

W.H.O.L.E

The foundational principles of a healthy human diet.





Introduction

Nutrition is only one aspect of the role food plays in our lives. Food is social, environmental, ethical, economical, cultural, and even spiritual. Diets often sacrifice all these hugely important factors at the alter of nutrition. With huge amounts of attention being paid to macros, grams of protein and calorie counting. In fact there are a great many diet dogmas that neglect one or more elements of food in the name of a single other. Veganism, for example, can be led by ethical beliefs at the expense of other factors. My view is that a principled approach to ones food is best. The guidelines I have laid out here are intended to give a framework of a few important principles that when followed produce a broadly healthy diet, while providing the necessary flexibility for accommodating dietary beliefs, budgets and even geographical locations.

I have attempted to distil nutrition down to five principles that focus on what is truly important for health. By health I do not just mean body composition, or blood markers for inflammation, although these are highly important to be sure. I also include mental, emotional, and social health. I have known people who were impossible to go to a restaurant with because of their obsessive focus on nutritional content of each meal. I have known people who have been unable to have round to dinner because of the stress caused to all concerned by making a meal for someone so strict on their eating plan. Some may even argue I have been both of these people.

As stated above, food is so much more than simply calories and nutrients. I do not believe that this rigid or narrow approach is necessary for great health. In fact it is, in and of itself, insufficient for it. By using a principled approach, we are able to have a small set of easy to remember guidelines that keep us broadly on track in real life. With minimal effort, and across widely variable contexts and situations, the WHOLE principles of good food allow us to navigate real life and get things much more right than we get wrong, leading to a way of eating that produces a healthy, robust body and mind by default.

I believe food is an integral part of a healthy human life in all of the contexts listed in the first paragraph of this introduction. In that spirit, I would like to comment on diet dogmas specifically. A diet dogma I define as a system for eating that is rigid and closely linked to a group identity or ideology. For illustrative purposes I am going to pick on vegans. But before I get a bunch of strong and passionate comments from the vegan community, let me just qualify that by saying that the keto crowd, the paleo guys and the carnivores are all in the same boat. I pick vegans for no other reason that their numbers are growing with the current zeitgeist and as a result everyone knows a vegan, and thus will relate. The same cannot be said for the other dogmas to the same degree.

With that said, here is my view. The universal problem with diet dogmas is that they use the wrong framework for assessing wether a given food is "good" or 'bad". I have two issues with this. Firstly, the concept of good and bad foods is erroneous. One food can be good in one context

and bad in another. Take the humble and glorious brownie. My personal favourite treat. Brownies consumed for breakfast every day in a diet where lunch is white bread sandwiches with processed cheese and dinner is frozen pizza could quite fairly be called bad. But a brownie to celebrate a little win in the context of a largely great diet can be termed good for taste, joy, etc and at worst neutral for health. If our objective is to have a healthy diet, demonising foods is generally not a great idea. Adherence to the dogma takes over the framework by which a food is qualified and leads to rigidity, guilt, unnecessary abstinence and inaccurate appraisals of how well you're doing.

Now to pick on vegans, for illustrative purposed only. A vegan diet can be a great diet. It is very possible to have a broadly healthy, tasty, enjoyable and nourishing vegan diet. It is also possible to have a horrendous vegan diet. Wine, vodka, beer, jelly snakes, ultra processed "cheese" substitutes, ultra processed "meat" substitutes, pure white sugar, and many other unhealthy culinary choices are perfectly vegan. If your framework for assessing wether a food or overall diet is healthy is "is it vegan" you have a stupendously flawed cognitive process. The same is true for "Is it paleo", "is it keto" and "is it low fat". These dogmas reduce nuance, and tint clear thinking. Each one of these diet frameworks will be applicable to the principles contained below. Each one is compatible with the WHOLE principles of good nutrition. But each by itself is insufficient and unnecessary for a healthy diet.

W.H.O.L.E.

Whole foods 90% of the time
Hunger determines intake
Only meals, no snacks
Limit liquid kcal
Everything in moderation

Whole foods 90% of the time.

Basing 80-90% of your food intake on real, whole foods, is the **single most important and powerful principle of a healthy diet**. Reason being, this principle will improve every aspect of your diet regardless of which nutritional doctrine you may adhere to. For clarity, a "whole food" is a naturally occurring food, minimally processed. The basic rule that "if it flew, grew, ran or swam, you can eat it" serves as a good proxy for discerning between whole foods and manufactured or processed foods.

