



## **Nutrition & Wellness eBook**

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LifeUpright emphasises optimal wellness with attention paid  
to the major elements of your life:  
nutrition, fitness, mindfulness, and relationships.

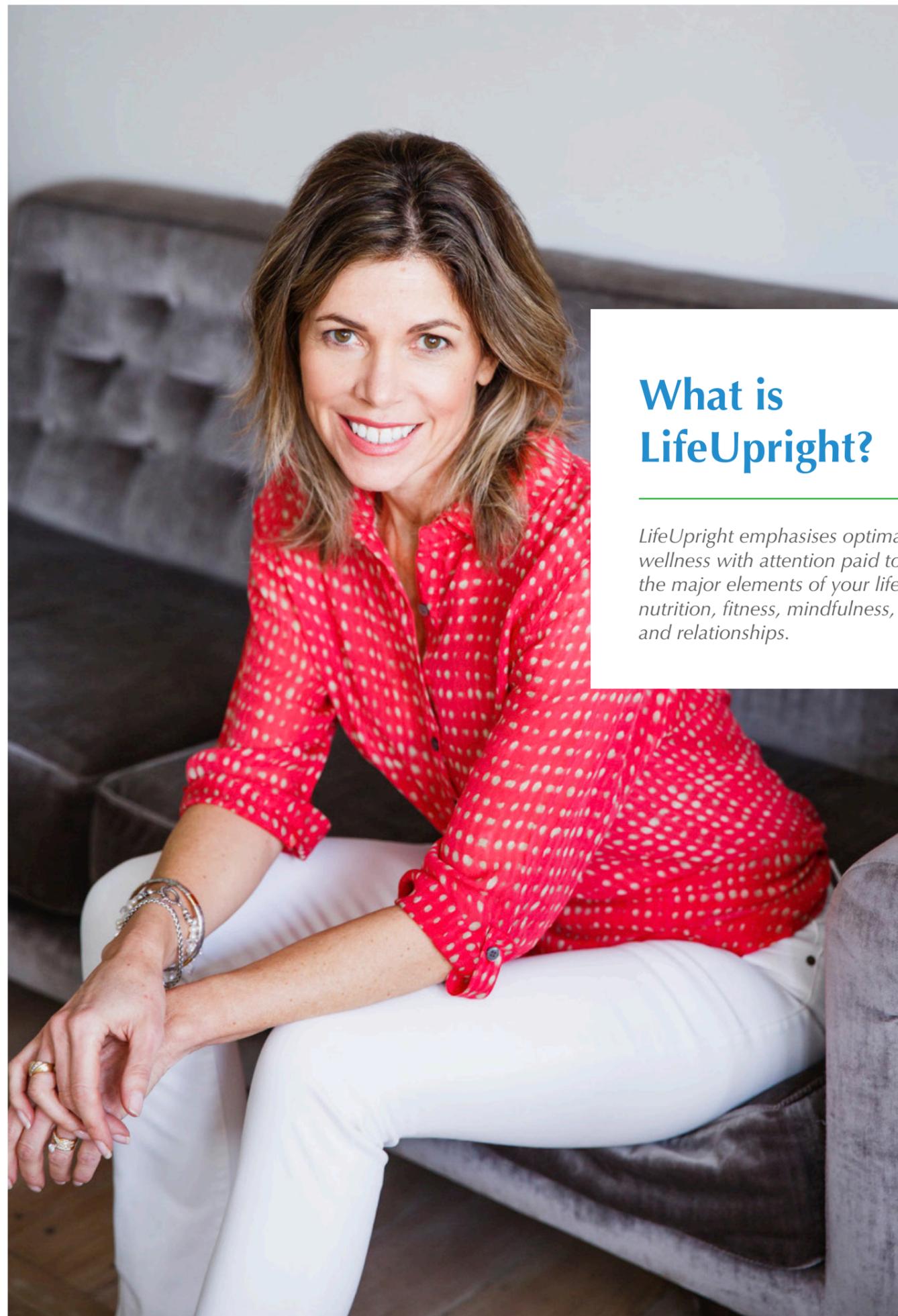
[www.lifeupright.com](http://www.lifeupright.com)



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## What is LifeUpright?

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*LifeUpright emphasises optimal wellness with attention paid to the major elements of your life: nutrition, fitness, mindfulness, and relationships.*

*This program introduces strategic living; being PROACTIVE instead of REACTIVE in managing and directing your life. Your journey with LifeUpright begins with a lifestyle and nutrition analysis, which is the gateway to a personalised, science-based, Thirty40Thirty Nutrition Plan.*

*Life often brings surprises, but having thoughtful strategies in place will give you the opportunity to better manage what life gives you. Other topics are introduced to aid your nutritional foundation to bring a state of balance to the other areas of your wellness.*



#### **Nutrition**

The Thirty40Thirty program promotes increased energy levels, control of appetite, peak mental and physical performance, loss of excess body fat, the ability to manage stress better and deceleration of the aging process. Learn to eat in a way that controls hormonal responses to foods that will balance blood sugar levels and help prevent future chronic disease.



