

Introduction

Hi! Welcome to the RootHealth nutrition guide. This is a brief but effective method of addressing nutrition for balanced health and performance for the general population. In order to bring our body back into balance we absolutely must address how we are fueling our bodies.

In regards to the content of the book, I want to call attention to the fact that there is a vast quantity of knowledge outside of this short guide to be known about nutrition. But these are the bullet points that I have found to have the most impact on client health with regard to PRACTICAL APPLICATION in my practice.

We are not going to re-invent the wheel here. Nor are we going to go deeply into the nutritional science underlying the content of this guide or details about specific supplements or the importance of individual nutrients.

Nor is there any special dogma or catch. This perspective can be valuable for paleo, vegetarians, carnivores, or other special needs because it IS NOT A DIET. If you don't like or approve of something in one of the categories or principles, DON'T EAT IT. Substitute with the next best thing that fits your particular preferences. That is the approach.

While the approach in this book is designed to positively impact a multitude of chronic diseases and conditions of lifestyle, it is recommended that you see a

physician (functional medicine docs usually fill this need) or dietician for specific diseases or conditions.

This book is about HABITS. It's putting into action the principles that are ubiquitous¹ in their positive effect on individual and population health and body transformation...**when focused on.**

This is because, as simple as these guidelines are, most of the American population falls drastically short of following them to an effective degree. If you can follow a few simple patterns effectively, most everything else will fall into place. So, keep it simple; stay consistent; visualize, and have a little fun putting meals together. You should see fantastic results in your health and the way you look, feel, and perform!

Good luck and thank you!

Jason Root, MS, CSCS, EIM,
Sports Nutritionist



¹ outside of individual outlying conditions or needs



RootHealth Nutrition

Section One: 5 Nutritional Principles for Health and Performance Success

Principle One: Prioritize your foods.

There are two main groups of foods with which to concentrate when considering how to prioritize the foods you eat. These two groups are our major food sources as omnivores: The *plant sources* and the *animal sources*.

There are 3 factors toward food prioritization within these 2 groups:

1. **Nutrient density**
2. **Glycemic index**
3. **Inflammatory tendencies.**

1. Nutrient Density

Each food contributes to our health with regard to its **macronutrient** (calorie containing nutrient) content and its **micro-nutrient density**. Macronutrients are our large energy carrying molecules.

Micro-nutrients are important because of the effect they have on metabolism and the body's chemical and internal processes...efficiency of energy (and all human body processes) beyond calories. If we focused on calories only, we may miss out on the value of our micronutrients.²

² see charts for plant and animal sources for visual representation.

The macronutrients are as follows³:

- **Fats:** High energy storage nutrient.
- **Carbohydrate (CHO):** Most accessible energy nutrient
- **Protein:** Tissue building nutrient

The micronutrients are:

- Vitamins
- Minerals
- Water
- Fiber

2. Glycemic Index

Foods that give a high rapid change in blood sugar are linked with metabolic syndrome (obesity and type 2 diabetes) as well as heart disease and cancer.⁴ Foods or food ingredients that are reduced down to their calorie containing elements via processing (such as table sugar and potato chips) tend to have this trait.

We also see a relationship between these types of foods and the dopamine response commonly seen with different drugs or addictive behaviors. In essence, this makes these foods (when in the presence of other whole food sources) act more as drugs than foods. This can be

³ I understand this is an extremely brief description of the nutrients. This is because the goal of this book and this section to focus on application toward health and a brief connection with underlying sciences.

⁴

<https://pubmed.ncbi.nlm.nih.gov/12828192/#:~:text=Observational%20studies%20suggest%20that%20diets,role%20in%20the%20disease%20process.>

seen in the addictive nature of high sugar/highly processed foods.

3. Inflammation

Closely related to glycemic index foods are inflammatory foods (though not precisely the same). The ***Dietary Inflammation Index*** was created in 2009 to rank foods that create greater amounts of systemic long term chronic inflammation and contribute to chronic disease⁵ (obesity, chronic pain, metabolic disease, cardiovascular disease, cancer, neurodegenerative disease, etc).

It should be noted that we use the word ‘tendencies’ in regard to inflammation as not all foods that may have a ‘tendency’ toward inflammation will have that effect on all individuals. You may think of the example of gluten where one person has severe issues and another is just fine.

⁵ [https://www.health.harvard.edu/staying-healthy/foods-that-fight-inflammation#:~:text=Foods%20that%20cause%20inflammation&text=refined%20carbohydrates%2C%20such%20as%20white,meat%20\(hot%20dogs%2C%20sausage\)](https://www.health.harvard.edu/staying-healthy/foods-that-fight-inflammation#:~:text=Foods%20that%20cause%20inflammation&text=refined%20carbohydrates%2C%20such%20as%20white,meat%20(hot%20dogs%2C%20sausage))

The Plant Group

The plant group is our main source for the macronutrient **carbohydrate**.

In the plant group, we have sub-groups. The sub-groups recommended provide the necessary fiber, micro-nutrient content and complexity to give us energy long term and not a quick boost followed by a quick drop.

A fruit and/or vegetable should be present in every meal.** They also provide the necessary vitamins and minerals to maintain body processes and metabolism while providing carbohydrates for energy. Many plant food sources can also provide healthy fats and protein.

- Eat low glycemic⁶/High micro-nutrient containing foods.
- Prioritize fruits, vegetables, legumes, beans, and other whole foods coming out of the ground.
- Avoid processed flour foods (white bread, tortillas, pasta) as much as possible. Use whole grain substitutes in that category.
- And avoid simple processed sugars!