Not to suggest that 100% adherence necessary, but if one was to strictly adhere to this rule totally, it would be almost impossible to overeat, to be malnourished, to develop type 2 diabetes, metabolic syndrome or unfavourable blood lipid profiles. It would also be nearly impossible not to lose fat, improve metabolic health or increase feelings of self reported wellbeing.

The nutrient profile provided by a completely whole-food diet will, by default, be low in sugar, alcohol, damaged fats, preservatives, and hyper-palatable foods. It will also, by default, likely provide adequate levels of the complete spectrum of nutrients required for a healthy body. Here's a little detail on each of those points.

Sugar intake:

With the notable exception of honey, which will likely make up a tiny minority of your total annual food intake, whole foods provide very little sugar. The sugar that is contained in whole foods such as in whole fruit, is normally bound up in the cell membranes and thus takes more time to release into the circulation. Leading to less erratic blood sugar and less cellular damage. The amount of blueberries you will need to eat to consume the equivalent one fizzy drink is unlikely to be eaten in one sitting in normal circumstances. ¹

Calorie intake:

The amount of calories per 100g of actual food eaten on a whole food diet is far lower than that of a typical processed food diet. This is known as calorie density. The lower the calorie density of a diet the more total food is eaten for the same total energy intake. Generally speaking every process a food goes through leads to faster digestion, more easily available calories and less nutrients. The sower digestion rate, coupled with more total food eaten, leads to greater satiety, meaning less hunger, and more stable energy and mood.

You will consume better fats:

Processed and damaged fats are the only really "bad" fats in the human diet². These are far more prevalent in processed, fried and preserved foods than they are in fresh, whole foods. Not only will you consume less damaged fats, but through a varied whole food diet, you are likely to consume a more varied and balanced profile of fats, which is good for health. Fats make up the membrane of every cell in the body and provide the raw material for many hormones. The better the fatty acid profile of your diet the more likely you are to have healthy cells and all the raw

¹ Unless you juice said blueberries and drink them. See principle "drink no calories".

² See principle "be kind to your fats"

materials you need for optimal metabolism. Processed foods tend to be high in omega 6 fats, hydrogenated oils and oxidised fats. This is a more inflammatory fat profile. Hydrogenated fats are unnatural fats that have been shown to be very bad for cardiovascular health and in no way beneficial. Oxidised fats are fats that have been damaged and have effectively gone rancid. The longer a shelf life of a food and the more processes it has been through the more likely it is to be oxidised. Once oxidised fats are more inflammatory and less beneficial in the body. A fresh, whole food diet will be virtually free from hydrogenated fats and oxidised fats, provided you are kind to your fats in storage and cooking.

You will consume less processed food.

Processed foods tend to have lower nutrient density, and have less favourable quality and sources of fats, carbs and proteins. Not to mention generally being more likely to contain potentially harmful ingredients such as various preservatives, potential carcinogens, artificial chemicals, and compounds that make the food hyper palatable, altering your taste and making you more reliant on processed foods and less satisfied by real food.

You will consume more live food.

Live foods such as living plants have widely accepted benefits to health. Generally they will contain high concentrations of biologically available and active nutrients, especially when compared to their processed or preserved counterparts.

Your diet will likely be far more nutritious.

The most commonly eaten "vegetables" among teenage Americans are tomato ketchup and potatoes in the form of fries. The difference in nutritional value, (per 100g or per 100kcal) of a diet based 90% on whole foods vs the standard western diet is profound. Our bodies evolved in a world where every plant grew in an organic, biodiverse manner, picked and eaten freshly and seasonally and traveled 0 food miles to reach our mouths. Every animal was wild and ate a nutrient dense, natural diet. Every fish was wild and fresh from pristine waters. The nutritional value of our ancestral diet during good times was very high. Even on a whole food diet today, it is difficult to attain these levels of nutrients in the diet. Modern farming often produces weak and nutrient sparse varieties of plants and animals. On a processed diet the nutritional value is horrendous. As a result we see a paradox where there are few people in the developed world who do not have nutrient deficiencies of some sort, even though we have an obesity epidemic. Basing the overwhelming majority of your diet on whole foods is good foundation.

The principle of grounding your diet in whole foods is a truth of good nutrition, regardless of doctrine. It accommodates all dietary dogmas regardless of wether you are vegan, carnivore, omnivore, keto, paleo or gluten free. Each of those diets have both a place and huge followings. But none are guaranteed to be healthy. There are great vegan diets and horrendous ones. There is gluten free crap and there are perfectly nutritious foods that are disallowed because they are not "paleo". I see problems with dogmatic nutritious camps, and I believe principles are a better way forwards. But I accept many of you reading this will identify in some way or another with a particular diet. This principle is a foundation of nutrition regardless of your current doctrine.