#### **Fitness**

The Thirty40Thirty nutrition program fuels your body for exercise and trains your body to burn fat more efficiently. Learn to work smarter not harder to build lean muscle and decrease excess body fat. Use strategies to improve posture and flexibility as well as ways to detox the body from daily stress and physical activity.



#### **Mindfulness**

Learn to be more confident and self-aware through better posture and effective ways to present yourself. Maximise your strengths and improve or minimise your weaknesses. By managing hormonal responses through Thirty40Thirty nutrition, you can experience a greater sense of calmness, a balanced spirit, self-control and a more restful night's sleep.



#### **Relationships**

Often an overlooked element of overall wellness, LifeUpright promotes ways to strengthen relationships and manage difficult or strained ones so you are less affected by them. Through Thirty40Thirty nutrition, stress can become more manageable through balanced blood sugar, lower cortisol levels and mental clarity.

# What is Thirty40Thirty Nutrition?

*It is the metabolic state in which the body works at peak efficiency. Your body will be brought into a balanced state of wellness, ultimately giving you better control of your health.*



## Why does balance even matter?

Our bodies are designed with specific hormones that act as messengers to tell the body to respond to the foods we eat.

For instance, our hormones send messages to tell our body to “store fat” or “release fat.” By learning how and why they respond to what we consume, we are better equipped to control our health.

## What can you expect?



**Optimal body function**



**Freedom from hunger**



**Increase in energy**



**Healthy immune system**



**Increase in physical performance**



**Improved mental focus & productivity**

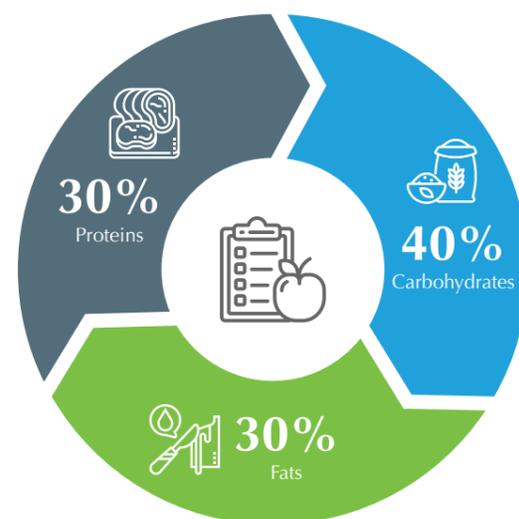


**A better night's sleep**

## How is this done?

The human body is constantly seeking balance, or homeostasis, all on its own. By balancing proteins, carbohydrates and fats in a 30-40-30 percent of calorie structure, your body is able to stabilise your hormones naturally.

Therefore, Thirty40Thirty Nutrition works in harmony with the body's natural tendencies, rather than against it. This creates an internal environment allowing for optimal physical health.



## Eicosanoids (Eye-CA-senoids)

These are the “master” hormones, which heavily influence virtually all systems in the body, such as the cardiovascular system, central nervous system, immune system, reproductive system, etc.

Some of the major functions eicosanoids control include:

- Inflammation
- Brain
- Heart
- Immune system
- Blood pressure
- Sleep cycle

Eicosanoids are controlled by the dietary fat consumed as well as your balance or imbalance of proteins and carbohydrates consumed. You produce both “good” and “bad” eicosanoids, similar to good and bad cholesterol. Your body requires both to survive.

With Thirty40Thirty nutrition, your body can produce more of these “good” eicosanoid hormones to help promote optimal body function.

## Insulin and Glucagon

These are both hormones that the pancreas secretes to control our blood-sugar

Maintaining normal blood glucose depends on a balance between insulin and glucagon production. They ultimately control:

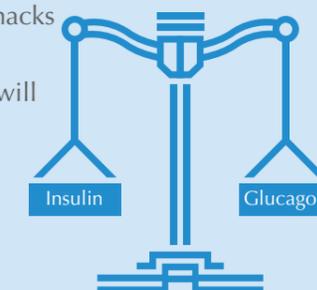
- Hunger
- Energy
- Physical performance
- Brain function

