



FITNESS & NUTRITION EXPERT PROGRAM

NUTRITION SESSION 2: Blood Sugar Management, Cholesterol and more!



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Nutrition Session 2: What we are going to cover

BLOOD SUGAR MANAGEMENT

- Understanding what happens in our bodies, the role of insulin and glucagon and the Glycemic Index and Glycemic Load

LOW GLYCEMIC EATING

- The Complete in 3 rule and how it applies to your clients

CHOLESTEROL

- What it is, why we need it and how to manage and what could be causing it other than diet


THE ESSENTIAL FATS

- More on EFAS, how to store and cook with fats and what they do

FOOD ALLERGIES AND INTOLERANCES

- What they are, gluten and dairy

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A HEALTHY
OUTSIDE
STARTS FROM
THE INSIDE.
- Robert Urich -

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What you need before we start:



1. Water
2. Put your finger tips together
3. Take 3 deep breaths



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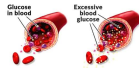
Blood sugar management and why it's important!



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What is blood sugar?

- Your body's main and preferred source of fuel is glucose (sugar).
- We get this in our diet by eating carbs. All carbs (the good and the bad!) break down to sugar in the body except fibre.
- Fats are secondary source of fuel BUT it is easier for your body to convert glucose to energy so it will always burn that FAST & FIRST ...glucose is your "go to source"
- The body needs to have a certain amount of glucose (sugar) circulating in the system (blood) and also in storage form for later use when glucose is not coming in through the diet, in order for all bodily functions to take place.
- The circulating glucose available for immediate energy use at any time is called blood sugar

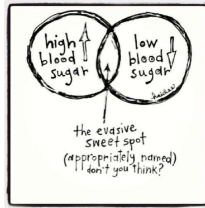


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WHAT ARE BLOOD SUGAR LEVELS?

In order to keep energy stable, there need to be approx. 4g of circulating glucose in the blood at all times

- Higher or lower than 4g causes immediate energy imbalance
- Short term not ideal but long term = DANGER
 - A leading cause of weight, health & mental issues with the most significant being diabetes



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What hyperglycemia & hypoglycemia?

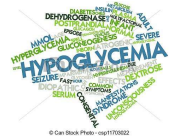
HYPERGLYCEMIA

- An elevated level of blood sugar is referred to as **hyperglycemia**
- **Symptoms of hyperglycemia include:** fatigue, lack of mental clarity (brain fog), aches and pains, extreme thirst and symptoms of dehydration, excessive urination, loss of appetite.

**These are the same symptoms you will find in type 1 and type 2 diabetes.*

HYPOGLYCEMIA

- A blood sugar level that is too low is referred to as **hypoglycemia**.
- **Symptoms of hypoglycemia include:** dizziness, feeling shaky, sweating, anxiety, panic, lack of mental clarity, hunger, in extreme cases fainting



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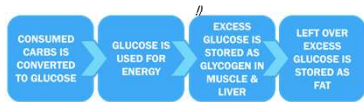
What is glycogen?

- Since glucose is the main fuel for the body there needs to be a backup supply in case of shortage in the diet.
- The storage form of glucose is called **glycogen**.
- **It is stored in 2 places in the body for later use: The Liver & Muscle**
- We store about 500-600g of total glycogen in the body, this can vary slightly from person to person, ~100g in the liver and ~400-500g in the muscle tissue.
- We store it in these two areas because these are the places that need to access glucose the quickest.
 - Shortage of glucose circulating in the blood, the liver will break apart glycogen to make glucose and release it into the bloodstream.
 - When we engage in vigorous or long term activity the muscles cells will break down glycogen into glucose for immediate energy in that area.

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Why is Blood Sugar Management important to weight loss?

Because if your body has too much sugar in the blood and can not effectively store or use it as energy, it gets stored as FAT!



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This is why our society is so overweight & is not losing...

Eating a super carb heavy diet = too much blood sugar = nowhere to store = body stores as excess body fat!



(Important- This is why calorie counting does not work for long term weight loss without macronutrient balance (ie balance of protein, carbs & fat). Even if you aren't eating a ton BUT eating too many carbs, your blood sugar will be out of whack & your body goes into storage mode! We MUST balance blood sugar for weight loss or it will always be a losing battle.)

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NUTRITION LINGO....

let's recap the macronutrients to understand their role on blood sugar!