Hunger Determines Intake

Appetite. What an amazing mechanism. Across pretty much all species of life, appetite, the art of knowing and regulating how much to eat, has preserved for billions of years. In almost every environment you can imagine, in every form of life, knowing how much energy to pursue for life without energy intake becoming toxic is a robust phenomena. Too bad we wrecked that one! Today, among humans, more people on earth experience ill health effects from excess energy consumption than do from inadequate energy consumption. More of us struggle with metabolic woes due to too much food than we do from starvation. In some ways this is a good thing and a sign of progress as a species. But in other ways it is a completely avoidable problem, indicative of our disconnection from our natural state and our inner awareness. When working properly, appetite will regulate energy intake astonishingly well. Maintaining adult weight across a lifetime in a remarkably stable manner. You can see this both anecdotally and scientifically among hunter gatherer peoples. Wild living human adults maintain stable weight across their entire lifetime unless famine causes unwanted drops. Obesity in the absence of modern diets is extremely uncommon if not statistically negligible. But modern diets and modern lives have highjacked this mechanism and caused havoc with our bodies along the way.

Modern diets and your hunger mechanism.

Hyper-palatable, ultra-processed, calorically dense foods. They are ubiquitous and they are a problem. Hyper-palatable foods are scientifically engineered to be irresistible. Nature has programmed us to seek out certain types of foods (by making them highly satisfying) for survival advantages. Fat is energetically dense, so we have evolved to like it, a lot. Sugar is a vital and rare source of high octane energy (to a hunter gatherer), and so we have evolved to like it, a lot! Salt is a valuable source of vital electrolytes essential to survival and hard to come by (for a wild human) so we have evolved to like it, a lot. But these preferences and the reward mechanisms that evolved to encourage us to seek them out and binge on them emerged in a world without salted caramel! In a world where sugar was reserved to fruit and honey, salt was rare, and fat was a highly prized survival fuel that required the slaying of a large mammal, overconsumption was not an issue.

Ultra-processed foods are "foods" that are so processed and full of artificial ingredients that they barely resemble any real food whatsoever. The amount of ultra-processed foods in one's diet and the health of that individual are inversely associated. For a slew of reasons, we want to keep these to a minimum. Not least of all, ultra-processed foods are generally calorically dense (lots of calories per bite) not very satiating (easy to overeat) and not very nourishing (empty calories).

Calorically dense foods (both ultra-processed and hyper-palatable foods tend to be calorically dense) are essentially foods that have a high number of calories per bite. If you combine a high number of calories per bite with a low level of satiation and a really high palatability, you have a food that is primed for overeating. For example; if I gave you a plate of butter and said eat as much as you like, you may have some, but would be unlikely to overeat it. The same is true of pure white sugar, white flour, and pure rock salt. But if I combined these ingredients to make

salted caramel cookies, you would easily and readily consume far more than you would from the individual ingredients. This is exactly how our appetite based regulation of food consumption gets highjacked by these modern additions to the human diet. Thus our likelihood of overeating goes through the roof in direct correlation with the amount of these foods represented in our overall diet.

Furthermore. We have lost touch with our appetite as the pirmary driver of how, when, and how much we eat. In the modern world, we eat because it is habitual meal time, because of the social setting, to find comfort, because of temptation, and because of boredom more frequently than we eat to quell hunger. We are enormously privileged, both in the context of those still starving around the world, but also in context of all of human history, to be in such a position. The down side of this lucky and cushy situation is that we have lost touch with our hunger mechanism. Combine this with the above described impact of modern diets and we have a literal recipe for overconsumption, and an epidemic of obesity to show for it.

IF you follow the first principle, (Whole foods 90% of the time), you can leverage the power of your incredible appetite system. But eating when hungry, and stopping when satisfied, you can regulate your weight over the course of your entire lifetime. Studies of hunter gatherer tribes still around today show that adult human body weight is remarkable stable over the course of an entire lifecycle, when modern foods are void from the diets and 100% of food consumed is essentially whole or minimally process (some ancient methods for preserving like smoking are classed as a minimally process). If you follow the first principle and eat 90% whole foods, you can begin getting in touch with your appetite and effortlessly regulate your weight over your adult life. No calorie counting, no tracking app. Just connection to your instincts and a solid whole food diet.

