Mysty Pfeffer Wellness Coaching

12 Week Program!

Metabolic Syndrome Busters

MetS Busters

Lower

- Blood Sugar
- Inflammation
- Cholesterol
- Waist Size
- Blood Pressure
- Triglycerides



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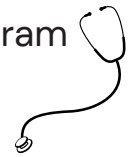
Week 12 ..... Wrapping Up

The information in this workbook is for educational purposes only. It is not meant to replace the advice of your doctor or dietician.

Week 1 Introduction to The Program & Change Model

Session 1 Goals:

- Map Out the 12 Week Program
- Define the Change Model
- Determine Needs
- Determine Readiness to Change
- Introduce 4 Pillars of Health
- Choose a Pillar of Health to Focus on for better health, and stage of change attendee is in at start.



Transtheoretical Model of Change

TTM is a model of combined theories and approaches to explain and predict how and when individuals stop high-risk behaviors and adopt healthy ones.

Self Efficacy is the confidence to make and sustain changes and the temptation to relapse.

"If I believe I can change, I am right. If I believe I can't change, I am right."

This is where personal strengths, talents, and abilities come in. . .

5 Stages of Change:

1. **Precontemplation**---not ready or denial stage. We will discuss pros/cons of change, future dreams, plans.
2. **Contemplation--**getting ready but not committed. The need for change is recognized, but ambivalence is common.
3. **Preparation**---ready. The person is taking steps, reading more, joining a gym, planning.
4. **Action--**doing it. Actively working to make the change happen. Strong urges to slip back into old patterns.
5. **Maintenance--**keeping up the change. Fewer temptations to slip back into old ways, more confident. Focus: No relapse.

*Prochange Behavior Systems, Inc. 2021

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Week 1 — 4 Pillars of Health

1. Lifestyle

Sleep/stress/entertainment/ relationships/work life/home life/spiritual life

What is important to me? What brings me joy?
How could my lifestyle be better?

2. Activity

Work/walking/hiking/swimming/ bicycle/playing with kids/sports/gym/exercise class

What activities do I enjoy most? What do I miss the most?

3. Attitude

Outlook on life/joy/peace/emotional wellness/spiritual health/values

Do I have a positive attitude?
How will my relationships be better if I have joy?
Am I intrinsically or extrinsically motivated?

4. Nutrition

Routine eating patterns/ portion sizes/sugar intake/fruits/vegetables/ protein/ carbohydrate intake

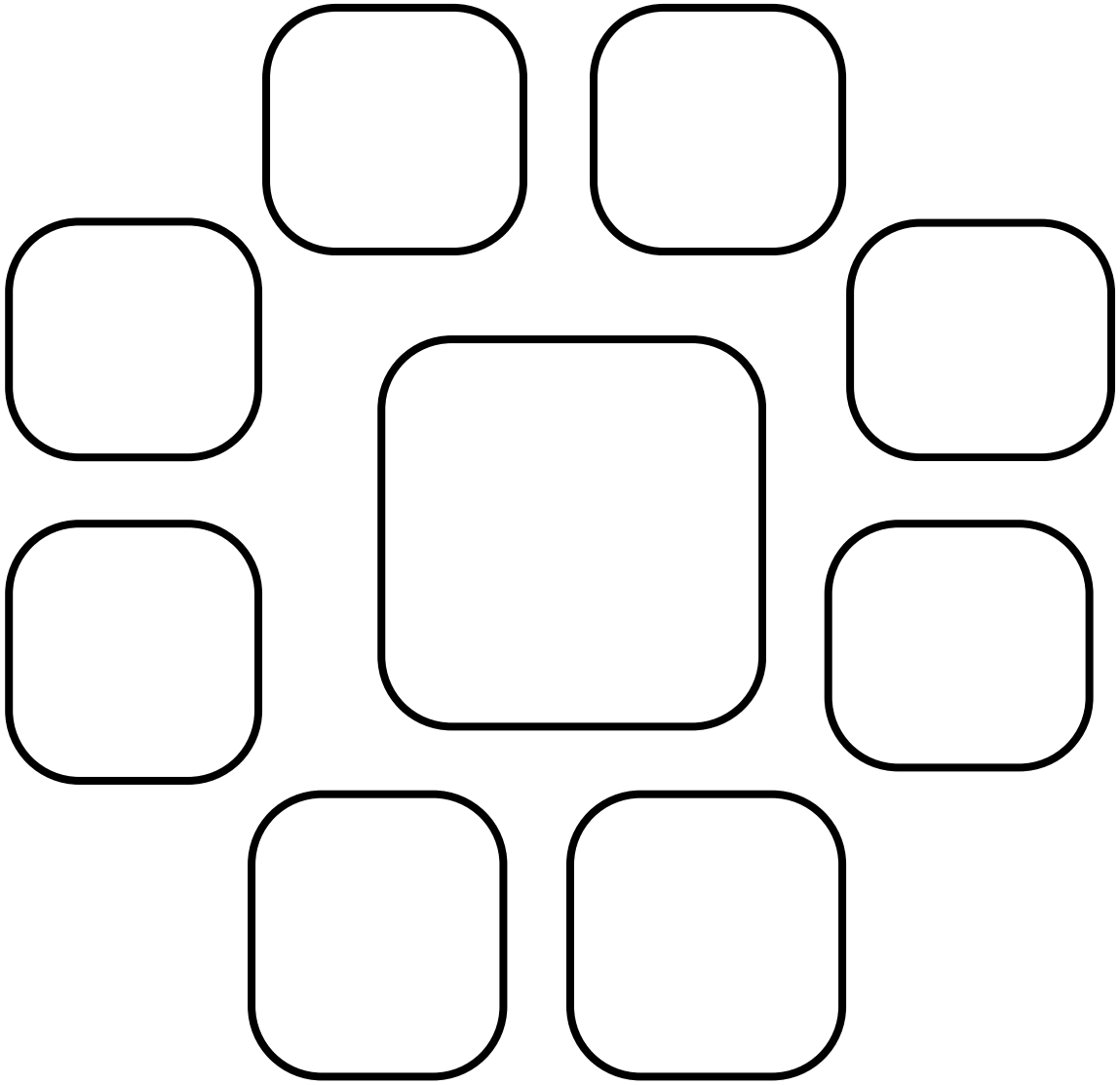
?

How are my lifestyle patterns affecting my health?

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Week 1 Exercise--Visual Mapping Tool

1. Write the **4 pillars of health** in the middle box below
2. **Circle** the ONE pillar **that needs the most attention** from you at this time in your life.
3. In the small boxes around the middle box, list ways to improve this area of your life.
4. What value is this to you intrinsically? In other words, how important is this decision going to help you feel better physically or spiritually?



