you will lose weight at a steady and predictable rate. IIFYM makes fat loss that easy. All you have to do is stay within your daily macros and the fat will start melting off!

Eating clean, healthy food can certainly help you lose weight and burn fat, but there is no magical connection between 'health food' and weight loss.

The fat loss details are in the calories. Yup, calories. Something we all know about, but avoid like the plague.

Tracking macros via IIFYM teaches us that these so called 'dirty' foods are ok to eat as long as we stay within our own required calorie intake for the day.

# THE POINT OF IIFYM

The purpose of IIFYM is to be able to enjoy the foods you like to make sure you can continue your everyday life and as long as you fit your macros in your calories see results.

However make sure you aren't just eating "bad" foods for each meal, but instead eating 80-90% clean (depending on how much you like bad foods) and leaving yourself 10-20% other foods to ensure you can hit your macros.

You have to imagine the macros are a budget, so you may have 100 carbs to play with which you can spend on rice, a food which will fill you up. However you could also have 100 grams worth of pancakes which will taste great, however you will be hungry again very quickly. So you have to question always is it worth to have the bad food, or will it make you more hungry later on and make you eat more calories later which will push you over your calories.

With that in mind if you are dieting down for a holiday, or a goal where your calories are very low, where you are consuming less food. You will have to limit bad foods to 5-10% of your calories because you will not have many calories to play with.

On the other hand, if you are bulking up IIFYM works perfectly, as eating a lot of calories is sometimes very hard. So, allowing your dieting to have some bad foods is an easy way to bump up your calories, and of course enjoy more of the foods you enjoy.

IIFYM may seem like a great option but first discuss with your trainer if it will work with you. As some people cannot just have the one piece of chocolate and must have the whole bar, for these kinds of "all or nothing" dieters IIFYM usually is difficult to implement.