Hara Hatchi Bu.

On the "stop when satisfied" side of the equation, the Japanese have a principle we can borrow to great effect. Hara hatchi bu roughly translates as "stop when 80% full". Coming from one of the countries in the world with the lowest rates of obesity (pre introduction of American food influences) this principle is a great rule of thumb to follow. Instead of blindly finishing the portion (like my former self would always do), try to practice paying attention to your body and the various cues it is sending you. Instead of eating until the portion is gone, or until bursting full, practice eating a little more slowly, and a little more mindfully, (both required by default if you are to be even slightly aware of when you are 80% full). Be connected to your present state and stop eating when 80% full. Satisfied but not uncomfortable. This principle alone will help you regulate at your ideal weight quite profoundly.

Familiarise yourself with hunger. As I mentioned above, many westerners are completely unfamiliar with what true hunger feels like. This is one reason I am a big fan of counselling my private coaching clients to do at least one 24 hour fast. If for no other reason than to connect with what hunger actually feels like. Many clients report that they have never felt hunger like that. Once again I would encourage you as the reader to dwell in the notion that you have no idea what true hunger is, and yet there are those around the world who suffer it daily. Once you "make friends"

with <u>elective</u> hunger, it becomes far less stressful. One reason people overeat in the west is a fear of hunger. You're out and about, you get a hunger pang and "need" to eat now. The truth is far different. Hunger is only stressful or to be feared when you have no idea where your next meal is coming from. When you know you will eat later that day, often just in a few hours, hunger is nothing to be concerned about. Despite this truth, hunger pangs drive snacking on ultra-processed foods every day among westerners. It simply is not worth the negative impact on your health. Learning to allow transient hunger pangs (which often only last 3 minutes) to wash over you is empowering. It makes it very easy to wait until your next meal. Not only will this help you regulate intake more favourably, but also over time you will experience them less, and develop greater self mastery.

Only Meals, No Snacks

Three meals a day and two snacks to stabilise hunger was a staple of advice from the fitness industry for a very long time. Whereas mothers around the world have been counselling kids to not snack between meals for even longer. Today the meal frequency debate seems split between one side focused on developing maximal muscle and minimal fat favouring frequent small meals, while the other side focused on health and longevity favour full meals less frequently.

For our purposes here I favour never snacking, and eating full meals as frequently as you need to to satiate hunger (discussed later). Here's why.

Firstly lets start with a definition so that we can all understand exactly what is being said. I define a meal as an eating event where the net whole portion of food eaten contains a source of protein, fats and / or carbs (depending on your nutritional tilt) and ideally fibre and micro nutrients from vegetables or fruits. Ideally this combination is all from relatively unprocessed, whole foods, eaten in solid form. A snack I define as an eating episode not fulfilling the above criteria. Often, snacks involve either processed foods eaten in isolation, often lacking protein and fibre. Even healthy snacks such as a handful of almonds or a piece of fruit cannot be classed as meals, and a breakdown of why these are still undesirable follows shortly. Let's examine what happens to our physiology when we consume a meal as outlined above, and why it is a cornerstone recommendation for a healthy diet.

When a meal fitting the above profile is consumed, the mix of fats, proteins and fibre from vegetables, nuts etc all slow down each other's digestion and absorption. If carbohydrates are present the same is true. Overall this leads to slower rate of emptying of the GI tract. This allows the body plenty of time to deal with nutrients being absorbed into the bloodstream, more stable impact on hunger and energy levels. From the carbohydrate perspective, it makes for a slow and gradual rise in blood sugar, followed by a controlled and smooth decline.

After eating a solid meal as outlined here, Your physiology is quite favourably affected in a myriad ways when compared to eating a snack.

Blood sugar, following a solid meal as described above will be likely to rise slowly and not reach a peak as high as if the exact same source and dose of carbohydrate were eaten alone. For example let's take a hypothetical case of steak and veggies followed by ice cream, vs ice cream followed by steak and veggies. If ice cream is eaten on an empty stomach and blood sugar tracked for the few hours after you will see a relatively high and rapid rise in blood sugar. If the exact same portion of ice cream is eaten after a meal of steak and veg, the resulting blood sugar rise will be slower and lower. Producing a far more favourable profile of blood sugar control. The protein, fats and fibre from the steak and veg slow digestion of the simple sugars.

