### Nutritional & Lifestyle Strategies for Healthy Gut Flora - GUIDE

### 6 Nutritional Strategies

- Avoid sugar & processed foods.
  - 2. Avoid artificial sweeteners.
  - 3. Limit grains.
  - 4. Avoid vegetable oils like canola oil, soybean oil, peanut oil, & margarine & shortening, which are high in inflammatory fats like omega-6 fatty acids & *trans*-fats. Instead, switch to healthier fat options like grass-fed ghee, extra-virgin olive oil, avocado oil, & coconut oil.
  - 5.Eat an abundance & variety of plant-based foods. Choose organic & local as much as possible.
  - 6. Drink spring water or filtered water.

### 6 Lifestyle Strategies

- 1. Avoid unnecessary antibiotic treatment.
- 2. Avoid antacids.
- 3. Limit alcohol.
- 4. Avoid smoking.
- 5. Reduce stress.
- 6. Increase self-care.

## Macronutrients

Macronutrients are chemical compounds that humans have to consume in large amounts. The three primary macronutrients – carbohydrates, protein, & fats – are our primary sources of energy. Other substances that are often classified as macronutrients but don't supply the body with energy include water & air.

TYPE OF MACRONUTRIENT	MADE UP OF	DESCRIPTION
CARBOHYDRATES	Carbon, hydrogen & oxygen Carbohydrates are a primary source of energy for cells. All carbohydrates are made up of fiber, starch & sugar. There are two main types of carbohydrates simple & complex.	
PROTEIN	Carbon, hydrogen, oxygen, & nitrogen	Proteins, & their constituents – amino acids are the building blocks of life. They form cellular organelles & act as enzymes. They also play a structural role in the formation of joints tendons & ligaments. Proteins are created from 20 amino acids. When two or more amino acids are linked in a chain, a structure known as a peptide is formed that contains 2–50 amino acids. There are three main classes of proteins: Globular, fibrous, & membrane proteins.
WATER	Hydrogen, & oxygen	A majority of the body is made of water. It is the medium by which most metabolic processes occur, & it is vital for the absorption of other macronutrients. It also transports dissolved compounds into & out of cells. Hydration is vital to ensure that toxins & waste are properly eliminated from the body.

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# Macronutrients con't

FAT	Carbon, hydrogen & oxygen	Fats are part of the "lipid" family, which is a major building block of cells. Fat serves as a backup energy source for the body (after glycogen is depleted), & is essential for the absorption of certain nutrients. It also helps you maintain your core body temperature, protects vital organs, helps form the structure of cell membranes, and it is a part of the nervous system. There are 2 main types of fat - saturated ("saturated" by hydrogen atoms) and unsaturated. Saturated fat is typically solid at room temperature, & it includes animal fat & some plant fats - like coconut oil. Unsaturated fat is usually liquid at room temperature. There are 2 types of unsaturated fat: Monounsaturated fat (one carbon double bond), found in olive oil & avocados, &	
		polyunsaturated fat (2 or more double carbon bonds), found in vegetable oils, some nuts & seeds & salmon.	
AIR	Nitrogen, oxygen, & trace amounts of argon, carbon dioxide, & other gases & pollutants	Oxygen is an important part of cellular respiration where oxygen breaks glucose into carbon dioxide, water, & adenosine triphosphate (ATP), which supplies the energy needed for the other chemical reactions. Oxygen also works as a natural antibiotic, killing harmful anaerobic bacteria.	

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# HEART HEALTHY FOODS

### FOODS TO SUPPORT CARDIOVASCULAR HEALTH

OLIVE OIL	Protects against LDL oxidation.	
ALMONDS	Reduce total cholesterol & LDL levels.	
OATMEAL	High in soluble fiber, which can lower cholesterol.	
AVOCADO	Rich in monounsaturated fats that may lower heart disease; rich in antioxidants & potassium.	
CRUCIFEROUS VEGETABLES (BROCCOLI, CAULIFLOWER, BRUSSEL SPROUTS)	Rich in carotenoids, which act as antioxidants against free radicals, good source of fiber.	
BLUE/RED BERRIES	Contain anthocyanins & flavonoids which may decrease blood pressure.	
DARK CHOCOLATE	Contains polyphenols, which may reduce blood pressure, clotting & inflammation.	
RED WINE	Contains resveratrol which is thought to lower the risk of heart disease.	
GREEN TEA	Contains flavonoids which decrease the risk of CV mortality.	
CITRUS FRUITS	Rich in vitamin C which has been linked to a lower risk of heart disease.	
APPLES	Contain polyphenols, which protect against free radical damage; contain pectin & fiber to lower cholesterol.	
CRANBERRIES	Rich in antioxidants that can improve blood vessel function.	
POMEGRANATE	Contain heart-promoting polyphenols & anthocyanins which may prevent hardening of the arteries.	
WALNUTS	Reduce total & LDL cholesterol; increase arterial elasticity.	