Strengths

Accepting
Active
Adaptable
Adventuresome
Affirmative
Alive
Ambitious
Anchored
Assertive
Assured
Attentive
Bold
Brave
Bright
Capable
Careful
Cheerful
Clever
Committed
Competent
Concerned
Confident
Considerate
Courageous
Creative
Decisive
Dedicated
Diehard
Doer
Eager
Earnest
Effective
Energetic
Experienced
Faithful
Fearless
Flexible
Focused
Forgiving
Forward-looking
Free
Happy
Healthy
Hopeful
Imaginative
Ingenious
Intelligent
Knowledgeable
Loving
Mature
Open
Optimistic
Orderly
Organized
Patient
Perceptive
Persevering
Persistent
Positive
Powerful
Prayerful
Quick
Reasonable
Receptive
Relaxed
Reliable
Resourceful
Sensible
Skillful
Stable
Steady
Straight
Strong
Stubborn
Thankful
Thorough
Thoughtful
Tough
Trusting
Trustworthy
Truthful
Understanding
Vigorous
Visionary
Worthy
Wise
Willing
Zealous
Zestful



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Week 1 Strengths & Stage of Change



List 3 core strengths of character you know you have, or have been complemented on in your life:

A decision I want to make about my health is:

I want to because:

If you decide to make this change how will your life be different in the future?

Looking ahead five years, how might your life be different?

What will your life be like 5 years from now if you don't make the change?

The Stage of Change I am in on this date:_____is:

Place a check beside the stage of change you are in today

Precontemplation (Not ready)_____

Contemplation (Getting Ready)_____

Preparation (Ready--taking steps_____)

Action (Doing something)_____

Maintenance (Keeping up the change)_____

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How to use your core strengths to make this decision a priority in your life.

1.

How has this core strength helped me in relationships?

2.

How has this core strength helped me learn?

3.

How has this core strength helped cope with life or work?

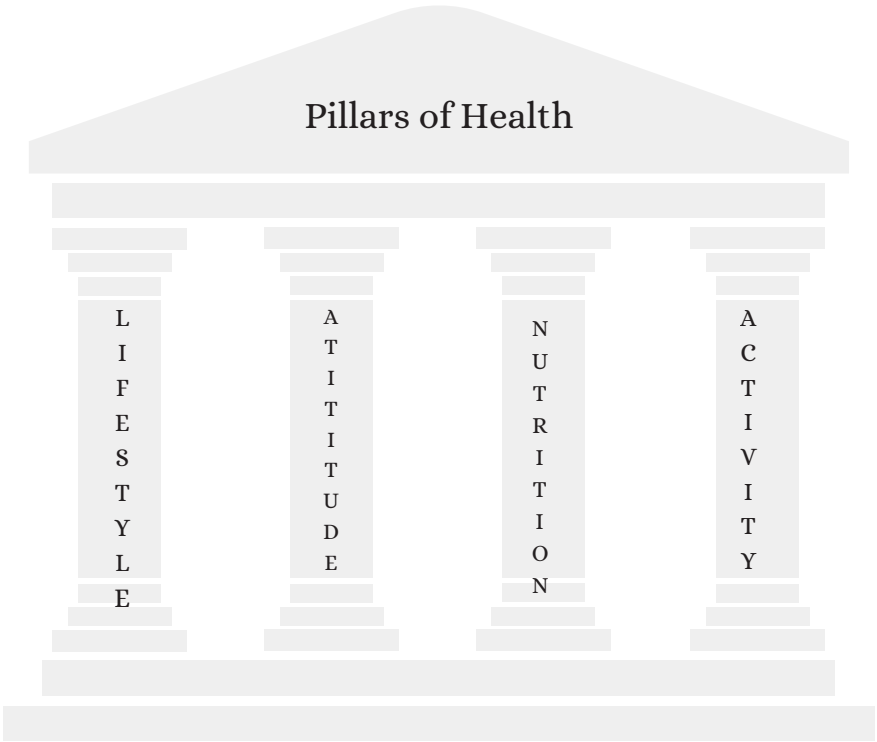
What are 3 ways to use my strengths to make the health decision I listed above?

Welcome to Week 2!

Overview of the Human Body

Week 2 Goals:

- Understand basic functions of the body
- Overview of the right fuel to maintain the body
- Gratitude statements for our bodies.
- Awareness of deception in advertising.
- Review and Discuss Health Decision to be made and your strengths

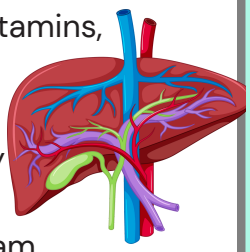


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Week 2 The Human Body Fun Facts

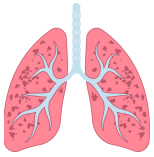
Liver

- The powerful liver is responsible for converting substances from food like fats and proteins.
- It extracts energy, vitamins, and minerals, too.
- It makes toxins less harmful to the body and removes them from the bloodstream.



- The liver can regenerate cells.
- More than 500 vital functions take place in the liver.
- A healthy human liver holds about a two-year store of Vitamin A.
- It filters about 1.7 liters of blood per minute.
- It contains 300 billion specialized cells.

Lungs



The air we breathe contains 21 percent oxygen, but our bodies only use 5 percent — the rest is exhaled.

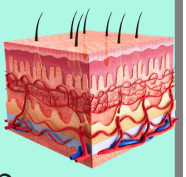
Seventy percent of waste is eliminated through our lungs just by simply breathing.

Children and women breathe faster than men.

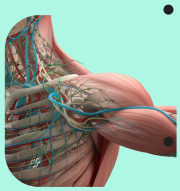
Humans exhale up to 17.5 milliliters of water per hour.

Skin

- The skin is the largest organ
- It regulates temperature
- Allows the body to retain fluids
- Keeps out harmful microbes
- It is full of nerve endings that help us feel heat, cold, & pain.



Muscle & Bone



- Primary function is Moving
- Includes ligaments, cartilage, joints, and other connective tissue.
- They have endocrine function to signal hormones throughout the body.

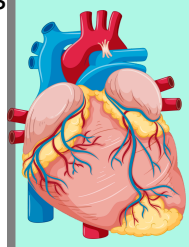
The Brain

There are 100,000 chemical reactions in the brain every second. It is 60% fat and 20% of the body's oxygen demand is used by the brain.

The sense of smell is connected to the part of the brain controlling emotions.