Hunger will be stable, ebbing and flowing in a natural rhythm and more attuned to appetite. Partially as a results of the more stable blood sugar profile, and partly due to the slow emptying of the GI tract. Once the mind has settled into the habit of a given meal pattern, not snacking but instead waiting for the next meal time will be easy and natural. Furthermore, there is a phenomenon known as the hormonal entrainment of meals. This phenomena describes how the

physiology of our bodies settles into a hormonal rhythm that drives hunger at the times that our body expects to be fed. Some evidence suggests that food eaten at consistent times is better processed by the body. And that haphazard patterns of food consumption can lead to greater fat storage and less desirable blood sugar management.

Energy levels, as a result of stable blood sugar and metabolic flexibility will be more stable and predictable when the body has settled into a consistent meal pattern.

Nutrient absorption is better when a whole solid meal is consumed that when small snacks are favoured. A good part of this observation can be ascribed to how one eats rather than what one eats. Meals that are consumed slowly, sat down, not working, ideally in a social setting are absorbed more fully and effectively than meals consumed on the go. One advantage I will shortly expand on of adopting the no snacks only meals principle is that you can carve out time to eat properly. (See "how to eat" later).

When I speak to larger audiences (for example, company wide talks) about this principle, I always get the same question / challenge back from usually healthy member of the audience who is invested in their healthy snacks at the desk habit. It goes something like this: "OK I see what you're saying about junk snacks like chocolate bars and crisps, but what about healthy snacks like almonds and fruit". I accept wholeheartedly that these are nowhere near as bad as junk snacks. But I still come down on the side of only meals, here's why.

Lets take a widely accepted healthy snack: The handful of almonds. Almonds contain a small amount of protein, healthy fats, fibre and a small amount of slow digesting carbs as well as some micronutrients like Vitamin E and phosphorus. This makes them a healthy source of food, no argument from me. (In fact, some evidence suggests almonds block absorption of other dietary fats, but I digress). So let me be clear I have no beef with almonds. But how we eat is as important as what we eat. Having a handful of almonds while working at your desk in comparison to having the exact same portion of almonds as part of a salad with chicken, leaves, and other vegetables are different things. When eaten in isolation, the brain is less good at calibrating total energy intake and more likely to overeat. When eaten mindlessly because you're more focused on your work, the hand can throw down 600kcal of almonds very readily. The fibre and fats contained within the almonds could have more favourable effects on the other nutrients of a meal if eaten in that manner. Even with healthy, low sugar snacks like almonds, I would prefer all my clients emphasised incorporating these foods into meals. The overall impact on diet and relationship with food is significant. One study using exactly almonds illustrates this effect nicely, in this case using almonds to make a meal more complete, rather than looking at them in isolation. The study took healthy volunteers and fed them either bread with 50g available carbohydrate for breakfast, or bread and almonds. The groups who ate the almonds as well (a few groups with differing amounts) showed slower blood sugar rises and smoother curves in direct relation to the amount of almonds eaten. So eating the almonds in isolation leads to missing out on the beneficial impact the food can have if you eat them as part of a meal.

Protract this effect out over the course of a whole day of only meals and you can begin to see much better blood sugar control, more stable energy levels, better digestion and likely better practices around eating. You will likely also over time develop better metabolic flexibility. Metabolic flexibility is the ability of a persons body to switch between fat and carbohydrate for energy. In a healthy person, switching between energy sources is, for all intents and purposes from the perspective of observing oneself, effortless and seamless. But when carbohydrate based diets with very frequent servings (snacks), are sustained over a long period of time, the body loses its ability to switch back to fats. This leads to an increased reliance on regular snacks to keep energy level and hunger at bay. It also leads to difficult fat loss, as the body is less good at accessing its stored fat reserves and utilising the energy held within. Following a pattern of only eating meals, especially when combined with low meal frequencies, (2 meals per day), leads to increased (or rather, healed) metabolic flexibility. This is partly due to the slower digestion and resultant impacts on physiology, and partly due to the extended times between feedings necessitating the body to access fat stores. This leads to less reliance on regular feedings due to more stable hunger, and potentially easier fat loss.

If following rules 1 and 2, (whole food 90% of the time and eating when hungry) many people actually stabilise at two sizeable feedings per day. But equally some people prefer little and often. Either way, you can trust your appetite to regulate you fairly well from an energy needs perspective. The third link in the chain is to only eat complete meals, even if small but frequent is your preference. The favourable impact on body composition, energy, blood sugar, relationship with food and metabolic health will follow as a by product.