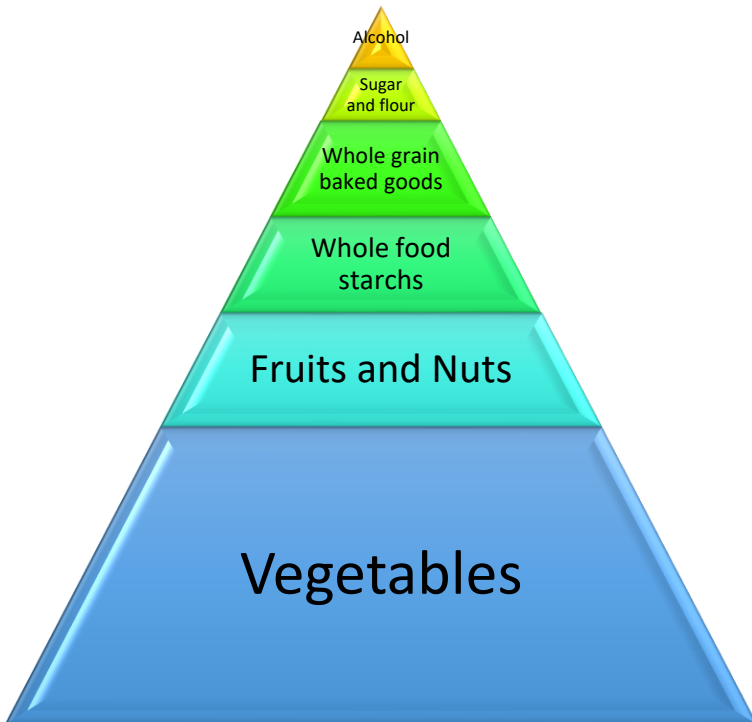
**Some people believe in separating their plants and animals in different meals. While the research doesn't support this, as long as the volume of proper food intake is present at the end of the day, I say 'Go for it' and see how it works for you.

⁶ You may want to further research the glycemic index such as here: <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/glycemic-index-diet/art-20048478>

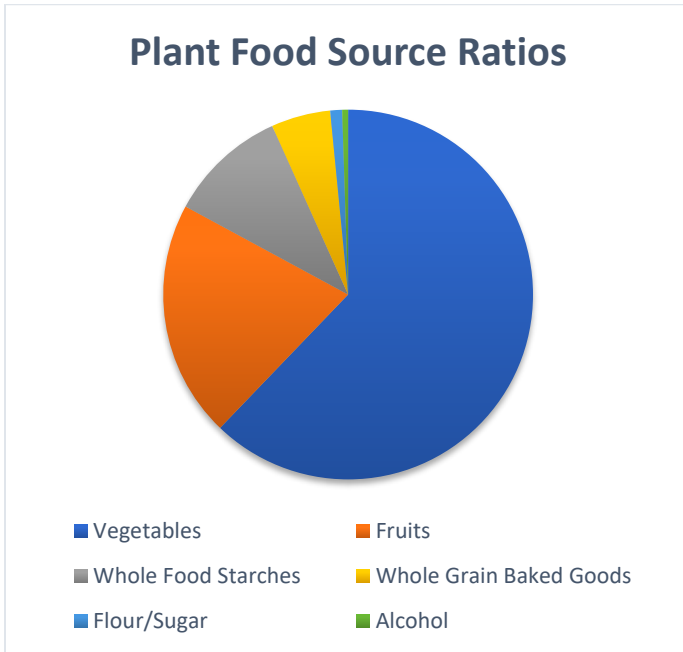
And here: <https://universityhealthnews.com/daily/nutrition/glycemic-index-chart/>

The Plant Pyramid

One way to visualize the ratio of nutrients attained from plant sources is through this pyramid. The most non-essential sub-groups derived from plants that cause inflammation, weight gain, and negative hormonal responses are on the top while our most valuable sources of micronutrients and health are on the bottom. **So, ELIMINATE from the top and ACCUMULATE from the bottom!!!!**



Another visualization tool that expresses the actual ratios of plant sub-groups is through this *pie* (ahem! I mean *circle*) chart.



This equates to around the following daily recommendations for servings:

- Vegetables: 6+
- Fruits and Nuts 2-3
- Whole Food Starches: 1
- Whole Grain Baked Goods: <1
- Flour/Sugar: 0 (seldom)
- Alcohol: 0 (seldom)

Your meals don't have to have this exact ratio in regard to types of foods in our plant group. But this is a good example to compare to.

Plant Sub-Groups Explained (moving from the bottom to top of the pyramid)



Vegetables (green-leafy/colorful/cruciferous/non-starchy)

Edible plant or its part, intended for cooking or eating raw.

Examples: *Spinach, Broccoli, Cauliflower, Carrots, Kale*

Pros

- Carbohydrate, fiber, and micronutrient rich.
- Anti-inflammatory
- low insulin response.

Cons

- Low satiety
- Takes a lot to feel satisfied, a lot of food volume vs. the time one may have for a meal.

Fruits and Nuts

Fruits are the seed containing reproductive portion of plants. Fleshy seed-associated structures of a plant that are sweet or sour and edible in the raw state.

Examples: *Apples, Pears, Cherries, Peaches/Nectarines, Mango, Grapefruit, Avocado, Tomatoes*

Nuts are fruits with a single seed and hard dry exterior.

Examples: *Almonds, Brazils, Pistachios, Walnuts*

Pros

- Carbohydrate and micronutrient/fiber rich.
- Anti-inflammatory
- Nuts have many of our ‘good fats’.

Cons

- Fructose elicits a high insulin response in the body. However, when bound with other nutrients and fiber, this is mitigated as opposed to fruit juice. As well, one serving of fruit does not have the amount of fructose in



other forms like juice. Nuts have high calorie/fat content (easy to overeat).

Whole food carbohydrate: Starchy Vegetables, Grains, Legumes, Etc)

These are whole foods (no chemical processing) that grow from the ground but are not fruits/nuts or green/leafy vegetables. These include whole grains, beans, legumes, lentils, and other carbohydrate rich plants.



Examples: *Sweet Potatoes, Wild Rice, Corn, Oats/Oatmeal*

Beans/legumes/lentils:

Black beans, kidney beans, Peanut butter, Garbanzo beans, Refried beans

**Note on beans: the lectin in beans makes them poisonous when not cooked. So, ‘raw’ beans are a bad idea...meaning some processing in the form of cooking needs to occur.

Pros

- High sustainable energy source with good fiber and micronutrient content.
- Minimally processed, whole food. Generally
- Low-inflammatory.

Cons

- Some can have an inflammatory response depending on individual genetics.

Whole grain baked goods:

These foods are less processed plant-based foods and use less additives than our flour/sugar category. However, flour still is milled out from plants for use in these foods to give high energy content thus having lower micronutrient/calorie ratio than their whole food unbaked ingredients.