The Heart



The heart is the size of a fist

The heart pumps 2 ounces of blood with every beat, which is 2,500 gallons daily

The heart begins beating 22 days after conception

The Rest of the Story. . .

The kidneys, nervous system, digestive system, circulatory system and lymphatic system are also working hard to keep us doing the things we love to do every day!

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Cell Builders

- Carbohydrates
- Protein
- Fat
- Fiber
- Vitamins
- Minerals
- Antioxidants



The building blocks of every part of our bodies are the cells. Blood, brain, bone, nerve, muscle, and skin cells, all are necessary for maintaining health.

Macronutrients like carbohydrates, protein, and fat provide energy for every single bodily function. And vitamins, minerals, and antioxidants help us fight disease and create new cells.

All "**real food**" is broken down into glucose, amino acids, or lipids the body "Sees" and understands how to use for hormone production and function, fighting infection, and building strong muscles and bones.

The Problem?

Ultra-processed food does not have the minerals, antioxidants, vitamins, or fiber to keep us strong and functioning well.

In fact, studies show it plays a major role in contributing to diabetes, obesity, heart disease, cancer, metabolic disease, and many autoimmune disorders.

Did you know the term "bliss point" is the amount of sugar, fat, and salt food companies use to make their food more appealing and addictive?

Cell Destroyers

- Additives
- Preservatives
- Flavorings
- Pesticides
- Artificial Ingredients
- Excess Sugar
- Seed Oils

What do you think about your amazing, miracle body?

Let's take a moment to appreciate all the work our bodies do in a day and express some gratitude.

I appreciate the fact that my skin is

My muscles and bones help me

Taking care of my brain is so important to me, I regularly

Knowing how powerful my liver functions to keep me well helps me to

Appreciating how my heart beats and pumps my blood every second motivates me to

Filling my lungs with air so I can do the things I love to do motivates me to

A lifestyle approach to better metabolic health looks at what feeds the cells best. In addition to sleep, attitude, activity, and food choices.

Place a check mark by the statement that resonates with you most.

I want to be more intentional about what I eat.

I want to pay attention to stress eating, emotional eating, and true hunger.

I want to learn how to try more vegetables.

Brainstorm with your group or coach
3 ways you can begin to do this:

1.

2.

3.

Week 2

How does knowing your taste buds are being manipulated by food companies to eat more make you feel?

What new thoughts do you have about your health decision and the pillars of health after this class?

How do your core strengths play a role in making this change a priority for you and your family?

Notes:

Thoughts & Ideas

Week 3

The Garden & Nutrients Needed to Keep Us Strong

Session Goals:

- Learn the Roles of Vitamins & Minerals
- Key Components of Food for Everyday Function
- Intentional Eating Tool Group Exercise
- Discussion/Thoughts

> *Let food be thy medicine, let medicine be thy food.*
>
> Hippocrates

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Week 3 The Role of Vitamins & Minerals

Our bodies require vitamins, minerals, essential fatty acids, amino acids, and phytonutrients (antioxidants) to function.

When we have optimum amounts of these nutrients from our food:

- We feel better & think more clearly
- Decrease inflammation
- Sleep better
- Have more energy & fight infection better & experience more control of our health.

Fat Soluble vitamins:
A D E & K
Are consumed in the diet and are stored in the fat. Large doses can create toxicity.

Vitamin A



- Immune system
- Vision
- Cell growth
- Stimulates white blood cell growth
- Remodels bone
- Neurological functions

Vitamin D

- Vital Hormone for testosterone receptors
- Important for calcium absorption
- Prevention of cardiovascular disease
- Prevention of chronic obstructive pulmonary disease
- Critical role in reducing cancer cell growth
- Reduces infections (1)**

Vitamin E



Functions

- Disables Free Radicals
- Protects cells from oxidative damage
- Regulates Enzyme Activity
- Needed for Heart Health
- Platelet Coagulation
- Eye and Nerve functions (2)

Vitamin K



Functions

- Blood Clotting
- Brain Health
- Bone Health
- Antioxidant
- Anti-inflammatory

Water soluble vitamins: B & C

B Vitamins (Thiamin B1- Riboflavin B2- Niacin B3- Pantothenic Acid B5- Pyridoxine B6 Biotin B7- Folate B9)



Functions

- Food metabolism
- Energy sources
- Hair and nail growth
- Improves cholesterol
- Skin and eye health
- Healthy digestion
- hormone production

Vitamin C



Functions
Formation of Collagen to protect blood vessels, skin cells, cartilage.

- Growth and repair of tissues.
- Form proteins that make skin, blood vessels, nails
- Heal wounds
- Fight infection

Betaine And Choline



Functions

- Decreases homocysteine levels.
- Liver detoxification
- Cell synthesis
- Helps the body process fats
- Boost muscle mass and strength



Antioxidants & Minerals

Antioxidants fight free radicals (cell damage and disease). There have been over 8,000 antioxidants found in fruits, vegetables, whole grains, legumes, nuts, seeds, herbs, and animals.

Although there are too many to cover for our purposes in this program, two major categories of antioxidants to understand are flavonoids and polyphenols.

Protective Properties of Antioxidants

- Antibiotic
- Cancer preventive
- Anti-inflammatory
- Tissue Protective Properties
- Give Bright Colors to Various Foods

Minerals

Potassium

Controls or contributes to:

- Heart rate and blood pressure
- Muscle strength
- Metabolism
- Water balance
- Nervous system



Magnesium

- Prevents constipation and asthma
- Keeps your nerves, muscles, bones healthy
- Important for normal heart rhythm
- 50% is stored in the bones, remaining in the cells, organs, and tissues.
- Boosts energy
- Helps with migraines
- Produces collagen
- When under stress your body is depleted of this mineral
- Helps with panic attacks



Manganese



- Helps control blood sugar
- Boosts metabolism
- Reduces inflammation
- Improves thyroid health
- Boots vitamin absorption
- Increases cognitive health
- Important sources: raspberries, grapes, beets, garlic, green beans, rice, oats, peppermint.

Selenium



- Balance hormones
- Help thyroid function
- Boost immune system
- Boost hair growth
- Reduce inflammation
- Prevent cancer
- Important sources: mushrooms, meat, fish, nuts, seeds, eggs.

Week 3 ----Coaching Exercise

Intentional Eating Tool

Wellness is a place for the whole family. Mom's/dads/teachers/grandmas/sitters/and friends' influence on us and our children's daily choices matter. Our choices have the power to build or hinder our immune systems, our cardiovascular systems, and our chances of getting cancer over time.