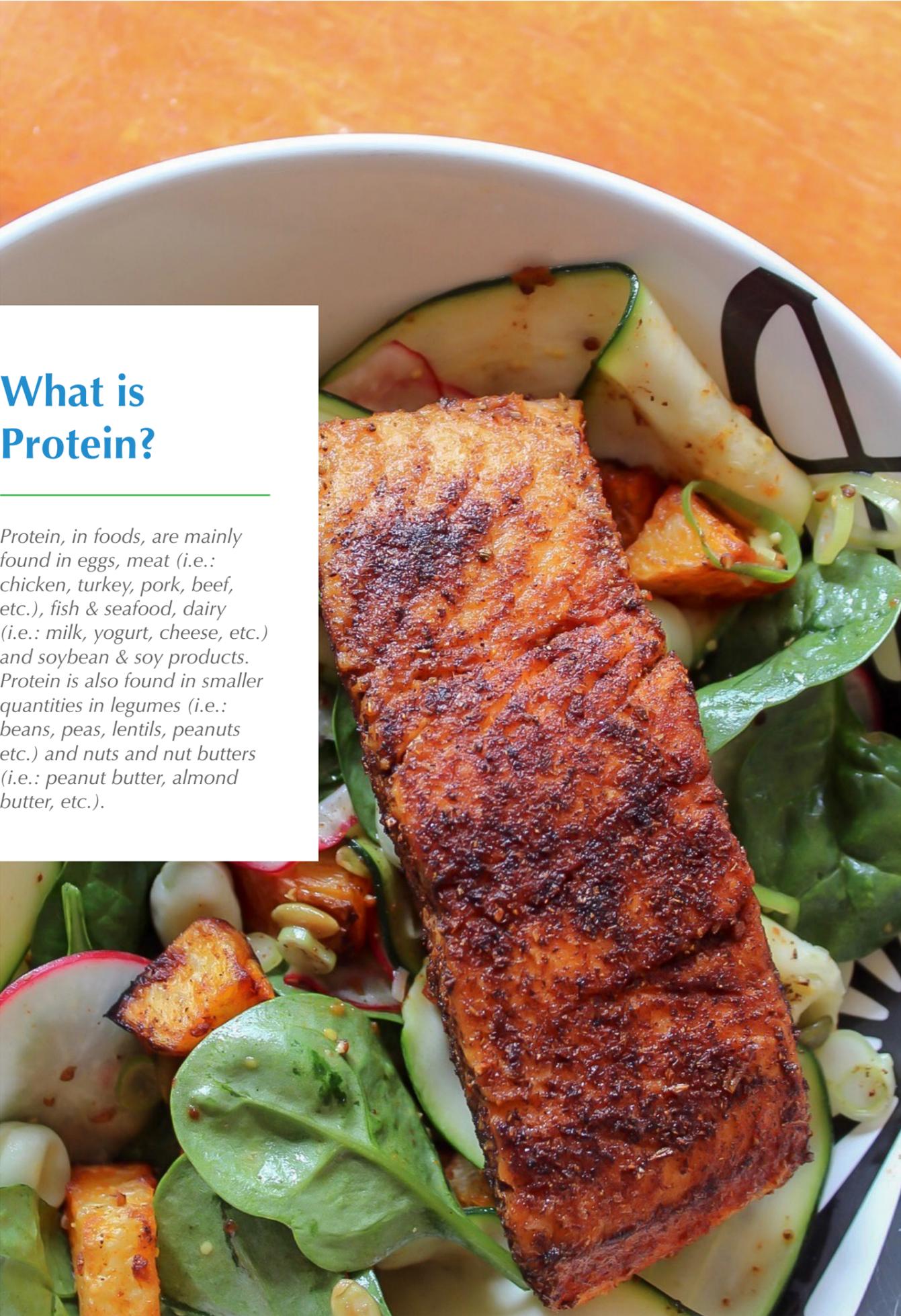
After a meal, your blood sugar rises. The body secretes insulin to lower it. Once released, insulin gathers the blood sugar and sends it to the brain and liver to be used or stored, with any excess being stored in the fat tissue.

The body secretes glucagon to raise blood sugar and control insulin production.

Acting like a gatekeeper, glucagon releases stored blood sugar as the body needs energy in between meals and snacks and during sleep.

Thirty40Thirty nutrition will teach you how food can balance these two opposing hormones.





## What is Protein?

Protein, in foods, are mainly found in eggs, meat (i.e.: chicken, turkey, pork, beef, etc.), fish & seafood, dairy (i.e.: milk, yogurt, cheese, etc.) and soybean & soy products. Protein is also found in smaller quantities in legumes (i.e.: beans, peas, lentils, peanuts etc.) and nuts and nut butters (i.e.: peanut butter, almond butter, etc.).

**PROTEIN** is more plentiful in our bodies than any other substance besides water. As much as one-half of your dry body weight – including most of your muscle mass, skin, hair, eyes, and nails - is made up of protein.

Protein is the main structural ingredient of our cells, and the enzymes that keep them running. Even our immune system is essentially composed of protein.

### Why do we need to eat protein?

Amino acids, the building blocks of protein, are the foundation of all life. There are 20 of these vital amino acids. Nine of them, known as the essential amino acids, cannot be created by the human body and must be supplied by the diet.

Without amino acids constantly entering the body, the rates of new protein formation will slow down and could stop entirely. This is why we require a continual intake of protein.

### Are all proteins the same?

No, different proteins enter the bloodstream at different rates.

#### Animal sources:

- All meat, fish and seafood, egg, milk, cheese and yogurt.
- These proteins have no fiber, giving them a higher degree of digestibility. This means they will enter the bloodstream faster.