These products may be packaged but will say ‘whole grain’ on the package and, hopefully, have a short list of ingredients rather than a large one (5 or less is a good rule of thumb).

Examples: *Whole grain breads, Tortillas, Chips, Pastas*



Pros

- Sustained energy
- Some fiber
- Some needed micronutrients.

Cons

- Some inflammation response (especially with wheat) possible.
- High calorie (carbohydrate) content vs. micronutrient content compared to other food choices.
- Some are high glycemic.

Flour/sugars

These are plant-based foods that have a high percentage of nutrients from processed sugar/CHO. Most of the ingredients have been processed and extracted from whole foods. They tend to have a long shelf life, many preservatives and other food additives.



Examples: *Candies, Soda-sugar or diet*, Fruit juices, chips, snack foods, white breads/flours, baked products like brownies, cookies, cakes, pies, muffins, bagels.*

Pros

- Quick energy/insulin boost when necessary

Cons

- Low micronutrient content.
- High insulin response.
- Quick energy followed by quick drop.
- High inflammation response.
- Commonly also a source of bad fats.

The Animal Group

The animal group is a main source of the macronutrients **protein and fat**.

Recommendation on servings: Have a source 2-4x/day. Chicken, turkey, fish, whey, eggs, and lean red meats are examples. ⁷

How much exactly? We estimate our volume consumption of animal sources by measuring grams of protein as well as of servings.

- Eat **.7+ grams protein/lb of lean body mass/day**⁸ for adequate maintenance of muscle mass, metabolism, and function in the general population. ^{9**} (this number includes protein from plant sources)
- Our ratios of food sources are based on those that are least shown to cause inflammation.

**There is some debate about upper limits on protein.

There is some fantastic research showing the positive effects of high protein/animal sourced diets on metabolism, general health, and performance. There is also some pointing the other direction. However, there seems to be notable bias regarding matters outside of the health of the individual in much of these studies. So, this is our common sense empirical approach.

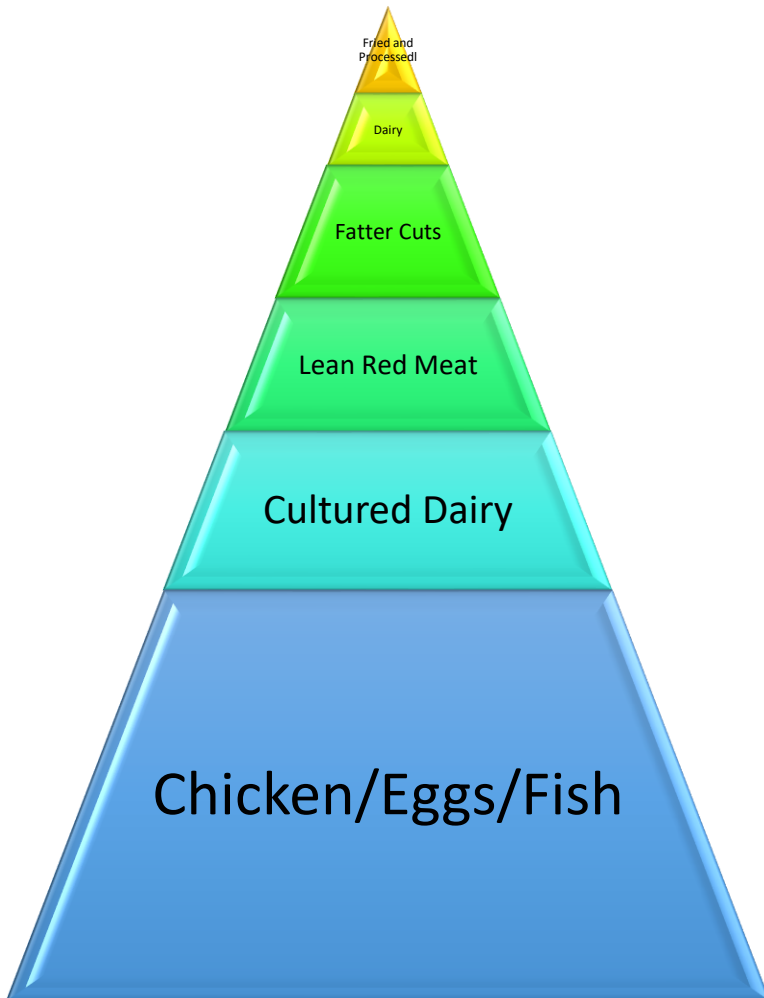
⁷ Regarding protein, non meat sources include black beans and rice, nuts and legumes, and whole grains. Do not forget to include these when calculating total protein. However, the quality of plant sources does not equal that of the animal sources.

⁸ Athletes or others with special needs are outside of these recommendations and may differ

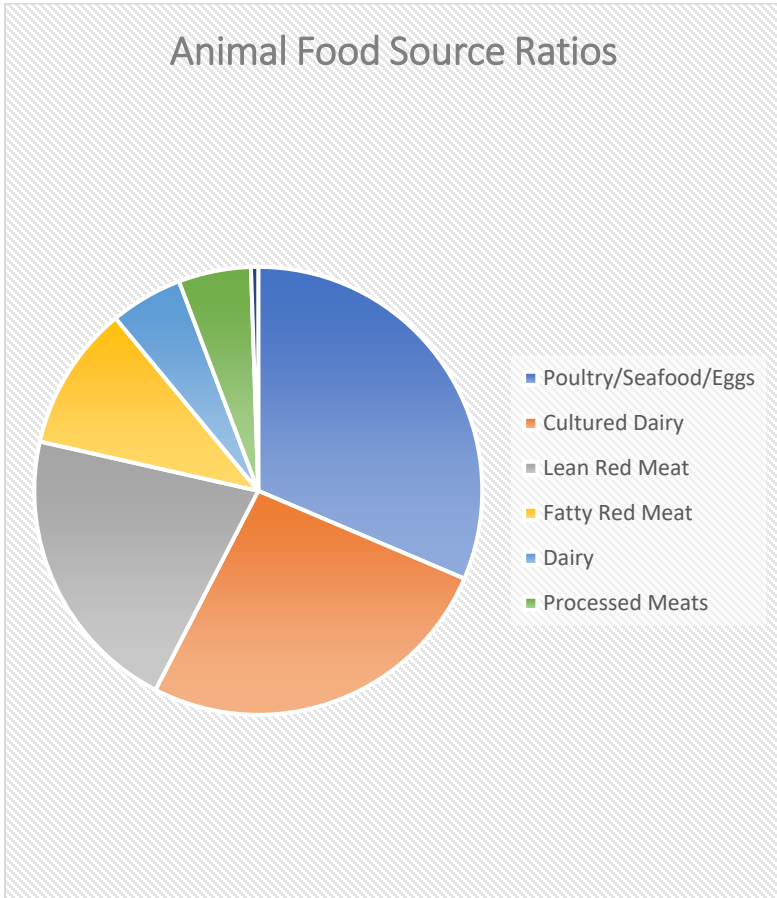
⁹ As we will note in principle two, how animal sources of food are raised or attained is of paramount importance. If the animal wasn't healthy (ex.cows fed corn while cooped up in a pen), then you won't be healthy when eating them!