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Macronutrients

NUTRIENTS

- Nutrients are substances needed for growth, metabolism, and for other body functions.
- There are 2 types: macronutrients & micronutrients

MACRONUTRIENTS

- Macronutrients are nutrients that provide calories or energy and we need for survival.
- There are three macronutrients:
 1. Carbohydrate
 2. Protein
 3. Fat

Need to remember? Think "macro" means large ie macronutrients are nutrients needed in large amounts.



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Carbohydrates (Impacts blood sugar A LOT!)

- Made of carbon & water.
- 4 calories / gram
- The body's main (and preferred) source of fuel and are easily used by the body for energy.
- All of the tissues and cells in our body can use glucose for energy.
- Needed by the central nervous system, the kidneys, the brain, the muscles (including the heart) to function properly.
- Can be stored in the muscles and liver and later used for energy.
- Are important in intestinal health and waste elimination.
- Found in starchy foods (like grain and potatoes), fruits, milk, and yogurt. Other foods like vegetables, beans, nuts, seeds and cottage cheese contain carbohydrates, but in lesser amounts.

2 TYPES:

- Simple Carbs (these end in "ose" like glucose ie sugar and burn fast & first.
- Complex Carbs (these are starches and fibre and are slower to burn for energy)



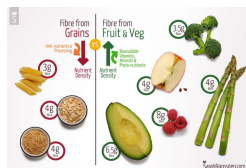
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Fibre (does not impact blood sugar)

- refers to certain types of carbohydrates that our body cannot digest
- These carbohydrates pass through the intestinal tract intact and help to move waste out of the body

2 TYPES of fibre

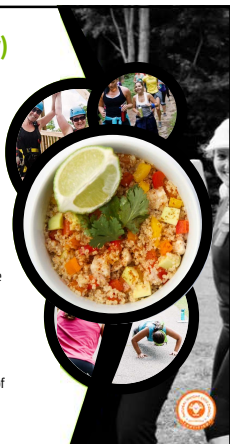
- Insoluble= increase bulk (like stalks, leaves and seeds)
 - Soluble= get to help you absorb nutrients more slowly (like flax, psyllium husk)
- While they don't provide energy, SUPER important to overall health, digestion, weight loss and more.



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Protein (impacts blood sugar slightly)

- Protein is the building blocks of your body and made up of amino acids with 4 calories per gram
- We need protein for:
 - Growth (especially important for children, teens, and pregnant women)
 - Tissue repair
 - Immune function
 - Making essential hormones and enzymes
 - Energy when carbohydrate is not available
 - Preserving lean muscle mass
- There are 22 amino acids
 - 8 "essential" amino acids . Essential means they cannot be made from body and we have to get from food.
- Protein that comes from animal sources contains all of the essential amino acids that we need.
- Plant sources of protein, on the other hand, do not contain all of the essential amino acids.



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Fats (Do not impact blood sugar)

9 calories / gram

We need fat:

- Normal growth and development (esp the brain in kids!)
- Energy (fat is the most concentrated source of energy)
- Absorbing certain vitamins (like vitamins A, D, E, K, and carotenoids)
- Providing cushioning for the organs
- Maintaining cell membranes
- Providing taste, consistency, and stability to foods
- Brain health, hormonal balance, weight loss and so much more!



5 main types of fat:

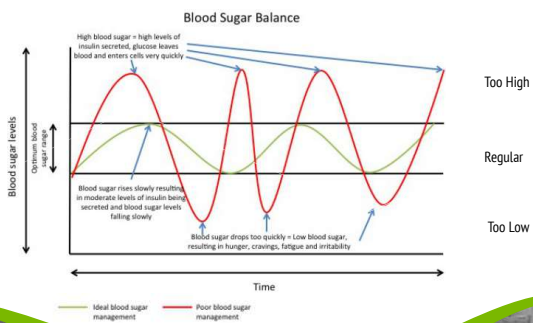
- Saturated (ie butter, coconut, found in meat)
- Unsaturated (ie olive oil, flax oil, salmon etc)
- Trans Fat (processed foods, margarine, etc. BAD!!)

Like proteins "essential" fatty acids can not be made in the body and we have to get from what we eat.