#### Vegetable sources:

- Beans, peas, lentils, peanuts, nuts, nut butters and soy products.
- There is fiber in vegetarian sources of protein. This decreases its digestibility and the body's ability to absorb its constituent amino acids. Undigested protein simply passes through the body unless chemically processed to strip away fiber as is the case with vegetable protein powders.

### Can you eat too little protein?

Low protein diets may cause malnutrition. Malnutrition leads to a weakened immune system, loss of muscle mass and hair loss. The worst side effect of eating too little protein in relation to carbohydrates is the overproduction of bad eicosanoids, which as discussed previously, may lead to a number of negative health issues.

### Can you eat too much protein?

High protein, low-carb diets seem to, at least in the beginning, help you lose weight; however, eating this way may cause harm to your body. Too much protein can induce an abnormal metabolic state known as ketosis. This occurs when you don't have enough carbs stored in the liver to meet the requirements of the brain and body.

Once the carbs are used up, the body turns to fats to supply energy. Unfortunately, eating this way causes your cells to manufacture abnormal biochemicals called ketone bodies. Your body has no use for these so it tries to get rid of them through increased urination. This means weight loss at first, but the vast majority of the weight loss is merely water.

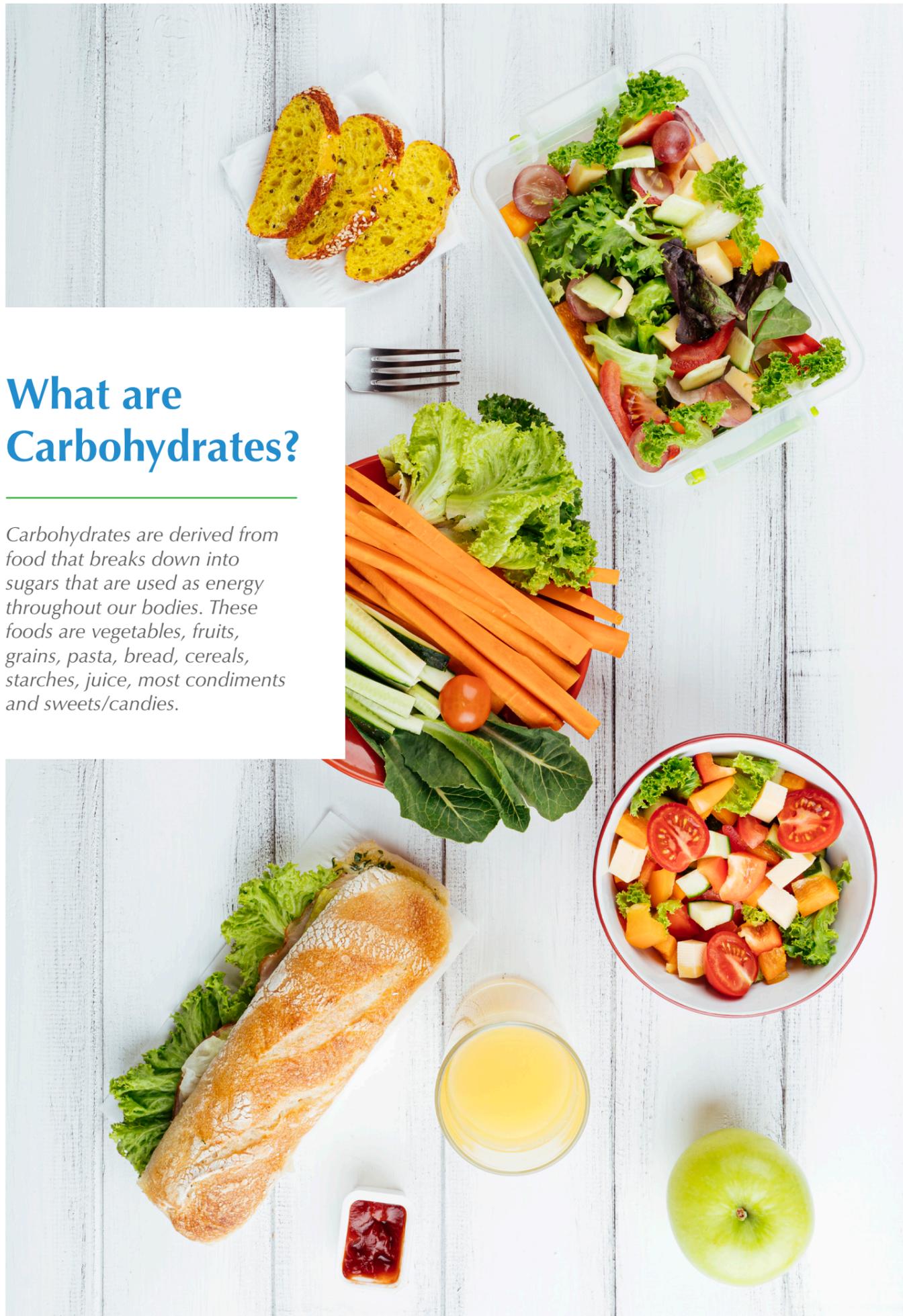
### How do your hormones respond to protein?