The Animal Pyramid

Like the plant pyramid, the higher priority items are placed on the bottom. **ELIMINATE** from the top, **ACCUMULATE** from the bottom!!!



The Circle Chart on Animal Sources



Animal Sub-Groups Explained (as listed on the pyramid from bottom to top)

Our recommendations for protein consumption is $.7g+/lb$ lean body mass per day for the general population.

Poultry/fish/eggs

Examples: *Chicken, Turkey, Salmon, Tuna, Halibut, Egg/egg white*



Pros

- Good source of complete lean protein as well as many micronutrients.
- Filling.
- Many of these are good sources for ‘good fats’. Ex. Salmon.

Cons

- Possibly hard on the liver/kidneys in amounts over and above our protein consumption guidelines.

Cultured dairy

Dairy that's been fermented, speaks eloquently, has great table manners and knows when/how to curtsy.



Examples: *Yogurt, Cottage Cheese, Whey protein*

Pros

- Good source of lean complete protein.

Cons

- Commonly have additives such as artificial sweeteners, sodium, or preservatives or a short shelf life and very expensive unless you live on a farm

Lean Red Meats

Examples: Venison, Beef, Lamb, Buffalo

Pros

- High protein content. Good source of many micronutrients. High satiety.

Cons

- Possibly hard on the liver/kidneys in extreme amounts.



- Some sources site inflammatory properties.

Organ Meats¹⁰

Examples: *Liver, Heart, Kidney, Brain, Tongue*

Pros

- Significant source of many vitamins and other nutrients

Cons

- Food born illness more likely than flesh meats if not cared for properly

Fatty Red Meat

Some meats seem to have more of an inflammatory response or are high fat cuts.

Examples: *Beef-ribeye/prime rib, ribs, bacon*

Pros

- Source of calories, energy and protein

¹⁰ <https://www.medicalnewstoday.com/articles/319229>

Cons

- High fat. Solid evidence of inflammatory properties.

Non-Cultured Dairy

Milk and products that are not cultured. Examples: *Milk, cream, ice cream*

Pros

- Source of protein and calcium

Cons

- High fat and/or sugar in the form of lactose. High insulin response. Studies show inflammatory correlation. Many people are lactose intolerant especially later in life.



Refined Meat

Packaged and deli meats may have different additives used in the processing that have negative effects vs. the meat on its own.

This category is wide in its spectrum on health and can be difficult to navigate unless you are good at reading labels and asking questions. If you need to eat in this category for convenience, try and get as fresh and unprocessed as possible.

Pros

- Source of protein

- Easy to make and eat

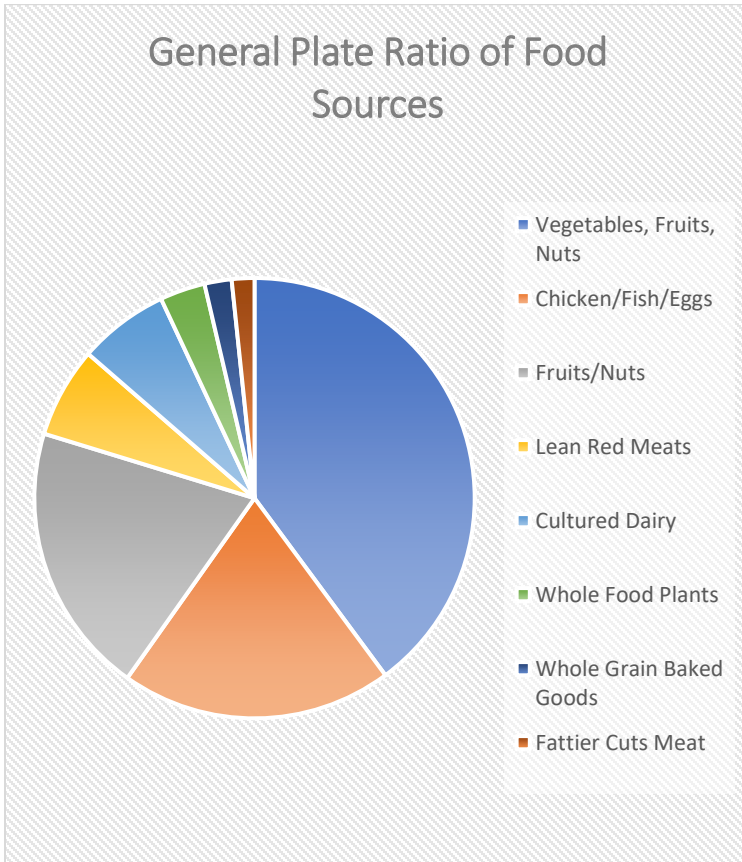
Cons

- Additives with negative health consequences



Total Diet Ratios

If we follow the guidelines in the previous pages, we might end up with the following in regard to our total diet at the end of the week:



Variation?

A person will also choose to prioritize foods with regard to how their body responds to that food source. Some people can consume bread daily and their medical diagnostics

(blood work, BMI, etc.) look great. Some people can eat ribeyes every night and have great results.