Family for you may be an individual, a couple, or a couple with children.
How would you rate the value of your family's health on a scale of
1 (not important) to 10 (very important)? Score_____

The following food choice tool will help us evaluate the link between our values and our choices for the people within our sphere of influence each day. There are 8 areas of intentional eating to evaluate. Place a number in each section of the wheel, on a scale of 1-10, of how intentional you are in making these choices each day for yourself, your family, or those people within your influence.



What new thoughts do you have about your health decision and the pillars of health after this class?

How do your core strengths play a role in making this change a priority for you and your family?

What is **ONE** small step or thing I can begin doing today that will help me feel better?

Notes:

Thoughts or New Ideas:

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Week 4

Metabolic Health & Metabolic Syndrome

Session Goals:

- Define Metabolic Syndrome
- How MetS is Diagnosed
- Additional Biomarkers
- Keys to Metabolic Health
- 7 Steps Coaching Exercise
- Review Pillars of Health
- Review Stage of Change

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Metabolic Health

A formal definition varies, but essentially metabolic health is the body's ability to process and use energy stores without medication and the presence of disease.

Metabolic Syndrome is the opposite of Metabolic Health.

Incidence

Affects 1/3 of the United States population 12 % of the children in the US

Positive Note

It is completely reversible with nutrition and lifestyle changes!

It is a cluster of risk factors developing within an individual that increases their risk for cardiovascular disease.

The cluster of risk factors include:

- Low HDL-C cholesterol (<40mg/dL in men, < 50mg/dL in women
- High triglycerides > 150mg/dL
- Elevated blood pressure > 130/85 mmHg
- Increased waist circumference > 40 inches in men, >35 inches in women
- Fasting blood sugar above 100 mg/dL. (1)



Additional Biomarkers

- High Leptin levels (0.5ng/mL)
- Low Adiponectin levels(<2.65ug/ml)
- C-Reactive Protein (<3mg/L)
- Ferritin
- High Uric Acid Levels (<5mg/dL)
- Increased Gamma-glutymaltransferase (GGT) (27IU/L men 17IU/L for women)

Keys to Metabolic Health

It's easier than you think!



- Being active
- Managing stress
- Sleeping well
- Eating a balanced diet
- Limiting sugar & carbs

My Biometric Results this Year:

Blood Pressure _____

Waist Circumference _____

Triglycerides _____

HDL-C _____

Fasting Blood Sugar _____

Repeat this phrase:

I have the power to reduce my risks and improve my metabolic health today!

My core strengths are:

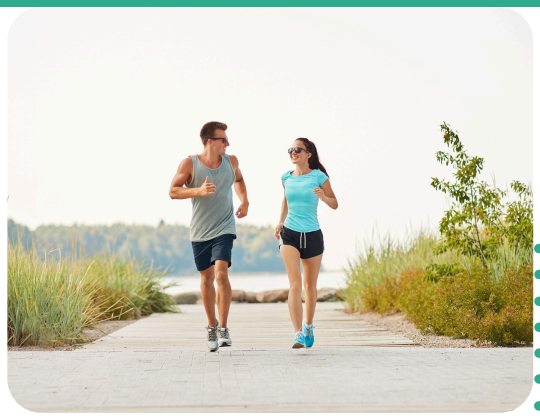
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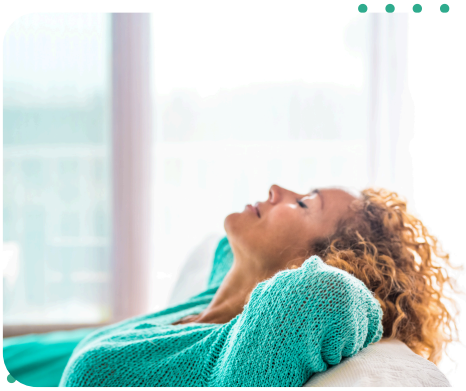
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Week 4 Metabolic Health & Metabolic Syndrome

Activity

- Doing activity you enjoy
- Moving throughout the day
- 30 minutes steady walking or exercise class in addition to regular activity
- Minimum of 150 minutes steady exercise per week





Sleeping Well

- Insomnia increases all the parameters we just mentioned for risk factors (appetite & fat storage hormones and lipid levels.
- Obstructive sleep apnea affects oxygenation to the tissues and also affects appetite and fat hormones.

Manage Stress & Attitude

- Deep breathing exercises
- Prayer
- Looking at the big picture
- Listening to music
- Taking time for yourself
- Resting
- Prioritizing tasks



Eating a Balanced Diet

Food is our Fuel!

Ultra processed food with dyes, colorings, flavorings, sugar, preservatives, artificial phosphates, etc.---increase inflammation and metabolic markers.

Healthy Eating is Key!

- Mediterranean Diet
- DASH Diet
- Low Carb
- Vegetarian
- Low Sugar Diet (<24 grams/day)

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Coaching Exercise:

7 Steps for Improving Metabolic Health

Instructions:
There are 10 steps for Improving Metabolic Health listed below:

1. Using a confidence scale of 1 to 10 (1 being least likely to try to 10 most likely to try) place numbers next to the following steps that look most doable for you at this time.

- Get active for at least 30 minutes or more per day_____
- Choose water as a drink – 8 glasses/day_____
- Reduce sugar intake to 6 teaspoons (24 grams) a day____
- Reduce or remove seed oils in packaged food/fast food/frying to twice a week_____
- Eat more fruit and vegetables_____
- Be Intentional about eating for fuel_____
- Intermittent Fasting (not eating after dinner or between meals____
- Decrease blue lights in the evenings from TV and electronics_____
- Sleep study if suspect obstructive sleep apnea_____

2. Discuss with the group, your coach, or your support person why you rated them the way you did.

3. Brainstorm three more possible steps you and your group can take to improve metabolic health that are not listed above.
1.
2.
3.

How does learning about metabolic health impact the way you think about the 4 pillars of health (Lifestyle/Activity/Nutrition/Attitude)?