Protein primarily stimulates the hormone glucagon and has an effect on the hormone insulin. Glucagon, just like insulin, is secreted by the pancreas. But that is where the similarities end. Glucagon and insulin are polar opposite in how they affect blood sugar levels in the bloodstream.

While insulin lowers blood sugar, glucagon raises it by causing the liver to convert stored glycogen back into glucose, which is then released into the bloodstream. By eating too much or too little protein your blood sugar becomes unbalanced. When following the Thirty40Thirty nutrition plan, insulin and glucagon work together to maintain a balanced state of body wellness.

## What are Carbohydrates?

Carbohydrates are derived from food that breaks down into sugars that are used as energy throughout our bodies. These foods are vegetables, fruits, grains, pasta, bread, cereals, starches, juice, most condiments and sweets/candies.



**CARBOHYDRATES** break down into sugars called glucose, fructose, and galactose. The body requires a continual intake of them, although when consumed in excess will be stored as fat.

### Why do we need carbohydrates?

Carbohydrates benefit the body:



Provide energy for our brain and muscles.



Control blood sugar.



Provides fiber to aid in digestion, weight management, satiety (feeling full from food).



Contributes to flavor and texture of food. Sugar provides sweetness.

### Why does our brain need carbohydrates?

Glucose occupies 2% of your body weight and your brain consumes up to 50% of it. Your brain needs glucose for all of the complex thoughts and emotions it creates.

Without adequate levels of glucose, hypoglycemia occurs, or low blood sugar; your brain will urge you to find a quick source of high-sugar food to quickly restore the glucose level. This urge often is mistaken as lack of willpower; when in fact, it is simply your hormones demanding action to restore balance in blood sugar levels.

Some consequences of having an inadequate supply of carbs for the brain are irritability, brain fog, dizziness and fatigue.

### What happens to the glucose not used by your brain?

Any glucose not needed right away gets stored in the liver and muscles. Stored glucose is called glycogen.

Carbohydrates that are consumed in excess to what can be used immediately or stored in the liver and muscles will be converted into fat and stored in fat tissue.

### What does our liver do with carbohydrates?

The liver is a storage site for the glucose stored (glycogen). The liver has a limited capacity for glycogen storage and can be depleted within 10-12 hours.

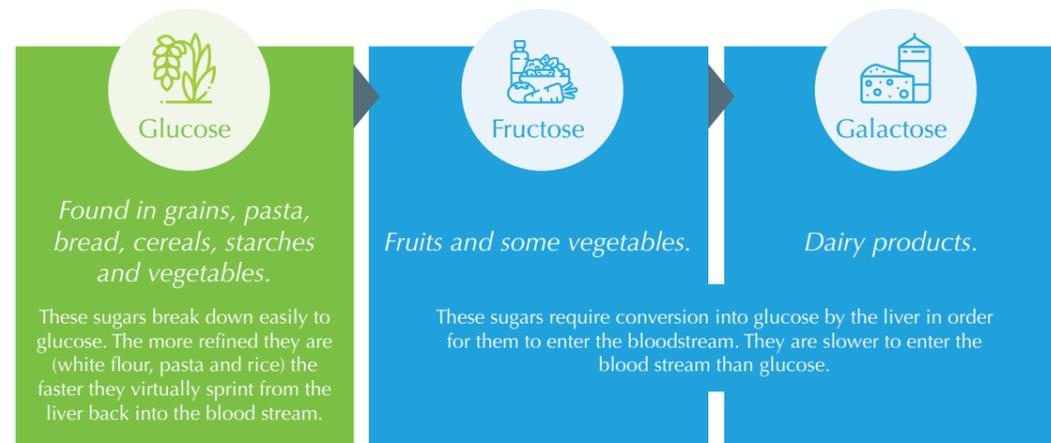
So, the glycogen reserves in the liver must be maintained on an ongoing basis. Our brain can only access glycogen that it needs from the liver (not the muscles) to replenish its supply in order to maintain adequate blood sugar levels for proper brain function.

### How do our muscles use carbohydrates?

Your muscles use carbs in the form of glycogen for energy that fuels muscle contractions for movement (exercise). Muscle contractions require a chemical energy source called adenosine triphosphate, or ATP, that your body will produce. This energy source is rapidly used up as you exercise and has to be replaced if you want more muscle contractions.

## Are all carbohydrates the same?

No, carbohydrates have to be broken down into simple sugars in order for them to be absorbed. These sugars are glucose > fructose > galactose.



## What is a glycemic index?

The rate in which a carbohydrate is broken down into glucose to enter the bloodstream is known as its glycemic index. The lower the index number, the slower the rate of entry; the higher the index number, the faster the rate of entry.

The glycemic index directly impacts whether a carbohydrate is considered 'favorable' meaning it has a low index, or an 'unfavorable' meaning it has a high index.

A complete list of favorable and unfavorable carbohydrates is listed on the next page. Furthermore, a glycemic load is the rate in which the combination of all foods eaten together in a meal or snack breaks down into glucose to enter the bloodstream.