This has to do with personal systemic variation (genetics, environment, etc). And it has to do with where the food ingredients are sourced and how they are produced. Some of the food variations are not studied and so the good forms of a food get mixed in with the other processed stuff.

For instance, studies on the wide effects of milk consumption on inflammation are debated. But no study has been done gathering high value, high quantity data on *organic raw goat milk*, for instance. Some people will say their body responds great to milk. The approach we use does not ignore those studies or the people that claim that consumption works well for them. Instead, we prioritize food categories with the best all-around record by eating more of that food category and less of the other. But if your body loves organic raw goat milk, I say ‘listen to it’.

Fats¹¹¹²

I like to think of fats as what brings the other nutrients together. For instance, though we'll eat fruit by itself (carbohydrate), or lean meat (protein), we don't usually eat fat on its own... unless you just like to chow on a stick of butter now and then! (some carnivore and keto diets get closer to this)



Nuts, dressings, cooking oils, butter, and fats in meat are common sources of this high energy nutrient. For healthy eating with concern to fats:

- Start by accumulating non-chemically processed sources and eliminating processed sources (hydrogenated, trans-fats, and almost any vegetable oil). Accumulate salmon, avocados, olives and healthy meats (as seen above).
- For cooking, use oils with a high smoke point.
- For dressings and other flavor additions, try to use oils with a high omega 3 vs. omega 6 fatty acid content (avocado, olive).

¹¹ <https://www.precisionnutrition.com/all-about-healthy-fats>

¹² <https://www.precisionnutrition.com/research-review-balancing-fats>

Principle Two: Food Quality

Industrial farming in America has left us with food that has less micro-nutrient value. This leads us to sickness and chronic disease. ***Organic? Natural?*** What do these words mean? Let's start out with 'organic'.

Typically, to be labeled '***organic***' the food must be grown without the use of synthetic chemicals such as pesticides or fertilizers. The land should have soil that hasn't been depleted of the nutrients the food needs to grow. They do this through rotating crops in various seasons.

Organically grown vegetables are shown to have significantly higher micronutrient content than the non-organic counterpart.

For meats, the treatment of the animals is of vital concern. Commonly, cows are kept in pens to keep them from exercising. That is because exercising leads to tougher meat and leaner cows. Obese cows are fatter for flavor and have more meat. They also give them hormones to keep them growing and anti-biotics to fight the diseases caused by their living conditions. The equivalent happens with chickens and other animals.¹³

Growing this way creates negative hormone profiles, inflammation, and chronic disease in the animals. ***These things are horrible for YOUR health. If your food is sick, so will you be for consuming it.***

Look for 'organic' or go to a farmers' market for plants. Seek out 'grass fed' for beef and 'free range' for chickens. With dairy, organic is the baseline. Raw is better. Goat may be even better.

¹³ <https://www.drbuttar.com/the-9-steps-to-keep-the-doctor-away.html>

Avoid processed food additives!!!!

To be labeled ‘*natural*’ a food must be without artificial ingredients or colors. The food must not be altered by processing that changes the composition of the food.¹⁴ The definition is vague but can give a little direction. In raw foods like meat or veggies, go organic.

For non-raw food sources, eliminate additives such as artificial sweeteners, MSG, and high fructose corn syrup. The effect of processing is to add compounds to our bodies that cause inflammation and to separate natural compounds down to an unnatural level (ie. Not optimal for human metabolic processes). For instance, artificial sweeteners, MSG (monosodium glutamate, a salty seasoning) along with other flavor and color additives may cause varieties of negative immunological and neurological responses at the cellular level.

Normal sea salt, herbs and spices do not produce the same effect. Actually, they produce positive effects.

Refining a natural compound like sugar (versus taking in sugar via a fruit or vegetable) changes the way it is metabolized in the body in a very negative way.

We noted this earlier. Processed sugar acts like a drug to the brain more than it has any positive effect on physiological processes. EVERY chronic disease has some causal link back to processed sugar. Cancer, heart disease, diabetes, chronic pain, and neurodegenerative diseases ALL have causal links back to sugar.

¹⁴ <https://www.livescience.com/52863-natural-organic-definition.html#:~:text=What%20is%20natural%3F,not%20fundamentally%20alter%20the%20product.>

Principle Three: The Most Important Nutrient

Other than air, you'll die without water before anything else. So, yeah, it is the most important nutrient.

Dehydration is the cause of more health conditions than you can count. Have a headache? *Did you drink enough water?* Constipated? *Did you drink enough water?* Tired? *Did you drink enough water?* Coming down with a cold?.....seeing a pattern here?

The recommendation from the NSCA (National Strength and Conditioning Association) and ISSN (International Society of Sports Nutrition) is:

- Take your body weight, divide by 2. That number is a base for oz per day. Add 10 oz for every factor such as dry climate, heat, and every 1/2 hour of intense exercise.



So, let's say it's a hot day, I am working out for one hour. I weigh 200lbs. Then, the calculation for my water intake would be:

$200/2=100$ oz as a base. Add 10oz for the hot day and another 20 for my hour workout.

So, $100+10+20=130\text{oz}/\text{H}_2\text{O}$ that day.

Principle Four: Meal Timing (attempting to meet optimal physiology with practicality)

Proper meal timing is a little different for everyone. I've toggled quite a bit throughout my life. The main point of meal timing is to control satiety and motility. *Satiety* is a feeling of being full with enough energy. *Gastrointestinal motility* is the process of food moving through the digestive system. Motility through the stomach generally takes 4-5 hours¹⁵. Here are 3 examples of techniques people use for meal timing.

- Frequent (90's bodybuilding fitness technique): For some folks, every 2-4 hours can be ideal for eating throughout the day. This would achieve around 5-8 meals/day. This can be good for keeping nutrients coming in and for satiety.

But this can be difficult to maintain at times. We can feel like we're always eating and always planning our meals. As well, our body is always working to digest and process something (motility). So, your digestive organs and endocrine system don't get as much rest as they would with some of the other approaches (the whole body needs to rest just like muscles do).

- Intermittent fasting: Some people like the intermittent fasting method. In this way, you pick a period throughout the day, usually 6-10 hours that you can eat. The rest is fasting. This is the opposite of the 'frequent' method.