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Notes:

Thoughts or New Ideas:

Stage of Change on the health decision I chose to make on page 5:

Precontemplation (Not ready)_____

Contemplation (Getting Ready)_____

Preparation (Ready--taking steps)_____

Action (Doing something)_____

Maintenance (Keeping up the change)_____

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Week 5

All About Sugar and Metabolism

"It is not good to eat much honey,
nor is it glorious to seek one's own glory.
A man without self-control
is like a city broken into and left without walls."
Proverbs 25:27-28

Objectives

- Sugar History and Progression
- Artificial Sweeteners and Effects on the Body
- Metabolism Definition and Stages
- Hormone Impact
- How to Speed up the Metabolism

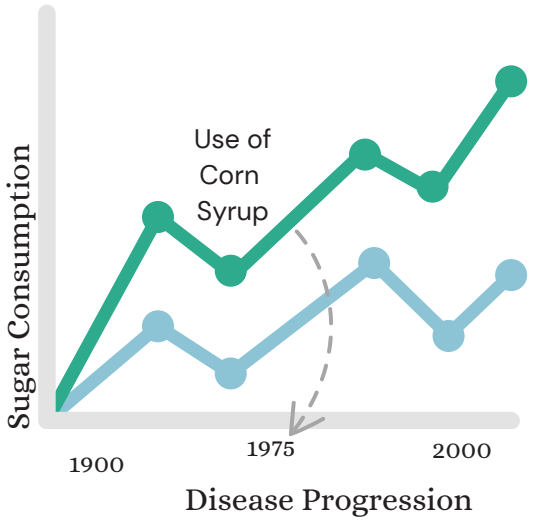
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Week 5 Facts & Information

Data from 18 clinical controlled trials found honey
when used within a healthy diet pattern:

- Reduced fasting glucose
- Total cholesterol
- LDL cholesterol
- Fasting triglycerides
- Increased HDL cholesterol
- Honey has been known for healing burns
- Has antiviral and antibacterial properties
- Removes infection from wounds and promotes tissue healing
- It's anti-inflammatory
- Healing gum problems

Sugar Cane on the other hand went from a rare and expensive substance in the 1800s to a cheap and "necessary" food ingredient by 1900.



Alternate Names of Sugar

Agave	Sucrose
Anything with "syrup"	Sucanat
Barley Malt	Mannitol
Beet	Maltose
Brown Rice Syrup	Maltodextrin
Cane	Turbinado
Fructose	Xylose
Molasses	High fructose Corn syrup
Galactose	"Saccharides"
Glucose	"Dextrose"
Hydrogenated starch	

Sugar decreases the immune system damages collagen production in the skin, and contributes to chronic diseases like:

- Diabetes
- Fatty liver
- Heart disease
- Cancer

Bottom Line

Minimize all sugar and sugar substitutes for best health. The American Heart Association's recommendations:

No more than 6 teaspoons (24G) a day for women and children
No more than 9 teaspoons (36 G) a day for men

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Week 5 Metabolism

Metabolism

Metabolism is the chemical process our bodies use to transform food we eat into the fuel that keeps us alive.

Epigenetics

The study of changes in organisms caused by modification of gene expression rather than the alteration of the genetic code itself.

Obesogens

Chemicals that disrupt hormones and make us gain weight by affecting our metabolism, appetite, and fat cells. They are found in food containers, cookware, personal care products, cleaning agents and medical supplies.

THE SPEED OF OUR METABOLISM IS THE METABOLIC RATE.

Factors Affecting Metabolic Rate

•AGE
•MUSCLE MASS—
•BODY SIZE
•ENVIRONMENTAL TEMPERATURE—
•PHYSICAL ACTIVITY
•CHRONIC STRESS-
•CHILDHOOD TRAUMA-
•HORMONE DISORDERS—
•INFLAMMATION-



Metabolic Disorders Happen

•WE ARE MISSING ENZYMES OR VITAMINS NECESSARY FOR IMPORTANT CHEMICAL REACTIONS

•THERE ARE ABNORMAL CHEMICAL REACTIONS THAT HINDER METABOLIC PROCESSES

•A DISEASE OF THE LIVER, PANCREAS, ENDOCRINE GLANDS, OR OTHER ORGANS INVOLVED IN METABOLISM

Hormone Disruptors

•Hormone disruptors-are chemicals that interfere with the endocrine system responsible for regulating bodily functions.

•They can mimic, block, or overstimulate the effects of natural hormones creating imbalances and negative health effects.

•They are found in water, food, and consumer products.

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Brainstorm Actions that will help Increase Metabolism

Here are a few ideas to get you started:

Drink more water
If able do high intensity interval training (HIIT)
Eat more protein rich foods
Avoid prolonged sitting
Get good sleep
Strength train
Green tea
Eat spicy foods
Drink coffee

What do these actions look like for me?

How will my strengths help me in this area?

What do I want most in this area?

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Week 6

Fats That Matter
Fatty Liver
The Power of Fasting

Objectives

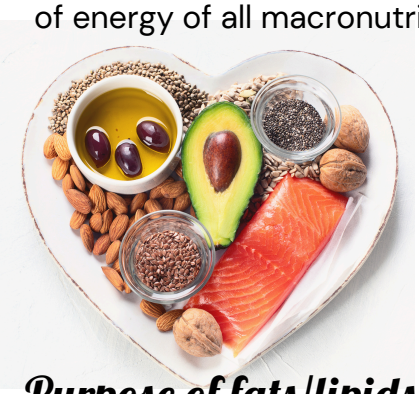
- Understand The Purpose of Fats
- Define Fatty Liver and It's Effect on the Body
- Treatment for Fatting Liver
- The Power of Fasting

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Week 6 Fats that Matter and Fatty Liver

Dietary Fats

- Fats, also known as lipids, are macronutrients necessary for human nutrition.
- They are found primarily in meats, dairy foods, nuts, seeds, and oils.
- Vegetable sources of dietary fat are soybeans, olives, peanuts, avocados, and coconut.
- Fats contain the highest amount of energy of all macronutrients.



Purpose of fats/lipids.

·Transport fat-soluble vitamins A, D, E, & K
·Essential component of the cell membrane.
·Protects the vital organs from trauma and temperature change.
·Regulate body temperature & transport hormones through cholesterol.
·Fat quality matters much more than fat quantity.

Fats are consumed by the body in the form of saturated, monosaturated, and polysaturated, and the now banned, hydrogenated trans fats.

Fatty Liver

Nonalcoholic Fatty Liver Disease (NAFLD) is a condition where fat builds up in the liver.

Two Types:
NAFL—Nonalcoholic Fatty Liver
NASH—Nonalcoholic Steatohepatitis
(There is inflammation and liver damage plus fat in the liver)

Like many inflammatory conditions NASH is silent.

NAFLD is usually found alongside metabolic syndrome, leaky gut, type 2 diabetes, and obesity. It is the leading cause of liver cancer.

Treatment

There is no medication approved to treat NASH or NAFLD.

<u>The NIH Suggests:</u>

- Lose Weight.
- Wash fruits and vegetables for less pesticide exposure.
- Avoid alcohol.
- Consider vitamin E which is shown to help reverse NAFLD.
- Intermittent fasting improves liver enzymes.
- Avoid high fructose corn syrup.
- Decrease sugary beverages and added sugars.
- Some studies suggest that artificial sweeteners contribute.
- Heal the intestinal wall.