## What impacts the entry rate of the sugars?

Three things impact the entry rate: the structure of the simple sugar, the fiber content and the fat content.

### Structure:

- is whether it is glucose, fructose, or galactose (as shown on the chart on previous page.)

### Fiber content:

- acts like a brake on the entry rate of a carb into the bloodstream. The higher the fiber content, the slower the rate of entry. When looking at a label, subtract the fiber count from the carb count to get the net carbs of the food.

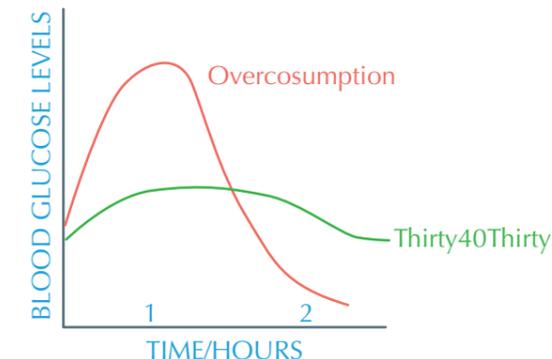
### Fat content:

- slows down the entry rate of a carb. When eating fat-free food, you'll get a quick sugar high that rapidly wears off and tends to have you reaching for more of that same food; whereas a food with fat would give you a feeling of satisfaction because of the slower rate of entry into the bloodstream.

## What is the hormonal response to Carbohydrates?

Overconsumption of carbohydrates relative to protein causes a rapid rise in blood glucose initially (red line). Soon after, within 2 hours, blood glucose will quickly fall along with energy levels and mental focus while hunger levels will increase. How quickly it rises and falls depends on the individual's unique biochemistry.

Thirty/40/Thirty balance will provide steady blood glucose levels maintaining energy, satiety (feeling of fullness), fat-burning and mental focus (green line).



## Do carbohydrates make you fat?

Not necessarily. Your body needs carbs for energy. It is when excess is consumed, beyond what is used immediately or filled up in storage, that will end up being converted into fat and remain there.

Consuming the right carbs in the correct amounts in addition to other foods will give your body proper energy and brain function.

## Unfavourable Carbs

Vegetables	Grains & Breads	Condiments
Acorn squash	Bagel	BBQ sauce
Beetroot	Barley	Ketchup
Butternut squash	Biscuit	Cocktail sauce
Carrots	Baked potato	Honey
Corn	Bread crumbs	Jelly
French Fries	Bread	Plum sauce
Sweet potato	Bread stick	Molasses
Potato	Buckwheat	Pickle
	Bulgur wheat	Relish (sweet)
<b>Beans/Lentil</b>	Cereal	Steak sauce
Baked beans	Corn bread	Brown sugar
Lima beans	Cornstarch	Granulated sugar
Pinto beans	Croissant	Confectioners' sugar
Refried beans	Crouton	Maple syrup
	Donut	Teriyaki sauce

## Favourable Carbs

Vegetables	Fruits
Alfalfa sprouts	Apple
Artichoke	Apple sauce
Asparagus	Apricots
Black beans	Blackberries
Bok Choy	Blueberries
Broccoli	Cantaloupe
Brussel sprouts	Cherries
Cabbage	Fruit cocktail
Cauliflower	Grapefruit
Celery	Grapes
Chick peas	Honeydew
Collard greens	Kiwi
Cucumber	Lemon
Dill pickles	Lime
Eggplant	Mandarin