¹⁵ <https://www.aboutgimotility.org/learn-about-gi-motility.html> and <https://www.webmd.com/a-to-z-guides/bowel-transit-time-test#2>

This is good for only having to eat during a shorter period throughout the day. Jack LeLanne, the famous fitness guru, only ate 2 x per day. There's been some pretty heavy evidence coming out about the benefits of this for hormonal and other health factors in the recent years. However, some may find they get too hungry. Or, missing a meal can be catastrophic when there's only time for a few meals/day versus our frequent eating method.

No method will have any advantages if one is not able to implement it for reasons of lack of ease or practicality. This is my main concern with this method.

- The motility method: It takes 6-8 hours for food to go through stomach to get to the small intestine. Take ~6 hours in between meals to give the body a chance to digest the food and even some time where no fuel is being processed to give these systems rest. This is my preferred method. If you do the math this equates to the incredibly innovative strategy of eating breakfast, lunch, and dinner! Well, maybe a little more spread out though.

There is research to support a rationale for all of these methods. Whichever method you choose to put together meal timing, your energy and nutrients at the end of the day is most important. You have to find the method (or combination of methods) that provides you with the best opportunity to fulfill your body's requirements. Here are a couple of other concepts to be aware of (though they are far from something to follow ubiquitously!):

- Breakfast: "Break" "fast". You haven't eaten for at least 8 hours when you wake up. Eating soon after waking up can provide the nutrients to kick the body's processes into gear. Waiting too long after waking may leave you feeling hungry or drained and lead to eating too many calories of foods we don't want on our menu. Note: Personally, though, I like to wait and eat after my morning training.
- Fuel for conditioning. Consume a mix of carbohydrate and protein (*a meal*) shortly *before* (within 2 hours) and *after* (within 1 hour) metabolically intensive training bouts.¹⁶ This helps with energy to complete the training and the fuel to repair after. This is really more important for athletes and fitness buffs. But good to keep in mind.
- Be pro-active. Fix prepared meals. Bring your lunch. Scout out healthy restaurants ahead of when you need to eat. This eliminates the need to eat the wrong foods in moments of hunger or exhaustion.
- Never Prioritize Pleasure When Eating. Eat for sustenance. Do not look for pleasurable things to eat without regard to sustenance first. Pleasure should be pleasant side effect of sustenance.

Of course try to choose foods you enjoy. When you enjoy your food, your habits are easier to maintain. But if you seek pleasure first from your food, you will end up with choices that do not fit our healthy dietary profile.

¹⁶ Since the RootHealth system does not focus on intensity but on consistency, this concept is of little concern for non-athletes.

As you can see some of these methods and principles can seem contradictory. But, try each using our approaches in Section 3 and see how the body responds. This is the best way to figure out which way is best for you. Just remember that the main goal is to keep your nutrient profile within the guidelines listed in principle number 1.

Principle Five: Supplement Properly

Prioritize whole foods over processed foods and supplements. Our body prefers fuel from real, whole foods. However, sometimes because of nutrient depletion in soil or food processing or other causes, our normal foods don't provide the nutrients for optimal physiological function. So, here are some common supplements and their uses:



- A *protein/meal supplement* is a way to get food quickly if normal food is not available or time is short.
- *Probiotics* may help digestion, metabolism, and immune function.
- A *green supplement* can provide many vitamins/minerals when adequate vegetable consumption is not met.

- *Fish oils/omega fatty acids* can be added for reduced inflammation and a variety of other metabolic processes by developing a better ratio of fatty acids (omega 3 to 6 should be 1/1)¹⁷.
- A good bioavailable *multivitamin/mineral* is great for most people to supplement where gaps may occur. Most people need to add in *specific nutrients* beyond even this.
- Common specific vitamins and minerals to use are: calcium, zinc, magnesium, iodine and selenium, vitamin C, A, E or vitamin D.¹⁸ A profile provided through the use of functional diagnostics from a functional medicine doctor is recommended for these and deeper dives into supplements and nutraceuticals.

¹⁷ We get far too many omega 6's as compared to 3's

¹⁸ Many companies have a test that can show chemical and metabolic imbalances in the body in order to supplement prescriptively. Labrix.com and qurecology.com are a couple.

Additional Principles

Contradictory information is rampant in the world of nutrition. Sometimes that is because of the inherent paradox that everything has positive and negative effects.

Of course, other times it is because of bias or someone trying to sell you something. Here are some side principles to be familiar with that will help clear some things up for you.

#1 Beware of dogma and trends.

Too often in healthcare, preventative health, fitness, nutrition and wellness there concepts that come about that seem like brand new groundbreaking information. Sometimes they are true and give us new information.

But much of the time, these are contradictory to the foundational principles that actually work for the long-term benefit for the individual and population. These concepts pervade the literature for reasons of monetary gain/news and publication sales, political ideals/agendas, novelty bias, or simply a lack of understanding the totality of the subject matter.

Most of the time the focus gets put on these concepts because there is some truth to them. But they get exaggerated beyond their actual impact when people start to think of these concepts as the magic pill. The magic pill scenario is very attractive and is the primary driver behind most American marketing. The magic pill concept drives our healthcare system....or sick care if you look at the pervasiveness of chronic conditions versus decades past.

Some charlatans try and monetize the concept with a book or video because it worked for ‘them’ or works very well for a short period of time. Or, sometimes, we just have a cognitive bias directed toward wanting to know more than other people to make ourselves feel sub-consciously smarter. Other cognitive biases such as environmental dogmas or the perceived rights of certain species sometimes influence the literature.

So, critically think and watch for trends or other concepts that either lack actual biological evidence over long periods of time, contradict long held norms¹⁹ and common sense or seem to have significant cognitive biases or hidden agendas...especially by industries that have a financial incentive based on how you eat.²⁰²¹

#2 Calorie Counting.

People ask me all the time about how they should count calories. Should they use this or that phone app or other tools to track what they eat? The answer to this is that “It depends”.