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Week 6 Fasting

Intermittent Fasting

Defined:
A period of hours or days with no or minimal food consumption without deprivation of essential nutrients.

Is it safe?

Lean muscle mass-is protected during fasting by hormonal regulation. Early rapid weight loss is due to a negative sodium imbalance due to water loss.

Benefits

Many human and animal studies show improvement in cardiovascular markers, weight loss, diabetes, Cancer, and neurological diseases.

Side Effects may include:

- Constipation
- Gout
- Kidney Stones
- Postural hypotension
- Cardiac arrythmias

Types of Fasting

Time Restricted Eating
Limits eating to a specific number of hours per day
Increases fat oxidation
Improves gut bacteria responsible for nutrient uptake
Helps improve metabolism
Helps set the circadian rhythm
Examples: 16:8 or 12:12 windows. Or just not eating between meals or after dinner at night.

National Institute of Health Fasting Guidelines

Can be found here: https://doi.org/103390/nu13051570

Alternate Day Fasting

•Weight loss
•Reduces inflammation
•Improves blood pressure
•Improves fat to lean ratio
• Reduces pro-aging methionine
Helpful for Fatty Liver
•Polyunsaturated fatty acids are elevated

Who Cannot Fast?

Anyone under 18 years of age
Pregnant or breastfeeding women
Anyone over 75
Anyone with an eating disorder
Anyone with type 1 diabetes or on medication
Anyone with a BMI < 18.5



Modified Alternate Day Fasting

Restriction days are not together and there is only a small amount of food.

Prolonged Fasting

Deliberate 3-7 day water only fasts. Decreases inflammatory markers. However, if on medication this will require medical supervision.

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Week 6 Coaching Exercise

Intestinal gut health affects the way we metabolize fats and store fats, which are thought to be a major contributor to Fatty Liver Disease.
Improving gut health includes removing damaging substances from eating patterns; like artificial sweeteners, ultra-processed foods, unhealthy fats in fried foods, increasing fiber with fruits and vegetables, eating fermented foods (or taking a probiotic), and decreasing sugar intake to less than 24 grams/day.

Brainstorm with your group/coach/ or family 3 ways you would like to improve liver health or reduce fatty liver risks:

1.

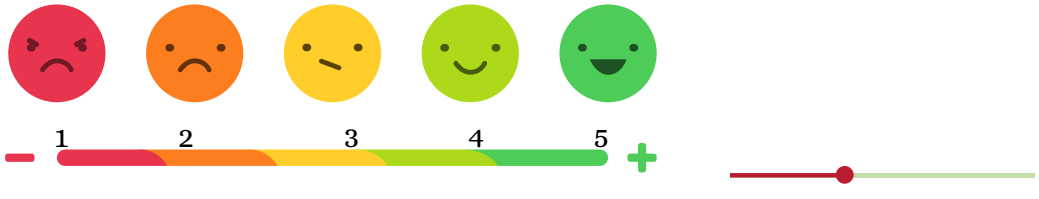
2.

3.

Considering what you learned about fasting today, what interest you most?

If you have tried fasting in any form (not eating between meals, eating two meals a day, or a medically supervised fast, how did it help you feel better?

Rate how the discussion today helps you focus on the decision you want to make regarding your health.



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Week 7

Hormones/Weight/Improving Sleep

Walking in Wisdom. . .
"If you lie down, you will not be afraid;
when you lie down, your sleep will be sweet."
Proverbs 3:24

Objectives

- Get an Overview of Hormones
- Where Hormones Are & How they Work
- How Hormones Affect Weight
- What interferes with Hormone Function
- Improving Sleep Naturally
- Setting Goals

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Week 7 Hormones/Weight/Improving Sleep

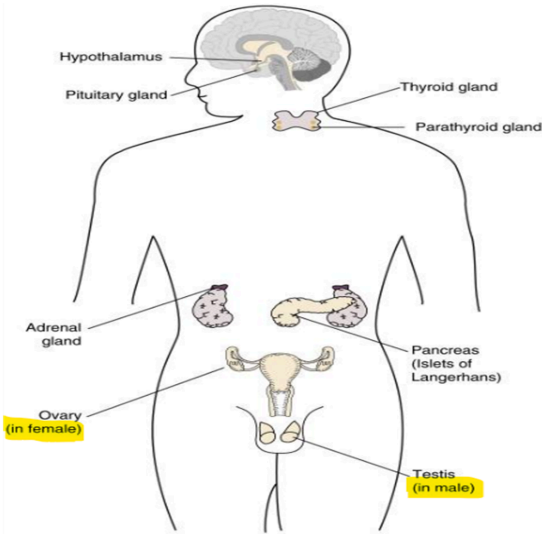
What Are Hormones?

Hormones are molecules produced by the endocrine glands, including the Hypothalamus, pituitary gland, adrenal glands, gonads (testes and ovaries) thyroid glands, parathyroid glands, and pancreas.

Hormones are important for growth and development, metabolism, electrolyte composition of body fluids and reproduction.



Hypothalamus
is the center of Homeostatic Control & maintains weight & energy Stores



Hormones Related to Weight Control

Thyroid --helps produce proteins, generate energy*maintain nerve cells /required for fetal growth, teeth, skin, hair.	**Estrogen** plays a role in female and male reproductive organs/appetite/fat storage. In females --menses/pregnancy*lactation.
Progesterone--supports pregnancy, sleep, breast health, metabolism, mood, sleep-balances estrogen-Lowers LDL	**Testosterone--**decreases body fat & bone loss, helps maintain memory, muscle tone, mood, & sexual interest.
Leptin--signals satiety, levels decreased in starvation. Sends signals to eat by increasing appetite.	**Adiponectin--**reduces insulin resistance and inflammation. Supports the immune system.
Insulin--major role in utilizing glucose for fuel-affects the breakdown of glucose from the liver-helps the body repair	**Ghrelin-**regulates appetite and fat storage, inhibits insulin secretion, + growth hormone/ increases gastric motility
Cortisol--helps control carb, protein, & fat metabolism. Increases glucose in the blood by breaking down fat. Protective in trauma.	**Incretins--**GLP1 (stimulates glucose-dependent insulin release from the pancreas, slows gastric motility.