### Unfavourable Carbs

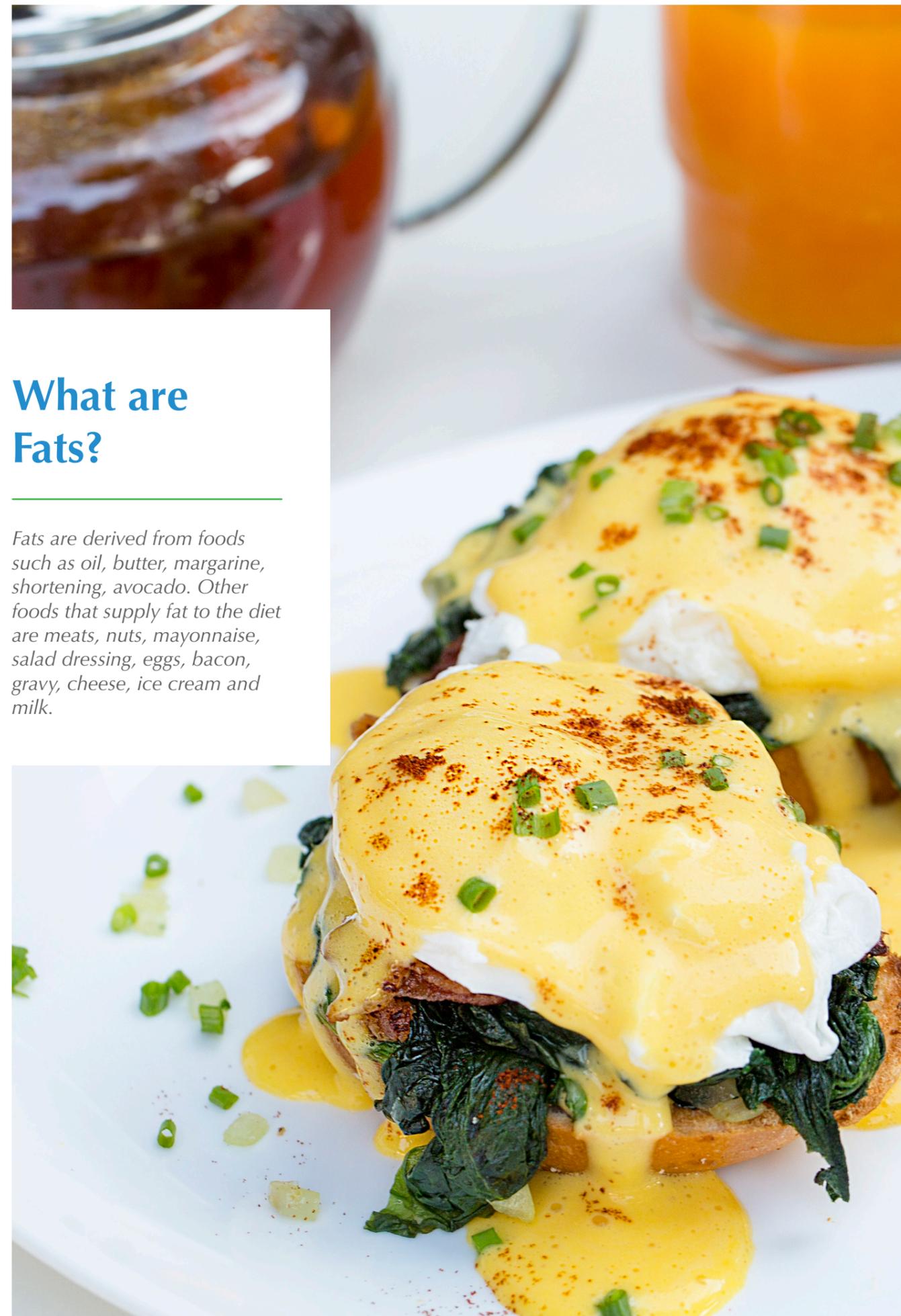
Vegetables	Grains & Breads	Condiments
Banana	English muffin	Chocolate bar
Cranberries	Flour	Corn chips
Cranberry sauce	Granola	Graham crackers
Dates	Grits	Ice cream
Figs	Muffins	Potato chips
Guava	Noodles	Pretzels
Kumquat	Instant oatmeal	Tortilla chips
Mango	Pasta	Saltine crackers
Papaya	Pancake	
Prunes	Pita bread	
Raisins	Popcorn	
	Rice	
<b>Fruit Juice</b>	Rice cakes	
Apple juice	Hot dog bun	
Cranberry juice	Hamburger bun	
Fruit punch	Taco shell	
Grape juice	Tortilla, corn	
Grapefruit juice	Tortilla, flour	
Lemon juice	Waffle	
Orange juice		
Pineapple juice	<b>Alcohol</b>	
Tomato juice	Beer	
	Liquor	
	Wine	

### Favourable Carbs

Vegetables	Fruits
Green beans	Nectarine
Kale	Orange
Kidney beans	Peach
Leeks	Pear
Lentils	Pineapple
Lettuce, iceberg	Plum
Lettuce, romaine	Raspberries
Mushroom	Strawberries
Onions	Tangerine
Peppers/Capsicum	Watermelon
Radishes	
Sauerkraut	<b>Other</b>
Snow peas	Hummus
Spaghetti squash	Oatmeal, slow cooked
Spinach	Salsa
Tomato	
Yellow squash	
Zucchini	

## What are Fats?

Fats are derived from foods such as oil, butter, margarine, shortening, avocado. Other foods that supply fat to the diet are meats, nuts, mayonnaise, salad dressing, eggs, bacon, gravy, cheese, ice cream and milk.



FAT is an essential part of our diet that we simply cannot live without. Fat is two and a half times more efficient as a source of energy than carbohydrates alone. But the most important things to know about fats are whether or not they are good for you and which ones to consume the most.

### Why do we need fat?

Carbohydrates benefit the body:



Provides immediate energy



Provides energy reserve



Forms major component of cell membrane



Nourishes skin and hair



Insulates the body to keep it warm



Cushions vital organs for protection



Provides raw material to absorb Vitamins A, D, E and Ka

Fat benefits our food in 4 ways:



Provides calories



Slows down absorption of carbs



Tells our brain that we are full and to stop eating



Flavours our food to taste better

Fat supplies the building blocks for eicosanoids. Eicosanoids, as we discussed previously, have a huge impact on our body. By choosing healthy fats such as olive oil, avocado, nuts, seeds, lean cuts of beef, skinless chicken, fish, fewer egg yolks and low fat cheeses, more good eicosanoids will be produced than bad ones.