I have found that the less one has to track anything, the less barriers to action there are. So, smiley or frowny faces on a calendar related to general eating patterns regarding food choices are much easier than

¹⁹ I once saw an article “Are Apples Actually Bad for You”

²⁰ <https://nutritionfacts.org/video/sugar-industry-attempts-to-manipulate-the-science/>

²¹ Note on veganism or other plant based models (actually, this is a ‘plant based’ model...it just includes meat): This model can be followed for the need of the vegan or vegetarian. However, a dietician should be consulted to recommend substitutes for specific nutrients missed that may cause health issues.

detailed information about everything one eats. Also tracking all calories and nutrients even with a tracking tool can be difficult to implement into a busy life with any accuracy.

On the other hand, tracking can help a person gain insight into the minute elements that may make a person's activities effective or ineffective toward their goal.

Therefore, my strategy has been to use simple rules and general tracking of action (like a +/- sign or smiley face on a calendar) along with just a few outcome measurements (such as blood pressure, weight, and circumference measurements) at the beginning and during a program. When plateaus and hurdles come up, more specific measurement of both outcome and process (actions) can be implemented.

#3 Think contextually and avoid binary thinking

Are Twinkies good for you? Let's say one is on a deserted island. There is no food. The Hostess plane flies over and a crate drops out accidentally. You will likely live longer by consuming the contents than you would with no food.

In this situation, Twinkies would be good for your health...versus the alternative. Of course, in the United States of America or other countries where there is an abundance of food choices, Twinkies or other similarly processed foods act more as a drug than a food. They promote disease more than our next best choice of food.

Since almost nothing dealing with the human body is a black and white proposition, the *context* of the situation with which the *concept* we are considering is extremely

important to how we look at food, health, and human development.

Using the method of the famous economist Thomas Sowell toward critical thinking, ask these questions when assessing a choice (or any concept really):

- 1) “***Versus what?***” *What is your next best choice? In the case of the Twinkies, could you choose broccoli?*
- 2) “***At what cost?***” *What resources will it take? What is the opportunity cost? How much do Twinkies cost vs broccoli? What other costs beyond money are there? Cost to health, energy, physiology?*
- 3) “***What is your hard evidence?***” *Is there solid information showing that broccoli is a better choice than Twinkies?*

Section Two: Implementation

These are suggested methods of integrating our nutrition approach into your life. Though, these strategies are definitely not the only ones, these are gradual, focused, fairly easy to follow and is very effective toward long-term health.

Approach 1: 8 Steps to Optimal Nutrition

This technique addresses habit forming by performing one or two small habits for an entire month, recording your adherence, and observing any changes in the way you look/feel/measure from each one. You will have developed significant cumulative changes by the end of the program (1-8 mos) with hopefully, not great effort required.

Here is how it works: Each month, follow the simple step(s) listed. Record on a calendar! I like to just put a plus sign for adherence on that day and a negative on the calendar for not. If you have a goal to be measured, note that as well.

If the plus signs do not cover 6 out of every 7 days in each week of the month, repeat the month. Do not move on to the next habits until you meet this requirement.

So again, the process goes:

- 1. Implement the behavior**
- 2. Record adherence**
- 3. Observe outcome**
- 4. Correlate the behavior with the result**

We have a couple of different types of habits. Some ‘accumulate’ by adding something good. Some ‘eliminate’ by subtracting something undesired.

Implementing an ‘accumulating’ habit before or at the same time as an ‘eliminating’ habit, we should not feel that there is an emptiness that needs to be filled. This sometimes happens when we eliminate something undesirable without adding something positive. Many steps are paired by accumulation and elimination behaviors that go together. The steps that are not ‘accumulating’ or ‘eliminating’ can be done alone.

Start by crossing off all of the habits you already are good at. If you already take a daily vitamin, cross it off the list. No need to work on it. Your program can become a shorter one very quickly. Some of the habits will have a noticeable immediate impact while some may be more subtle.

Step One and Two

- Accumulate: **Water** and a **multivitamin**. Follow guideline 4 in section one for water intake. Add in a good multivitamin daily. Record this on a calendar of some kind.
- Eliminate: **Processed food additives**. No MSG, artificial sweetener, or high fructose corn syrup. If you drink diet sodas, STOP!

Step Three and Four

- Accumulate: **VEGGIES**. Lots and lots of VEGGIES!!!! Secondary to veggies are **fruits and/or nuts**. Add these in as well. 6+ servings of veggies/day and 2-3 servings of fruit...No **fruit juice** though...high in sugar!

- Eliminate: **Sugar**. Get rid of all **high sugar/fructose foods** (juice too). No cookies, candies, chips, and baked goods.....**alcohol** too folks!

Step Five and Six

- Accumulate: Good sources of **protein**. See the charts under guideline one above. Focus on natural, organic, local, etc. Study what is good for each animal such as wild caught for fish, free range for chicken, and grass fed for beef and dairy. Remember, when you calculate protein (>.7g/lb lean body mass), you also are getting protein from your plant sources as well.
- Mitigate: **Milk**. I say ‘mitigate’ because all milk is not created equal and people respond to it very differently. Be conscious of dairy and how it works with your body. Some forms like yogurt and cheese may work well while milk and ice cream may not.

Step Seven and Eight

- Accumulate: **Whole food CHO**. These can be good sources of carbohydrate, protein, and good fats. Beans and legumes, wild rice, potatoes, and oats are good secondary sources of energy to vegetables and fruits.
- Minimize: **Bread and flour** products. Flour can act like sugar with regard to insulin response. Flours can cause low level inflammation. Too much of this can keep us sick and overweight. Whole grain bread, pasta, chips, crackers, tortillas, and other flour products should be taken in very moderate amounts...think 1 serving every 2 days or so. If it comes in a box or can stay on the shelf longer than a month, get rid of it! (this includes mac and cheese, pizza, chips, crackers, etc)

Throughout: These should be used throughout as they help along every habit.

- ✚ Meal timing. Pay attention to how your body feels with different time frames between meals and eating at night vs morning.
- ✚ Additional supplementation: Add in additional supplements based on coaching you get from a professional analyzing your body's current condition, full diet, and goals. Also, check with your primary care physician if you have any doubts over specific conditions you may have.

Note: Getting blood, saliva, or urine testing for body processes that may be helped by supplementation is recommended. A natural dietician or functional medicine doctor may be a good resource here.