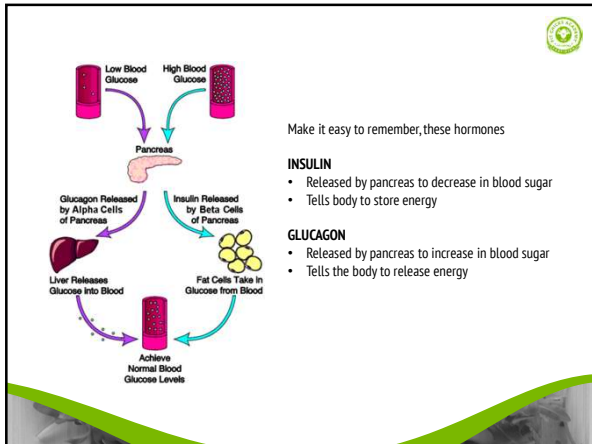
FAT DOES NOT MAKE YOU FAT!!

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Blood sugar management



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WHAT HAPPENS WHEN BLOOD SUGAR IS BALANCED?

Example 1: You eat a meal of white rice and veggies

- You have glucose in the blood
- Insulin is released.
- Insulin takes glucose we haven't used for energy from the blood and stores it in the cells.
- If cells are full and we haven't burned it off, it goes to fat stores

Example 2: It has been 6 hours since you ate your white rice and veggies.

- Your blood sugar is low and low insulin levels.
- Glucagon levels are rising because it knows you need energy and there is no food.
- Without this quick energy source, your body will soon grow fatigued; it's time to **tap into your fat cells**.
- It tells the cells to start the beta oxidation process (ie turning fat into FUEL!)

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So what is the problem?
IMBALANCED BLOOD SUGAR!

And this causes weight gain, hormone probs, bad skin, mood disorders and so much more!

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Understanding the role of carbohydrates on blood sugar management

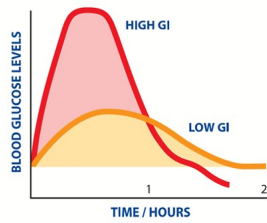
Remember, protein has a small impact on blood sugar but fat does not...

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The Glycemic Index

The Glycemic Index (GI) is a scale that ranks carbohydrate-rich foods by how much they raise blood glucose (sugar) levels compared to a standard food

The standard food is white bread of sugar at 100 on the GI.



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CHAPTER 42
Glycemic Index

FOODS WITH A LOW GLYCEMIC INDEX, SUCH AS APPLES, ARE ABSORBED SLOWLY ALONG THE ENTIRE LENGTH OF THE SMALL INTESTINES, RAISING THE BLOOD SUGAR LEVELS OVER A LONGER PERIOD OF TIME.

The glycemic index (GI) classifies carbohydrates based on how quickly and how much they boost blood sugar compared to pure glucose. Choose low-GI foods to keep blood sugar in check.

Surprising fact: a baked potato has a higher GI than a can of soda!

Source: GI News

LOW G.I. FOODS (less than 55) **HIGH GI FOODS (more than 70)**

1. What are Carbohydrates? Glycemic Index

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Glycemic Index Chart

Let's take a look at some examples on the Glycemic Index!

http://www.health.harvard.edu/diseases-and-conditions/glycemic_index_and_glycemic_load_for_100_foods

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What are some challenges with using the glycemic index alone?

1. It only takes into account the food on it's own, not combined with other foods
2. It doesn't take into account the nutrient value in food, just impact on blood sugar
3. Doesn't always take into account the amount of food consumed (ie if 1 apple is a 55, how much is 2 apples in 1 sitting?)
4. It is not always clear how the food is cooked which alters the GI
5. Hard to manage, track and determine for your clients

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Glycemic Load

To solve the problem of the serving sizes not being accounted for in the glycemic index the glycemic load scale was created...quality AND quantity matters!

GL (glycemic load) = (GI x grams of carbohydrate per portion)/100

One unit of glycemic load is roughly equal to the glycemic effect of 1 g of glucose.

The glycemic load categories are:


- Low (10 or less)
- Medium (11 to 19)
- High (20)

	Glycemic Index	Glycemic Load
High	70 or more	20 or more
Intermediate	55 - 69	11 - 19
Low	54 or less	10 or less

The same idea applies to the GL as GI, when it comes to food choices. To balance blood sugar and insulin levels the majority of choices should come from the food items and servings sizes in the low-moderate range of the GL scale.

For weight loss, choices should come from the low end of the scale

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Are we confused yet? Let's make it simple!