Unlike carbohydrates, fat has no impact on insulin. A palmful of nuts is a good quick snack when you are on the go and don't have time to eat. If/when you reach the point of your desired weight and continue to lose weight, then it is time to add a little more healthy fat to your diet.

This addition will help you maintain the desired weight without causing weight gain – consider it a bonus for reaching your desired weight!

### Aren't all fats the same?

No, from worst to best:

#### Trans Fat

- Trans Fat is a result of healthy oils being turned into solids that will never spoil. This allows for a longer shelf life. Avoid products made with trans fats as they may increase inflammation and harmful LDL cholesterol, which in turn may block arteries, causes heart disease and reduces the effects of good HDL cholesterol. Look for "PARTIALLY HYDROGENATED" or "HYDROGENATED" oil on the ingredient label. If a product contains less than one gram of trans fat, companies are allowed to label it as zero.

#### Saturated Fat

- Saturated Fat is solid at room temperature, think of bacon grease. Saturated fat may also cause inflammation, increase LDL cholesterol and reduce beneficial HDL cholesterol. While some saturated fat is okay, it should not be your most significant form of fat. Saturated fats should be limited to less than 10% of daily caloric intake.

#### Triglycerides

- Triglycerides are fats found in the blood stream & body tissues. Triglycerides are taken from the diet or can be formed in the body. Consumption of fatty red meat, poultry skin, butter, lard, high-fat dairy and shellfish as well as alcohol and processed carbohydrates all contribute to triglyceride levels.
- High triglyceride levels are associated with coronary artery disease as well as linked to an increased risk of pancreatitis (inflammation of the pancreas). As mentioned before, when carbohydrates, proteins and/or fats are consumed beyond what can be used or able to fit into storage, the body stores the excess as fat in the fat tissue (adipose tissue).

- Regularly eating more calories than you burn will cause triglycerides to increase which may lead to heart disease, stroke, obesity and diabetes.

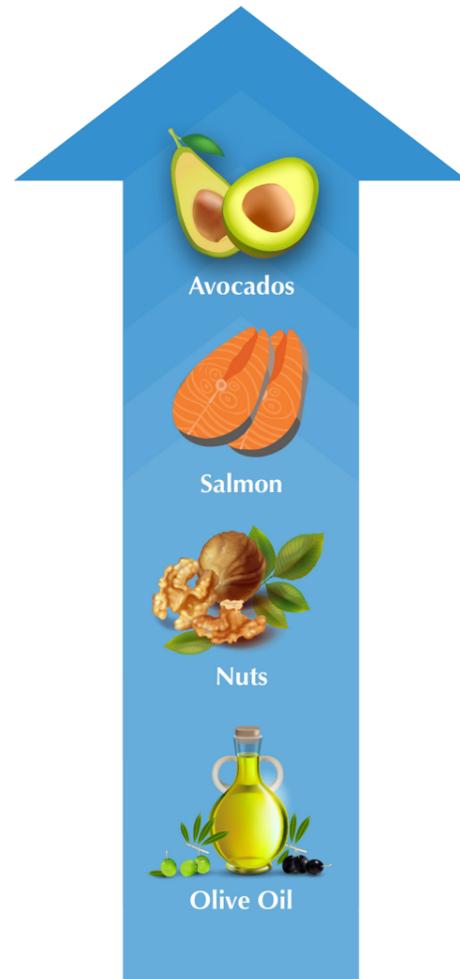
#### Polyunsaturated Fat

- Polyunsaturated Fat is liquid at room temperature and extracted from plant sources like sunflowers, safflowers, soybean and corn.
- They are healthier than saturated fats and have been linked to healthy heart benefits. However, these fats, when eaten in excess, may speed up the growth of cancer cells due to their higher content of omega 6 fatty acids in relation to omega 3 fatty acids.

#### Monounsaturated Fat

- Monounsaturated Fat is liquid at room temperature, but will solidify if refrigerated. They are the best kind of fat, since they may help reduce the amount of cholesterol in your bloodstream.
- These fats contain a favorable amount of omega 3 fatty acids in relation to omega 6.

### Good Fats (Omega-3)



### Bad Fats (Omega-6)



Dietary fat is a significant part of the Thirty40Thirty nutrition program. Choosing a majority of fats that are higher in omega-3 fatty acids (green arrow) as opposed to fats that are higher in omega-6 fatty acids and saturated fat (red arrow) will provide your body with the right balance of good to bad eicosanoids for optimal body wellness.

This concludes the basics to the LifeUpright Introduction on Nutrition. Your personalized Thirty40Thirty Nutrition Plan will be

presented next, followed by weekly phone appointments discussing how your plan can best accommodate your lifestyle. Furthermore, weekly topics will be discussed to enhance your wellness management.

You are on your way to a new, healthier, more energetic YOU!



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