# HEART HEALTHY FOODS con't

COLD WATER FISH (SALMON, COD, SARDINES, HALIBUT)	Rich in omega-3 fatty acids.
TOMATOES	Source of lycopene which is associated with a reduced risk of heart disease.
BEANS	Good source of soluble fiber to lower LDL levels & improve LDL to HDL ratio.
LEAFY GREENS (SPINACH, KALE, COLLARD GREENS)	Rich in carotenoids, which act as antioxidants against free radicals.
RAISINS	Rich in potassium, which helps lower blood pressure & increases antioxidants.
GARLIC & ONIONS	Contain compounds that lower blood pressure, slow arterial plaque growth, & lower cholesterol levels.
FLAXSEEDS/ CHIA SEEDS	Rich in fiber & omega-3 fatty acids; reduce total & LDL cholesterol.

# MEAL PLANNING - TEMPLATE

Using a pattern can make it easier to fall into a rhythm when creating meal plans.

SAMPLE MENU - TEMPLATE		
MEAL	TIPS	EXAMPLES
BREAKFAST	Rotate between a few simple, yet nutrient dense meals.	Smoothie, oatmeal, quinoa or amaranth, egg & veggie omelet.
LUNCH	Rotate between a few simple, yet nutrient dense meals. Smoothie, salad, soup, or leftovers from dinner.	
DINNER	Follow a good pattern for the week to get into a good rhythm. Make choices that work for your schedule.	Sunday - new recipe Monday - leftovers Tuesday - theme night (keep it simple) Wednesday - new recipe Thursday - leftovers Friday - new recipe Saturday - eat out or order in

# MEAL PLANNING - TEMPLATE

Using a pattern can make it easier to fall into a rhythm when creating meal plans.

MENU - TEMPLATE				
	BREAKFAST	LUNCH	DINNER	SNACK
SUNDAY				
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

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# SUGAR IN DISGUISE

It's easy to identify "sugar" on a nutritional facts label but what happens when manufacturers start using different types of sugar in their products? We might be eating a ton of sugar and not even realize it! With all of the negative press about the detrimental effects of sugar, especially high fructose corn syrup, manufacturers have become quite clever. They have started using all forms of the sweet stuff in their foods, & labeling them in ways that only a detective (or a trained nutritionist) could discover! Use this handy list & you'll never be duped again!

HIDDEN SOURCES OF SUGAR		
Barley Malt	Golden Sugar	
Beet Sugar	Golden Syrup	
Brown Sugar	Grape Sugar	
Buttered Syrup	High fructose corn syrup (HFCS)	
Cane juice crystals (evaporated can juice)	Honey	
Cane sugar	lcing Sugar	
Caramel	Invert Sugar	
Corn Syrup	Lactose	
Corn Syrup Solids	Maltodextrin	
Confectioner's Sugar	Maltose	
Carob Syrup	Malt Syrup	
Castor Sugar	Maple Syrup	
Date Sugar	Molasses	
Demerara Sugar	Muscovado Sugar	

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# SUGAR IN DISGUISE con't

Dextrin	Panocha
Dextrose	Raw Sugar
Diastatic Malt	Refiner's Syrup
Diatase	Rice Syrup
Ethyl Maltol	Sorbitol
Fructose	Sorghum Syrup
Fruit Juice	Sucrose
Fruit juice concentrate	Sugar
Galactose	Treacle
Glucose	Turbinado Sugar
Glucose Solids	Yellow Sugar