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Easy steps to eat lower on the glycemic index and manage blood sugar

1. Focus your diet around real, whole foods (made with love!) – think quality like Mother Nature made and remove processed, packaged foods
2. Combine lots of low GI foods with a small amount of high GI foods (limit refined!)
3. Eat 1 – 4 times per day (at least 4 hours in between)
4. Follow the “Complete in 3” Rule for balanced meals!






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Complete in 3 rule!

The “Complete in 3” is our rule of thumb to creating “complete meals” without calorie counting or stressing out. To make it complete, just make sure each meal includes the following 3 elements: protein, low glycemic carb/fibre & fat.

Example: Eggs (protein) with sweet potato hash (fibre/complex carb) cooked in coconut oil (fat).

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Make it a complete meal!



A complete meal means AUTOMATIC LOW GLYCEMIC EATING:

- Low Glycemic eating is all about keeping your insulin and blood sugar level.
- There are so many diets / eating styles but the main thing for weight loss, high energy, muscle building, etc is keeping your blood sugar level.
- We want to avoid spikes (this means highs and lows) in blood sugar to regulate weight, hormones, moods & more – it is SO IMPORTANT for optimal health!



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HOW TO STRUCTURE YOUR COMPLETE IN 3 MEALS

1. **FOCUS ON FIBRE RICH FOODS** - make your meals around vegetables, not meat (think of meat as a condiment!)
2. **EAT LOW GLYCEMIC VEGGIES WITH EVERY MEAL!** At least 2 servings incl breakfast
3. **ROTATE YOUR PROTEINS, CARBS & FATS** - Don't eat the same thing everyday to make sure you get all the nutrients!



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Sugar burner vs. fat burner



We either burn carbohydrates (aka sugar) or fat for energy....so how do we get into the stored fat?

Sugar Burners

A sugar burner is just what it sounds like: your body runs on glucose for fuel

Fat Burners

A fat burner or "fat adapted" is someone who can effectively use dietary fats for energy and burn stored fat for energy

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Sugar burner vs. fat burner



Why is it better to be a fat burner than a sugar burner?

When you are a sugar burner, you are CONSTANTLY only using the carbs you eat or have in the muscles & liver for fuel...you NEVER tap into your stored fat!

Becoming a fat burner literally means your body shifts from glucose as to start to effectively use fat for fuel. Suddenly, you don't need to graze every few hours. Your hormones will work with you to lose weight and stay lean. You discover what it feels like to feel full again.

Does that mean don't eat carbs? NO! But it means shifting when you eat carbs, what types of carbs you eat (low sugar impact carbs aka low glycemic carbs, High Fibre Carbs)

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SUGAR BURNER	FAT BURNER
<ul style="list-style-type: none">• Use carbs for energy• Can't effectively use dietary fat for energy• Can't effectively tap into stored fat for energy as they are always running on glucose• Low energy & tired• Constant cravings for sugar• Can not go 4 – 6 hours between a meal• If they miss a meal, you will be ravenous, cranky and light headed	<ul style="list-style-type: none">• Can effectively use dietary fats instead of storing them• Can effectively burn stored fat for energy throughout the day.• Have lots of energy• Hormonally Balanced• No cravings• Can go 4- 6 hours between meals



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Sugar burner vs. fat burner



How to go from being a sugar burner to become a fat burner?

1. Don't eat a sugar & starch heavy diet...processed or natural! When we are constantly eating carbs, we are running on sugar and will never tap into our stored fat
2. Focus your diet around good fats and healthy lean protein. Use mostly low starch veggies for your carbs.
3. Start the day with healthy fats, protein and low impact carb / fibre (like leafy greens). Do not eat higher impact carbs until the afternoon to reduce insulin response (after 1pm)
4. Wait 4 - 6 hours between meals
5. Incorporate cinnamon, holy basil (tulsi), cloves and turmeric to help balance blood sugar

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Sugar burner vs. fat burner



IMPORTANT - If looking to lose weight and tap into stored fat, calories still count!

It doesn't matter if you are eating good carbs, healthy fats or protein – if it is too much for YOUR body's needs (ie too many calories and not burning them), you will not lose weight.

Your body will ALWAYS use either carbs or dietary fat if readily available preferentially over stored body fat.