Limit Liquid Calories

Liquid calories are common in modern diets. From juices to lattes to fizzy drinks. Consuming liquid calories is a common feature of people's nutrition. There are a few problems with this. The first is the obvious issue that many, although not all, calorie containing drinks are nutritionally void. Fizzy drinks laden with sugar are a well accepted affront to our health and our waistlines. I do not want to labour the point here as many thoughtful and detailed pieces of information are available on that side of the topic. I do, however want to address that all liquid calories are, in general, best limited.

As with all other principles within this book, the limitation need not be absolute, and your adherence need not be religious. The whole idea of developing a principled approach to food is to allow flexibility and a healthy relationship with food, while having guiding principles that steer us in the right direction for health and well-being more often than not.

So, what's my issue with calories in the form of juices, lattes and wine? The headline is that the brain does not calibrate these calories in the same manner as it does solid food. This can lead to overconsumption, and thus the health woes that follow along. Secondarily, liquid calories are very prone to impacting blood sugar in a less desirable way than does solid food. Leading to the negative nudges on ones health associated with poorly controlled blood sugar.

The appetite impact.

Look in the literature on the impact liquid calories have on total consumption and you will see mixed data. Some studies indicate equivalent impact to solid food, and others indicate a tendency towards overconsumption. Upon unpacking the reasons behind these mixed results you see that the tendency for liquid calories to contribute towards overconsumption can be boiled down to specialised behaviours rather than strict physiology.

Put a person in a metabolic ward and give them calorie matched cookies or sugary drinks and then wait a while. Follow that up with a meal served for them to eat ad Libitum and you will likely find that calories are equivalent in terms of their impact on diet, at least acutely. But the problem with this type of study is that it is not very reflective of what happens in the big wide world. In free living circumstances the impact looks very different, especially over a 24 hour period.

In free living conditions (read, normal life), an adult's food consumption will be influenced by many different factors. And data suggests that liquid calories will likely contribute to greater net calorie intake over a day / week / month / lifetime. The reason for this is simply that the amount an adult westerner eats at meal times is likely influenced by social cues, cognitive intent and habits rather than pure instinct. For example, if you're one of those people who was raised to clear your plate regardless of hunger levels, (I definitely was), your consumption at a meal time is likely not primarily regulated by satiety, but rather by finishing your allotted portion.

Illustration of this effect is further evidenced by comparing adults to children. My kids love oat milk. Given a chance they would survive on 80% oat milk and 20% chocolate. (I do not allow this to happen). Now, as all parents reading this will likely relate, if I allow them to have a big glass of

oat milk an hour before their dinner, they will likely not eat a great portion of said dinner. This is indicative of the instinctual and appetite-centric regulation of total calorie intake in a child.

An adult given the equivalent amount of calories from, say, a latte mid morning, would likely eat exactly the same lunch portion they would otherwise have eaten without the latte. This circles back around to our discussion about hunger, and how we would benefit from getting back in touch with it.

The blood sugar impact

One of the reasons behind the WHOLE food principles and the 'only meals' principle, is that the impact on blood sugar is far more favourable when a whole meal of veggies, protein, fats and / or carbs is consumed. When compared to the impact of a snack of relatively pure carbohydrate, like a cereal bar or a banana, meals produce a slower, more steady curve of blood sugar rise and fall, which is far healthier. Liquid calories follow a similar trend. In comparison to equivalent calories and macro nutrients in solid form. The difference between drinking a glass of orange juice and eating three oranges is huge, in terms of blood sugar control, satiety and satiation.

Combine these two factors, (the impact on net calorie intake and blood sugar control), and limiting liquid calories clearly becomes a principle to abide by the majority of the time.

Once again, I do not wish to seem draconian in my approach. I enjoy a few beers at the end of a long week, I don't think you're a bad person if you indulge in a latte with friends a few times a week. As I mentioned before, nutrition in real life is about what you get right 80-90% of the time. You need not be a nutritional saint. But building solid habits, and removing harmful ones is the essence of curating ones way of life to lead to health and performance by default.

Everything In Moderation

If you're following rules 1,2,3,4.....

Let's assume you've cracked the four foundation principles of a healthy way of eating.

You're basing 90% of your diet on whole foods, eating a wide variety of relatively unprocessed foods ad libitum.

You're allowing hunger to determine intake, becoming connected with your appetite mechanism and stopping eating when satisfied.

You're only eating meals, no snacks. Making time and space to sit down and eat a few times a day, enjoying solid whole mixed meals with protein, veggies and fats and / or carbs.

And you're limiting liquid calories. Drinking plenty of water, green tea and black coffee.