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# FOODS TO INCLUDE & AVOID

FOOD	INCLUDE	AVOID
FRUIT	Fresh or frozen whole fruits, freshly squeezed or pressed. Fruit juice, avocados, olives.	Canned fruit.
VEGETABLES	Sea vegetables, raw, frozen, steamed, sauteed, or roasted. Vegetables, freshly juiced vegetables.	Canned vegetables.
GRAINS	Brown, wild, jasmine, red, & black rice, quinoa (technically a seed but used as a grain, buckwheat, amaranth, millet, steel cut oats, teff, tapioca, sorghum.	White rice, spelt, kamut, triticale, wheat, barley, rye, couscous, farro.
ANIMAL PROTEIN	Grass-fed, pasture raised, organic meats, cage-free eggs, & wild caught fish.	Factory farmed & grain- fed meats, cage raised eggs, farmed fish.
VEGETABLE PROTEIN	Lentils, beans, quinoa, legumes, spirulina, chlorella, hemp protein powder, hemp seeds, hemps hearts, nut butters, vegetables including greens, peas, & broccoli, chia seeds, brown rice, cashews, flax seeds, & avocados.	Tofu, soybeans, soy sauce, processed soy foods including fake meat products.
DAIRY	Nut milks including coconut milk, almond milk, hemp milk, rice milk.	Milk, cheese, cottage cheese, butter, ice cream, non-dairy creamers, yogurt.
NUTS & SEEDS	Cashews, almonds, walnuts, pecans, hazelnuts, pine nuts, brazil nuts, macadamia nuts, pistachios, hemp seeds, chia seeds, flax seeds, sunflower seeds, pumpkin seeds, sesame seeds, nut & seed butters.	N/A

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# FOODS TO INCLUDE & AVOID

OILS	Unrefined coconut, sesame, macadamia, flax seed, extra virgin olive oil, coconut butter, avocado, sunflower.	Butter, margarine, mayonnaise (with soybean oil), salad dressings, canola oil, shortening, soybean oil, grape seed oil, corn oil, cottonseed oil, hydrogenated coconut oil, & palm kernel oil.
SWEETENERS	Stevia, xylitol, coconut nectar, lucuma, dates, fresh fruit, dried fruit (in moderation), & palm sugar.	Refined sugar, artificial sweeteners including Splenda, Equal, & Sweet 'N Low, high fructose corn syrup, maple syrup, agave nectar, honey, brown rice syrup, brown sugar.
CONDIMENTS	Balsamic vinegar, apple cider vinegar, nutritional yeast, coconut liquid aminos, Bragg's Liquid Aminos, Bragg's sprinkle seasoning, stevia, all herbs & spices, celtic sea salt, himalayan sea salt, black pepper, cacao powder, carob, mustard, miso, dijon mustard, wheat-free tamari, Nama Shoyu.	Mayonnaise (with soybean oil), sour cream, soy sauce.
DRINKS	Spring water, filtered water, sparkling water, mineral water, coconut water, herbal tea, green tea, nut milks.	Soft drinks, fruit juice or drinks (unless fresh), animal milks.

### 5-STEP GUIDE TO FOOD LABELS & WHAT REALLY MATTERS

It's OUR responsibility to be conscious shoppers and truly understand what's in our food. This guide is designed to decode the nutrition label in a way that will help you make informed decisions about the food you're putting in your basket - *and your body*. Use this checklist as a handy reminder of what you should be looking for on your food labels, how to avoid unwanted ingredients, & tips to decode common nutrition label claims.

STEP 1: KEY INGREDIENTS	
5 Ingredient Rule	Choose processed foods with only 5 ingredients or less.
Difficult toAvoid products containing ingredients that you need a dictionary toPronounceunderstand (or pronounce).	
Hidden SugarAvoid products containing ingredients that you need a dictionary to understand (or pronounce).	
Quality Counts Opt for organic over conventional, sea salt before table salt & avoid any unhealthy trans-fats by not buying foods with hydrogenated oils in them.	
Avoid Chemicals	Avoid foods with artificial flavors, colors, & sugars. These are made from chemicals that have a very negative effects in the body!

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STEP 2: FACTS ABOUT FAT		
Everyone is Different	Make choices that feel good to you & your body. Work with a Certified Transformational Nutrition Coach to find the right balance for you!	
Quality over Quantity	Foods labeled "low-fat" don't mean a thing. A small amount of low-quality fat (like hydrogenated oil) can be more problematic than a large amount of high-quality fat (like organic walnuts or coconut oil).	
Saturated Fats are not "Bad"	Our bodies actually need a balance of both saturated and unsaturated fats. Moderate amounts of high-quality, organic saturated fats either from grass- fed/grass-finished meats or plant based sources such as coconut oil & cocoa butter can offer big benefits to the body.	
Unsaturated Fats	<i>d Fats</i> These fats are also needed in the body & can be found in many great sources such as fish, nuts, seeds, avocados, olives, hemp, & liquid vegetable oils.	
Choose Organic, High-Quality Fats	There are so many scams out there right now where food manufacturers are filling containers with low-quality oils & trying to pass it off as something else. Choose organic oils that are in dark, glass containers, & come from trusted sources. Also, if the price seems too good to be true it probably is.	