To tap into stored fat you have to:

- Create the demand to tap into reserves with a combo of short windows of lower calorie phases and burn calories with exercise.
- Support all the processes needed for this to happen with a diet that provides essential nutrients, enzymes, vitamins, and minerals (ie REAL FOOD!)

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What to eat?

Start with the FIT CHICKS Grocery Guide!

FIT CHICKS® GROCERY GUIDE

To make your life in the grocery store, "tick approval", check the boxes on our shopping guide that we think up and are great to use again as you make your "Compass" of meals consisting of 4 groups. Here we list:

As most of the boxes are partially lit they are not, which foods made with them? It is best to only buy what you need for the next few days or for your recipe meal prep, to avoid waste.

Proteins

- Boneless, Skinless Chicken Breast
- Canned Tuna (water, packed, and oil)
- Cold Cuts, salami, ham, beef, pork
- Shrimp, scallop
- Cooked Ground Beef
- Protein Powder, w/ sugar
- Egg Whites or Eggs
- Top Round Steaks or Boneless Pork chops, London Broil, Sirloin
- Beef Tenderloin (aka Filet, Tenderloin)
- Turkey and Poultry
- Ground Turkey, Turkey Breast (lean or extra lean), Turkey Breast (lean or extra lean), Turkey Breast (lean or extra lean)
- Cottage Cheese

Build Intake with the 3 RULE

1. **PROTEIN** (meat, fish, eggs, dairy, etc.)

2. **VEGETABLES** (leafy greens, cruciferous, etc.)

3. **HEALTHY CARBS** (whole grains, fruits, etc.)

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Understanding the role of cholesterol in the body

Plus the importance of EFAs, Sat fats and why we need!



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Cholesterol



- Waxy substance in the body that got a bad wrap (without cholesterol, we would die!). We need it to:
 1. Protect the cells from dehydration and toxins
 2. Component of bile
 3. It is the backbone for all hormones such as estrogen, testosterone, cortisol, etc
 4. It is a building block for Vitamin D (huge role in immunity)
 5. Acts as an anti oxidant when antioxidants are depleted
- Made by almost every cell in the body (approx 70%). **It is SO important to our body, we make it!**
- It is not water soluble so it has to be transported out of the body (this is why we need fibre!)



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Cholesterol



Some people, confused about the distinction between dietary cholesterol and blood cholesterol, have asked which foods contain the "good" cholesterol. "Good" cholesterol is not a type of cholesterol found in foods, but it refers to the way the body transports cholesterol

Lipoproteins transport cholesterol through the body

- LDL (Low Density Lipoprotein): The LDL circulate throughout the body, making their contents available to the cells of all tissues—muscles (including the heart muscle), fat stores, the mammary glands, and others.
- HDL (high-density lipoprotein): the type of lipoprotein that transports cholesterol back to the liver from the cells; The liver makes HDL (high-density lipoprotein) to remove cholesterol from the cells and carry it back to the liver for recycling or disposal.

High LDL cholesterol indicates increased risk of heart disease, whereas high HDL cholesterol has a protective effect.

How to know your cholesterol levels? Get a blood panel from the doctor!



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What could be causes for high cholesterol?



1. **Excess sugar**
 - insulin is pro inflammatory
2. **Excess fats, processed and non essential fatty acids**
 - could increase cholesterol production
3. **Deficiencies in antioxidants (basic Vitamin A, C, E, Selenium & Zinc)**
 - Free radical damage key trigger for plaque formation
4. **Low dietary fibre**
 - Fibre needed to carry out the cholesterol out
5. **Increased toxins & free radicals in your environment**
 - Cholesterol protects the vulnerable cells
6. **Chronic dehydration - protects against water loss**



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Cholesterol



Some people think of HDL as healthy and LDL as lousy, or refer to LDL as "bad," and HDL as "good," cholesterol. Keep in mind that the cholesterol itself is the same and that the differences between LDL and HDL reflect the *proportions* and *types* of lipids and proteins within them—not the type of cholesterol.

The following factors help to lower LDL and/or raise HDL:

- Weight control
- Monounsaturated or polyunsaturated, instead of saturated or trans fat, in the diet
- Increase Soluble dietary fibers
- Phytochemicals
- Moderate alcohol consumption
- Physical activity
- Quit smoking



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One question with someone trying to lower their cholesterol or focusing on a plant based diet ask is: "Where do I get my protein?"