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How to Balance Hormones

- Limit Ultra-Processed Food
- Include Cruciferous Vegetables in Your Food Daily
- Manage Stress
- Stay Active
- Restore the Gut
- Increase Fiber and Fermented Foods
- Intermittent Fasting
- Establish Good Sleep Habits

Improving Sleep Naturally

- First Morning Light Stimulates the Circadian rhythm.
- Exercise early in the morning, not before bed.
- Wind down, deep breath, and be thankful.
- Turn off all electronics one hour before bedtime.
- Consider blue blocking lenses or screens in the evening.
- Keep the room temperature cool.
- Get wi-fi and TV out of the room.
- Stop food and fluid intake 3 hours before bed.
- Get Tested for Sleep Apnea.

Breathing Exercises to wind down and calm respirations.

Foods



Oats, cherries, kiwi, nuts, turkey, oily fish, & nuts are good items to eat to promote sleep naturally.

GABA Foods---Broccoli and other cruciferous vegetables- peas and beans-oats, wheat, and barley-rice & tomatoes-sweet potatoes-spinach.

Essential Oils



Clary sage, bergamot, lavender oil, sweet marjoram, Roman chamomile, and valerian are a few essential oils that can be placed in a diffuser, on a pillow, or in a warm tub of water before bedtime.

Supplements

Supplements---Check with your doctor first and ask about:
Melatonin -Magnesium-Valerian-Passionflower Tea-Lavender-Chamomile Tea
Glycine-Gamma-aminobutyric acid (GABA)- Gingko Biloba- B12 in am.

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Week 7 Coaching Exercise/Tools

What is ONE thing you learned this week that helps you understand how daily choices impact every part of the body?

Fill in the Blanks Below:

Metabolic Health is more than being overweight it is_____
_____.

Sleep patterns and hormones affect how I _____, how I _____ and how well I _____.

The stage of change I am in at this time is:

___Precontemplation (Not considering a change)
___Contemplation (On the fence/ready but unsure)
___Preparation (Getting ready-looking at options--reading, learning)
___Active (I have made the change and going for it)
___Maintenance (I successfully made the change and sticking with it)

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My Goals This Week:

My Primary Health Goals

Identify up to 3 primary areas you want to focus on during the rest of this metabolic program. The goals should be challenging (so you remain interested) and achievable (realistic). To help you, try answering the question:

"How specifically would you like your life, to be different after attending this program?"

For each focus area, write a simple heading and do your best to describe "measurable" results - how you'll know you have succeeded or are on track.

GOAL 1: *one*

Focus area:

I know I've succeeded when:

GOAL 2: *two*

Focus area:

I know I've succeeded when:

GOAL 3: *three*

Focus area:

I know I've succeeded when:

Week 8

Heart Health and Cholesterol

Session Objectives:

- Discuss Heart Health
- Fun Heart Facts
- Overview of Heart Conditions
- Who is Affected by Heart Conditions
- 2 Main Dietary Contributors to Heart Disease
- Cholesterol Numbers

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Week 8 Heart Health & Cholesterol

The heart is about the size of two fists put together.

Each minute your heart pumps about 1.5 gallons of blood; that is about 2000g/day!

It beats 100,000 times a day and has been Beating since day 21 in your mom's womb.

It is a muscle, functioning as a pump with valves, and has its own electrical supply.



Heart Disease is the # 1 Killer of Women & Men

Heart Disease develops in men 7-10 years earlier than women.

Women's risks increase after menopause.

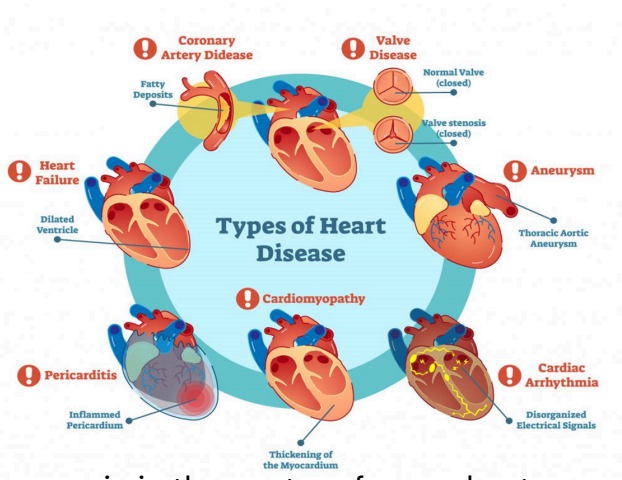
Greater risk factors are related to type 2 diabetes, obesity and smoking.

Other risk factors include high chronic stress, while coping with alcohol, food, or drugs.

Heart Disease Can Happen at Any Age!

Risk Factors We Can Control:

- High blood pressure
- Smoking
- High blood cholesterol
- Lack of regular activity
- Obesity or overweight
- Diabetes



Signs & Symptoms of a Heart Attack

Signs and Symptoms of a heart attack are:

- Uncomfortable pressure, squeezing, fullness or pain in the center of your chest.
- It can last more than a few minutes or goes away and comes back.
- Pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Break out in a cold sweat, with nausea or lightheadedness.



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Chronic Inflammation is thought to be the Underlying **Cause of Heart Disease.**

2 Primary Dietary Factors Contributing to this are: **Sugar and Excess Highly Processed Seed Oils**

Sugar & Inflammation

People with higher sugar diets have more inflammatory markers in their blood, including C-reactive protein (CRP).

CRP affects glucose transporters at the cellular level that regulate the immune system.

Blood is sticky and slow to flow.

Excess Seed Oils

Creates a hydroxynoneal byproduct in the blood.

It changes LDL structure, contributing to inflammation and atherosclerotic lesions. It is also recognized as a marker for CVD, Stroke, Type 2 DM and NASH.

Causes neuronal cell death to an area of the hypothalamus crucial for weight control. It contributes to morbid obesity by increasing appetite and fat cell inflammation.

Cholesterol (Lipid Panels) Give us a Snapshot of this Process.

Desirable Cholesterol Levels (measured in milligrams per deciliter – mg/dL)	
Total cholesterol	Less than 200 mg/dL
LDL ("bad") cholesterol	Less than 100 mg/dL
HDL ("good") cholesterol	60 mg/dL or higher
Triglycerides	Less than 150 mg/dL

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Week 8 Heart Health & Cholesterol

Biometric Wellness Tool

My Numbers

Total Cholesterol

LDL-C HDL-C

Triglycerides B/P

Fasting BS

Heart Health is Affected By

	3-4 Servings Vegetables/Day
	2-3 Servings Fruit/Day
	7- 8 Hours of Sleep/Day
	Chronic stress level> 7
	Alcohol >2/day m >1/w
	Fried Foods/ Fast food >3 x wk
	Excess Sugar in Sodas/Snacks
	Salt/Additives in Packaged Foods

Satisfaction with life matters because it affects how we cope and how we make decisions towards or against our health.