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### 5-STEP GUIDE TO FOOD LABELS & WHAT REALLY MATTERS con't

STEP 3: DON'T BE FOOLED			
Serving Size & Servings per Container	The serving size is usually set unreasonably low by the manufacturer in order to appear healthier (lower calories or fat). In addition, the servings per container are often broken up into tiny amounts in order to make the nutritions facts seem healthier!		
Calories	This number is generated by the amount of calories provided by the macronutrients (fat, protein, carbs) & should not be considered when deciding whether a food item is "healthy." Calorie measurements are not an exact science & many labels are off by up to 20%.		
Cholesterol	Recent evidence doesn't support the idea that high levels of cholesterol contribute to heart disease. The Framingham Heart Study, which is the most extensive study on risk factors for cardiovascular disease ever done, found that there is zero correlation between large amounts of cholesterol in the diet & the risk of heart disease.		

STEP 4: WHAT'S NOT ON THE LABEL (THAT'S WORTH INVESTIGATING)		
GMOs	It is not required for food manufacturers to list these on the label in the US & Canada. The best ways to avoid them are to buy organic & choose foods that have the "Non GMO Project Verified" label.	
The Reason the Food was Fortified	When the labels aren't saying is that the chemical process they used to fortify foods completely strip the food of it's natural nutrients & they had to add synthetic versions back into it, which your body doesn't absorb in the same beneficial way.	
Indirect Additives	These are "hidden additives" (unreported) & contaminants that may have entered the food during some phases of production.	
Chemicals	Used during processing & packaging like BPA from plastic packaging, dyes from boxes, & industrial cleaning products.	
Silent Additives	Pesticides, antibiotics, hormones, medicines, & chemical pollutants.	

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### 5-STEP GUIDE TO FOOD LABELS & WHAT REALLY MATTERS con't

STEP 5: FINAL REMINDERS THAT CAN MAKE ALL THE DIFFERENCE		
Don't Believe Anything You Read on the Front of a Package	Foods can actually say "fat free" or "sugar free" & still have fat & sugar as long as they total .5 grams or less. In addition, claims like "high in fiber" or "lowers cholesterol" are used loosely & can be misleading to the average consumer.	
When Choosing Dairy Products	Always look for certified labels and claims such as "certified organic," "certified humane," "animal welfare approved," & so on.	
The Term "Natural"	Often used as a marketing ploy to trick consumers into buying the product. The FDA nor the USDA has rules or regulations for products labeled "natural" with the exception of meat & poultry, which can't contain artificial flavors & colors, preservatives, or sweeteners & the processing must be kept to a minimum. However, it doesn't indicate anything about the raising, feeding, or care of the animals. For other products, "natural" does not mean the same thing as organic & comes with no guarantees of being toxin free.	
Labeling Irradiated Foods is NOT Required	Spices, dehydrated enzymes, & dried vegetables are among the most heavily treated with more than 100 million times the amount of radiation than the average chest x-ray. To be safe, buy organic!	

### 1) SERVING SIZE

The label presents serving sizes as the amount that most people actually consume in a sitting. This is not necessarily the same as how much one should eat per serving. All of the nutrition information on the label is based on one serving. If you eat twice the serving size here, multiply the nutrient & calorie values by two.

### 2) CALORIES

The number of calories listed represents the total calories from fot, acrobydrate, & protein (manufacturers are allowed to round this value to the nearest 5- or 10-calorie increment). 100 calories per serving is considered moderate, while 400 calories or more per serving is considered high. A 5'4", 158-lb active woman needs about 2,200 calories each day. A 5'10", 174-lb active man needs about 2,900 calories.

### 3) TOTAL FAT

Fat is calorie-dense &, if consumed in large portions, can increase the risk of weight problems. While once vilified, most fat, in & of itself, is not bad. Adults should consume 20 to 35% of total calories from fat.