LOTS OF AWESOME PLANT BASED SOURCES!



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HOW MANY GRAMS OF PROTEIN ARE IN THESE PLANT-BASED VARIETIES?

Sesame Seeds 1 cup - 15 grams	Broccoli 1 cup - 5 grams	Chickpeas 1 cup - 20 grams
Hemp Seeds 1 cup - 10 grams protein	Broccoli Rabe 3 1/2 cups - 17 grams	Tahini 3 Tbsp - 8 grams
Walnuts 1/4 cup - 5 grams	Alfalfa Sprouts 3 1/2 cups - 4 grams	Quinoa 1 cup - 8 grams protein
Cashews 1 cup - 14 grams	Spinach 1 cup - 5 grams	Refined Beans 1 cup - 15.5 grams
Almonds 2 Tbsp - 4 grams	Kale 2 cups - 5 grams	Oatmeal 1 cup - 6 grams
Pistachios 1 cup - 5.8 grams	Sweet Potato 1 cup - 5 grams	Non-dairy Milks (Soy, Almond, Hemp or Coconut) 1 cup - 3 grams
Peanuts 1 cup - 45 grams	Lentils 1 cup - 18 grams	
Nut butters (peanut, almond or cashew) 2 Tbsp - 8-10 grams	Beans (Pinto, Kidney or Black Beans) 1 cup - 15 grams	
Avocado 1 medium sized - 10	Soybeans 1 cup - 28 grams	

Let's go take a peek!

<http://yumiverse.com/plant-based-protein-information-chart/>

HONORABLE MENTIONS

- Spirulina
- Chia seeds
- Sunflower seeds
- Edamame
- Flaxseeds
- Pumpkin seeds
- Hemp hearts
- Sprouted grain bread products
- Hemp milk
- Soybean meal
- Almond meal
- Nut flour

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Fats have gotten a really bad rap! But they are so important to your health and should make up for 20-35% of our diet.:

FIGURE 5-8. Fatty Acid Composition of Common Food Fats.
Most fats are a mixture of saturated, monounsaturated, and polyunsaturated fatty acids.

Key:
 Saturated fatty acids (red)
 Monounsaturated fatty acids (blue)
 Polyunsaturated, omega-6 fatty acids (green)
 Polyunsaturated, omega-3 fatty acids (yellow)

Animal fats and the tropical oils of coconut and palm contain mostly saturated fatty acids.
 Coconut oil
 Butter
 Beef tallow (beef fat)
 Palm oil
 Lard (pork fat)
 Chicken fat

Some vegetable oils, such as olive and canola, are rich in monounsaturated fatty acids.
 Olive oil
 Canola oil
 Peanut oil

Many vegetable oils are rich in omega-6 polyunsaturated fatty acids.
 Sunflower oil
 Safflower oil
 Corn oil
 Soybean oil
 Walnut oil
 Cottonseed oil

Only a few oils provide significant omega-3 polyunsaturated fatty acids.
 Flaxseed oil
 Fish oil (salmon)
 *Heat or cooking tips over 300s. Infrared acid

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SATURATED VS UNSATURATED FATS

Saturated Fats are:

- Stabilize cell membrane in the body
- Not very susceptible to damage
- In foods, they are hard at room temperature (ex. butter, lard, sear)
- They are less likely to turn rancid when exposed to elements such as heat, light and air
- Higher smoke point when cooking

Unsaturated Fats are:

- Provide flexibility to the cell membranes
- Very delicate and susceptible to damage (very important: how we handle them)
- Liquid at room temperature (ex. Olive oil, flax oil, fish oil)
- Turn rancid when exposed to heat, light and air
- Do not cook at high temperatures

We need BOTH saturated and unsaturated fats to stay healthy

FIGURE 5-9. Fatty Acid Composition of Common Food Fats.
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Keep the fat!

Some of the BEST FATS TO CHOOSE FROM when cooking:

- Avocado Oil
- Butter
- Ghee
- Coconut Oil
- Olive oil - medium heat

GOOD FATS vs. BAD FATS

Hemp Seed, Chia Seed and Flax oil are great to use for dressing only.

FATS TO AVOID CHOOSE FROM when cooking:

Stay far far away! Usually made from genetically modified products and your body does not know what to do with them!

Corn Oil, Cottonseed Oil, Peanut Oil, Soybean Oil
 Any Vegetable oil (what vegetable has oil??)