You're nailing it, now time for reality. In the real world, over a long enough period of time everyone deviates from the ideal diet. No matter how dedicated (obsessive) or disciplined one may be. In fact this is not, in my opinion, a "bad" thing. I don't think it indicates weakness or a lack of seriousness. I feel that being able to deviate from ones ideal diet **is part of a healthy diet** and a healthy relationship with food. I argue that if you are following the four preceding principles, you have every right, without guilt or pause, to indulge in the culinary wonders that lie far outside these guidelines. IF you are nailing it the majority of the time, deviations can be made with little to no impact on your metabolic health, health span or lifespan. Obviously it is easy to let slip too far. And for deviations to become the norm rather than the exception, and one must mind their step to be sure. But I feel that a focus on getting it right most of the time and having little regard for the minority of the time we indulge, allows us to eat for pleasure (maybe even hedonism) from time to time and have zero need for justification or consideration. And in that spirit......

My confession: I want to come across as being very human, and very much imperfect with own nutrition here. I do not wish to give the impression that I am a nutritional saint. My favourite foods include; hazelnut white chocolate bloodies from Kigali (my local artisan coffee place), jam rolly polly (a traditional English desert made with suet, for those of you who are not British), and stout (dark ales like Guinness for those not familiar). How often do I enjoy one of these foods or other of a similar ilk? Weekly! Don't get me wrong, My diet is largely on point. I eat meat, eggs and occasionally Skyr for breakfast. I eat meat and veggies for dinner. I enjoy cups of bone broth and only drink black coffee and water. most days, I am on target with my habitual choices and patterns. But I enjoy desert after Sunday lunch. I enjoy a beer on Friday night. If my wife and I go for dinner at a restaurant, I order what appeals, rather than what fits my macros. I focus on the big picture, as I suggest you do.

Of course, if I wanted to get as lean as possible, or appear on the men's health cover, more attention to detail would be needed. Same if I wanted to get a muscular as possible, or compete in the olympics. But I do not. And I am guessing the majority of you don't either. I am happy with my current physique and want a way of eating that focuses on making me healthy, while keeping

a flexible and enjoyable relationship with food. And I find these principles work brilliantly. Not just for me! But for the majority of my clients who choose the same path.

Fear-mongering around "junk" food

One aspect of nutrition that I think needs a short comment here is fear mongering about junk food. I've been in this industry for nearly 20 years. In that time I have come across many an obsessive nutrition nazi. There are those who are so focused on, maybe even obsessed with, foods impact on their body that they abstain from all junk all the time (or at least claim to). They demonise anything not paleo, or vegan, or raw or fill in the blank. I wish to be a voice of reason for you here: Its fine. Yes, junk food will raise blood sugar, and bad cholesterol and cause inflammation and spike dopamine and all that. It will, I completely agree. But as I outlined above, if you are on point the overwhelming majority of the time with healthy, good foods, it really makes very little difference over the long run. If I eat a pizza, some ice cream and wash it down with a beer on Friday evening, by the time I have eaten well, and drank water, and walked outside by Saturday evening the results are likely negligible. The poison is in the dose, as the saying goes. If the dose is low and relatively infrequent the damage will be negligible. If the dose is frequent and / or excessive the problem will present and persist. Black and white thinking rarely does justice to the real world issue we face in our nuanced daily lives. Think, be honest with yourself, and make smart decisions. I do not think that outright demonisation of "junk" foods is necessary. Context is king.

These are foundation principles.

These "foundation five" principles of healthy food are designed to make a working framework by which you can build healthy habits and a a solid foundation of nutrition. They are designed to be flexible and accommodate a wide variety of nutritional approaches, while maintaining a focus on what is truly important when it comes to long term health. It is not designed to be the perfect diet, an religious dogma, or an all encapsulating solution. In my practice with private clients, I use far more specific protocols and strategies to enhance health and achieve particular goals. But the WHOLE principles of healthy eating are the foundation upon which all other protocols and decisions are built.

For more information about specific approaches to specific challenges please visit us at www.thrivehm.com.

What follows are a few further principles I feel are important to include. I said above that how we eat is as important as what we eat. The following few principles attempt to tend to this issue. In a similar way to those above.

Eat The Universe.

This principle is borrowed from a small book by monk, meditation teacher and thinker Thich Nhat Hanh. The book is called "How to eat" and I highly recommend it as light but thoughtful reading.