Approach 2: Meal by Meal

In this approach, you'll address all your habits one meal at a time. For instance, start by eating breakfast with choices that match our paradigm perfectly. Then, after a month, move to lunch...then so on and so forth. I suggest having a whole perfect month for each meal or step to make sure you have it down then move onto the next.

Step One: Water and Multi-Vitamin

This is the same as above. This happens all day and so must be addressed even before our first meal.

Step Two: Eliminate Snacking and Get an Idea of Eating Frequency

Since we are addressing our eating meal by meal, we can't have a whole bunch of extra food consumption that we are not in control of. Once you eliminate snacking, how many meals a day does it take to satiate you? How does your body relate with Principle Four? Do you eat frequently? Or, can you go 5-6 hours without food and not feel tired?

This is important information to have. Use this information to get a starting point for how you move through the rest of these stages. Keep in mind that the eating frequency you have at this point is likely to change as we change the content of each meal.

Step Three: Breakfast

What time do you eat breakfast? Do you need to eat right when you get up. If you are an athlete, you probably will. But, if you are looking for general health, I would try different time periods for a month or two to figure out what time your body really wants to eat.

After figuring out what time our first meal should be consumed, we will now address the content of the meal. We will want to start with going to the grocery store and making sure we have the right ingredients. What foods do you like that fit into the bottom of our pyramids? Create some recipes. I like an omelette with veggies or a shake with lots of fruit and veggies with some eggs or yogurt on the side (my body likes cultured dairy). If you can't cook, where can you get a similar meal?

Steps Four: Repeat With Each Meal

You now repeat the last step with each successive meal...one at a time. How long does it take for you to get hungry for the meal after breakfast? Then, what recipes can you implement within our guidelines to eat for that meal?

Do this for a month, then repeat for the next meal, then the next. You may find that the number of meals per day diminishes as the foods you are eating are more fulfilling.

You will start to get a handle on what quality foods you enjoy and you will attain a handful of recipes you like for each meal. At restaurants, you'll be able to pick the meal that best resembles these recipes.

Honestly, this is my favorite approach. Though, there are probably infinite ways to implement our way of eating for life, these two have worked best for me and my clients.

Additional Note:

Another reason that I like these two approaches is that they somewhat resemble the elimination diet (where

you eliminate certain foods one at a time to see how each one affects you). But, our approach is easier to implement in my opinion. Whichever method you choose, pay attention to the different foods in your recipes and how they cause different changes in your body.

For instance, if I eat bread in a sandwich for lunch, I am going to need a nap)...unless I am doing something very active. It took me a long time to figure this out.

If I drink milk (organic) for more than one day in a row, I get phlemmy. Some people have issues with peanuts, beans and other foods in the middle of our charts. Feel them out to see how they work for you.

Client Story

Jo was a client of mine a few years back. Jo was a former collegiate athlete. She had just had her second child. In her second pregnancy, she had gained a bit of weight. She came to me after an injury she had acquired in an exercise class she was taking. In the first 3 months her posture improved greatly, the injury was gone through our sub-clinical movement therapies, and she had gained significant strides in her performance and strength. Like many of my clients, she said, "But I haven't lost any weight!"

I smiled, unsurprised, and said, "Oh, really?" She asked why. I asked her how her nutrition had been going. She said that she was following the guidelines as listed above.

So, I said "Ok. Let's start measuring." We measured her waist, hip, thigh, and arm circumferences, body weight and body composition every day thereafter. I also had her report what she ate every day. She did not have to report exact volumes of food, just whether she followed the guidelines. She had already followed the steps in our program above, but learned soon that she was deviating too far from how they should be implemented for her own goals (for her, this was eating off her kids' plates).

The result was immediate after we started measuring and made adjustments. In three months, 30lbs fell off of Jo. This is the value of basic action + accountability + measurement. She had been mentally following the program. But, as many of us will do, she was cheating without being aware. As soon as we started

making her aware of the small cheats every day like eating off of her kids' plates and indulging a cookie (then forgetting about it!) the internal changes needed for her weight and metabolic health just fell into place.

Health Specific Outcomes to Nutrition

As nutrition is ubiquitous throughout a program of health and affects every organ system, one should consider diagnostics (blood testing for example) to measure and chart outcomes in every body system along the way and get personalized precision results.

While we are not offering one set of diagnostics related to nutrition, a variety of general diagnostics should frequently be taken for the metabolic system, cardiopulmonary system, inflammation, kidneys, liver, hormonal, and even psychological measures. These should be correlated both subjectively and objectively to the ongoing changes in nutrition that are made. This can be a life-saving preventative measure. But most do not do this until they are in the disease state and it is too late. As I stated earlier, a functional medicine doc can be extremely helpful in this regard.

Specific chronic health conditions that are especially affected by diet are cardiovascular disease and metabolic disease. **Cardiovascular disease** includes, atherosclerosis, heart attack, stroke, and arrhythmia.²²

Metabolic Disease is the combined conditions of diabetes, obesity, and hyperlipidemia (also a factor in cardiovascular disease). Metabolic disease conditions are a causal factor in heart disease. This is why the two are almost interchangeable. Many educational and health organizations will actually combine them in definition.

²² <https://www.heart.org/en/health-topics/consumer-healthcare/what-is-cardiovascular-disease>

It should be noted that one can improve overall cardiac and metabolic health while not necessarily losing a significant amount of weight or bodyfat. As well, one can look skinny, but have visceral fat around the organs actually rendering them obese and unhealthy. Their body composition can be fine while still having dysfunction of endocrine and other body systems.

Associated diseases are liver disease, kidney disease, gastro-intestinal issues, chronic inflammation, and psychological disorders.

General health changes in the form of more energy, alertness, body composition change, decreases in inflammation (pain included), and general well-being are a very common outcome to nutrition change.

Proper nutrition is the number one prescriptive lifestyle activity that one can implement for the avoidance and treatment of these conditions. It should be noted that the above recommendations are for the general health and balance of most people to avoid chronic disease. However, a licensed professional should be consulted if a clinical disease state such as diabetes, celiac disease, food allergy or any other disease state is diagnosed.

I hope this guide is of help. Thanks for coming along on the ride! I wish you the best of luck and great success in your health and performance pursuits!

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