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What is important to know about buying and storing fats?



1. Buy in small bottles and keep fresh as long as possible
2. Buy oils in glass bottles, not plastic
3. Buy cold pressed oils or unrefined to avoid damage to the oils
4. Keep your oils in a cool, dark place
5. Keep all polyunsaturated oils in the fridge
6. Store nuts and seeds in the freezer
7. Do not buy ground flax, hemp, chia seeds



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What are food allergies and intolerances and why are they important?



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Food sensitivities

- An adverse reaction to a food that other people can safely eat.
- include food allergies, food intolerances and chemical sensitivities.

Food allergies

- Triggered when a person's immune system mistakes a food protein for something harmful.
- The first time the body is exposed to such a protein, it responds by creating antibodies called immunoglobulin E (IgE).
- The next time there is exposure to this same food protein, the body releases IgE antibodies and chemicals like histamine.
- Histamine is a powerful chemical that causes a reaction in the respiratory system, gastrointestinal tract, skin and/or cardiovascular system, and in the most extreme cases can be fatal.



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Chemical sensitivities

- An adverse reaction to chemicals that occur naturally in, or are added to, foods.
- Typically people may react to caffeine in coffee, tyramine in aged cheese, and the flavour enhancer monosodium glutamate, also known as MSG.

Food intolerances

- A food intolerance is a food sensitivity (such as lactose intolerance) may or may not involve immune system (IGG response).
- Unlike food allergies or chemical sensitivities, where a very small amount of food can cause a reaction, it generally takes a 'normal'-sized portion to produce the symptoms of food intolerance and may not be felt for up to 3 days
- Reactions are likely to originate in the gastrointestinal system and are usually caused by an inability to digest or absorb certain foods, or components of those foods. Constipation, headaches, mood disorders, etc. can also be signs of a food intolerance



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So what are some of the top food intolerances?

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Gluten intolerance

- An intolerance to the protein composite found in wheat and related grains, including barley and rye.
- Gives elasticity to dough, helping it rise and keep its shape and often gives the final product a chewy texture.
- Gluten is also used in cosmetics, hair products, and other dermatological preparations

We use "gluten intolerance" when referring to the entire category of gluten issues including:

- celiac disease
- non-celiac gluten sensitivity
- wheat allergy

Response to a food protein (called gliadin in gluten) because it considers it as dangerous to the body

Gluten free choices - corn, amaranth, buckwheat, teff, etc



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Dairy intolerance

Dairy is a pretty hot topic when it comes to nutrition

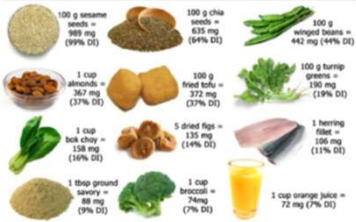
- Ethical** - is it good to drink another animals milk?
We are the only species!
- Hormones in the animals (not in Canada)**
- Inflammatory food** - it is acid forming on the PH Scale (lets take a look at the PH Scale)
- Lactose Intolerance** - 3% of the world is lactose intolerant (ie we do not produce lactase, the enzyme to break down lactose)

But what about calcium? There are tons of non dairy sources that are **BETTER** sources of calcium including almonds, kale, white beans, sesame seeds and more!



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Quick question: Why are we so obsessed with the idea of getting calcium from milk?



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Dairy alternatives



Alternatives to milk: homemade nut milk including almond, cashew & hazelnut

Alternatives to cheese: not many actual alternatives but cashews & nutritional yeast are commonly used to provide texture and cheese flavour

If you can tolerate dairy:

- choose to use in small amounts
- recommended select from raw, fermented and unpasteurized sources
- goat or sheep cheese are typically easier to digest



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Nutrition Session 2: Recap



BLOOD SUGAR MANAGEMENT

- Understanding what happens in our bodies, the role of insulin and glucagon and the Glycemic Index and Glycemic Load

LOW GLYCEMIC EATING

- The Complete in 3 rule and how it applies to your clients

CHOLESTEROL

- What it is, why we need it and how to manage and what could be causing it other than diet

THE ESSENTIAL FATS

- More on EFAs, how to store and cook with fats and what they do

FOOD ALLERGIES AND INTOLERANCES

- What they are, gluten and dairy

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Any questions or inquiries, please email:

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Let's have an amazing journey ahead!



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