Nothing comes from nothing. Even a single grain of rice contains the entire universe. It contains the sunlight, the water, time, energy, the farmers care, and is literally made from stardust, as all atoms are, including the ones that make up our bodies. It will become a part of us, very literally.

Eating mindfully, and realising that each mouthful contains so much, has an impact on so much, allows us to be fully appreciative of not only the food we eat and the impact that it will have on our bodies. But also of the impact that these choices will have on the globe and the people in it as a whole.

When we eat mindfully our bodies are more likely to be in a parasympathetic state. Meaning that the side of our autonomic nervous system that puts us in a stress state (the sympathetic branch) is calmed. In this state more blood is available for our gut, whereas in a stress state blood is diverted to the muscles. Our gut is in a state far more conducive to digestion and absorption of nutrients. This aids our digestion and our physical health along with it.

Taking a moment to reflect on the broader context making up the food we eat helps us to slow down, contemplate our choices a little deeper, and be more connected to the food, planet, and impact of our choices.

Chew your food, not your worries.

Again borrowed from Thich Nhat Hanh, and again related to mindful eating, this principle can be really quite impactful for many people in the modern, relentless world. Those of us who are driven, working in stressful and high pressured roles, or ambitiously pursuing a goal, will often be guilty of poor eating habits. Not necessarily in relation to food choices, but to our state of being while eating, our focus of attention while eating, and our practice of the physical act of eating.

Eating with presence and good practices can bring us maximum appreciation of our food. Including in terms of taste and pleasure, digestion and absorption, appreciation of the thousands of events that led to us eating that particular bounty, and in terms of the respite a mealtime can provide from our stressors.

Yet many of us are completely mentally absent when we eat. Effectively, "chewing our worries" instead of our food. Our minds occupied by our anxieties about the future, ruminating on the past, or consumed by the work in front of us as we eat lunch at our desks.

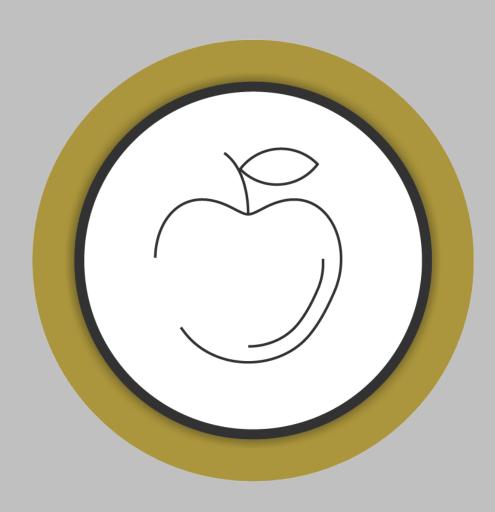
Not only is this state in-conducive to full appreciation of the food and flavours we are consuming at that time. But also these practices tend to put us into a sympathetic state. Activating the stress and action side of our nervous system, and quieting the rest and digest branch our of nervous system. This state of being while eating will divert blood away from our gut, and hinder digestive function. This, in turn, leads to poor nutrient absorption and many gut related woes from IBS to overeating.

Furthermore, this inner state while eating robs us of some of the hidden value of enjoying a good meal in a more social, mindful, or peaceful state. Namely the chance to punctuate our days with pockets of mindful presence in parasympathetic states. The practice of eating meals seated, not working, maybe socially, with people who's company you enjoy, not talking about work, will add far more than you lose in terms of "productive" time. This practice can help you improve per hour productivity in the time following the break. Along with reducing stress, and stress's impact on the nervous system and mind. It can make you a more effective communicator, and even lead to more "eureka" moments.

When following the above rules of only eating meals, and avoiding snacks, it is good to practice these two principles of how to eat. After all, how one eats is inextricably linked to what one eats, and the two factors are interdependent. In my experience clients are often surprised when I ask about how they eat. In the west I feel we give far too little thought to this element of our health. Cultivating healthy practices around how we eat can have significant impact on the quality of our nutrition and overall health. Similarly, neglecting this element of our diets can have significantly negative impacts, even in spite of our best efforts with food selection.

Closing words on food.

Every single cell in your body, every chemical and each one of the trillion chemical reactions that happen every second to keep us alive. Achieving good nutrition while also respecting the other elements food represents in our lives is key to achieving great health, long life, and vitality. Here I have attempted to give you a simple, easy to remember framework for achieving just that. The WHOLE principles or healthy food are a heuristic intended to make navigating the wide ranging and highly variable circumstance in which you make decisions about food. I hope you establish these, and build on them to find your path towards wellness.



FOOD