### 4) SATURATED FAT

Saturated fat is part of the total fat in food. It is listed separately because it plays an important role in raising blood cholesterol & your risk of heart disease. Eat less than 10% of total calories from saturated fat.

#### 5) TRANS FAT

Trans fat works a lot like saturated fat, except it is worse. This fat starts out as a liquid unsaturated fat, but then some food manufacturers add some hydrogen to it, turning it into a solid saturated fat (this is what "partially hydrogenated" means when you see it in the food ingredients). They do this to increase the shelf-life of the product but in the body, the trans fat damages the blood vessels & contributes to increased blood cholesterol & the risk of heart disease. Individuals should consume as little trans fat as possible.

### 6) CHOLESTEROL

Many foods that are high in cholesterol are also high in saturated fat, which can contribute to heart disease. Dietary cholesterol itself likely does not cause health problems.

### NUTRITION FACTS

8 SERVINGS PER CONTAINER

SERVING SIZE: 2/3 CUP (55G)

AMOUNT PER SERVING CALORIES

% DAILY	VALUE**
TOTAL FAT 8G	10%
SATURATED FAT 1G	5%
TRANS FAT 0G	0%
CHOLESTEROL OMG	0%
SODIUM 160MG	7%
TOTAL CARBOHYDRATE 37G	13%
DIETARY FIBER 4G	14%
TOTAL SUGARS 12G	
INCLUDE 10G ADDED SUGARS	20%
PROTEIN 3G	
VITAMIN D 2MCG	10%
CALCIUM 260MG	20%
IRON 8MG	45%
POTASSIUM 235MG	6%

\*THE % DAILY VALUE TELLS YOU HOW MUCH A NUTRIENT IN A SERVING OF FOOD CONTRIBUTES TO A DAILY DIET. 2,000 CALORIES A DAY IS USED FOR GENERAL NUTRITION ADVICE.

### DAILY VALUE

Daily values are listed based on a 2,000calorie daily eating plan. Your calorie & nutrient needs may be a little bit more or less based on your age, sex, & activity level (see https://fnic.nal.usda.gov/fnic/interactiveDRI /). For saturated fat, trans fat, sodium, & added sugars, choose foods with a low % (5% or less) Daily Value. For dietary fiber, vitamins, & minerals, your Daily Value goal is to reach 100% of each.

**Ingredients:** This portion of the label lists all of the foods & additives contained in a product, in descending order by weight.

**Allergens:** This portion of the label identifies which of the most common allergens may be present in the product.

(More nutrients may be listed on some labels) mcg = micrograms (1,000 mcg = 1 mg) mg = milligrams (1,000 mg = 1 g) g = grams (about 28 g = 1 ounce)

### 7) SODIUM

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You call it "salt," the label calls it "sodium." Either way, it may add up to high blood pressure in some people. So keep your sodium intake low - less than 2,300 mg each day.

#### 8) TOTAL CARBOHYDRATE

Carbohydrates are in foods like bread, potatoes, fruits, & vegetables, as well as processed foods. Carbohydrate is further broken down into dietary fiber & sugars. Consume foods high in fiber often & those high in sugars, especially added sugars, less often. Adults should consume 45 to 65% of total calories from carbohydrates.

#### 9) DIETARY FIBER

There are two kinds of dietary fiber: soluble & insoluble. Fruits, vegetables, whole-grain foods, & beans, peac, & lentils are all good sources & can help reduce the risk of heart disease & cancer. Individuals should try to eat 14 grams of dietary fiber for every 1,000 calories consumed.

#### 10) SUGARS

Too much sugar contributes to weight gain & an increased risk of diseases like diabetes & fatty liver disease. Foods like fruits & dairy products contain natural sugars (fructose & lactose), but also may contain added sugars. It is recommended to consume less than 10% of total calories from added sugar or less than 50 g per day based on a 2,000-calorie dietary pattern.

#### 11) PROTEIN

To limit saturated fat, eat small servings of lean meat, fish, & poultry. Use skim or low-fat milk, yogurt, & cheese. Try vegetable proteins like beans, grains, & cereals. Adults should consume 10 to 35% of total calories from protein.

### 12) VITAMINS & MINERALS

Your goal here is 100% of each for the day. Don't count on one food to do it all. Let a combination of foods add up to a winning score.

THE EXERCISE PROFESSIONAL'S GUIDE TO PERSONAL TRAINING