Place a number on a scale of 1-5 for each category of satisfaction to the right..
1=Not satisfied. 2 =Minimally 3=Somewhat
4 =Satisfied 5= Happy/Content

Considering your numbers, what would you like to do differently?

How will you do it?



Life Satisfaction Wheel

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Notes and Thoughts:

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Week 9

Gut Health & Inflammation

Objectives

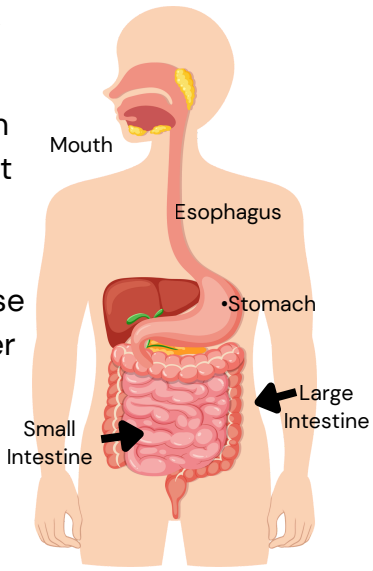
- Gastrointestinal System (GI) Function
- GI Microbiota & Function
- Signs & Symptoms of GI Dysfunction
- How To Restore Gut Function
- Inflammation -Acute & Chronic
- Reducing Inflammation Effectively

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Week 9 Gut Health & Inflammation

Gastrointestinal Tract

The GI tract is a 25-35 foot hose that runs from the mouth to the anus. It does not include liver, gallbladder, kidneys, spleen. Although all these organs function together and contribute to the health of one another, we are just discussing the gut today.

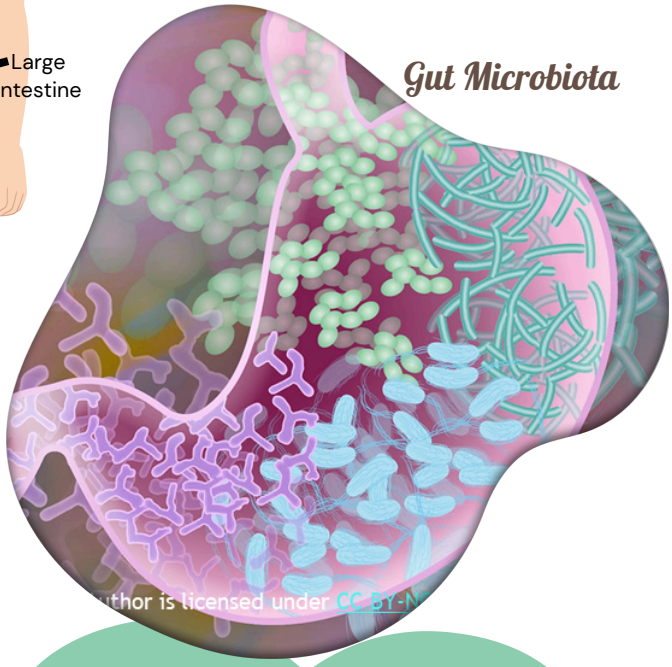


Gut Health

Gut health includes effective digestion and absorption of food, the absence of GI illness, normal and stable microbiota, effective immune status and a state of well-being. (NIH, 2011)

Gut microbiota is a set of microorganisms that colonize in the digestive tract. They consist of bacteria, viruses, fungi, and protists.

Gut Microbiota


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Functions of the Microbiome

- Prevents overgrowth of pathogenic microorganisms
- Provides nutrition for Gut Wall from undigested food
- Regulates the mucosal immune system
- Keeps the gut barrier in place
- Helps regulate our metabolism

Signs Gut Health is Off balance

- Abdominal Pain
- Diarrhea
- Indigestion
- Gas
- Constipation
- Bloating
- Chronic Joint Pain
- Recurrent Bladder Infections
- Asthma
- Chronic Muscle Pain
- Skin Rashes
- Recurrent Vaginal Infections
- Poor exercise tolerance
- Mood Swings
- Aggressive Behavior
- Nervousness
- Anxiety
- Poor Memory
- Fuzzy Thinking

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Types of Inflammation

Acute is a local response to cellular injury marked by dilation of capillaries (smallest blood vessels) and stimulating the immune response of white blood cells, to remove the agent and damaged tissue. With injury, it causes redness, heat, swelling, and pain.

Chronic inflammation is when the invasion is persistent from food sensitivities or processed food. Damage occurs in different places in the body, at the cellular level.

Health Impact of Excess Sugar, Gut Health, & Inflammation



6 TSP or LESS

Fat accumulation
Insulin Resistance
Heart Disease Risks
Inflammation
Blood Pressure
Collagen Breakdown

Average Sugar Per day in America of 85 grams is 21 Teaspoons Almost 1/2 cup (24 tsp =1/2cup)

CDC, 2021

Healing the Gut and Reducing Inflammation

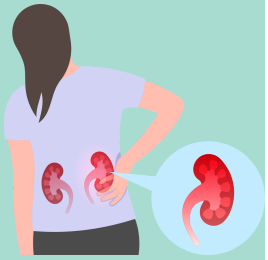
Ultra-processed foods often contain ingredients like additives, preservatives, and dyes that contribute to chronic inflammation and poor gut health.

Therefore, restoring gut health and reducing inflammation is a combined process of:

- Removing cell destroyers and adding cell builders in daily habits
- Eating whole food
- Eating less processed & packaged food
- Eliminating or drinking less diet soft drinks.
- Consume more fermented foods
- Consume anti-inflammatory foods



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Artificial Phosphates



Preservatives
Additives
Flavorings





Alcohol/Fat Sugar

Inflammation can be silent and persistent. It can also show up anywhere in the body. We have a way to make the connection between what we are eating or drinking, and inflammation.

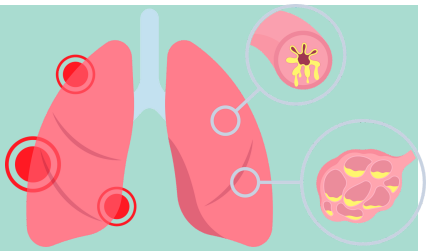
3 Day Food Diary

Pain and better function can be powerful intrinsic motivators. How much do you value feeling better on a scale of 1-10?

_____

Homework

Keep a 3 -to -5 -day food journal of everything you eat and drink. Pay close attention to how you feel 2 hours later. Note anything in your journal that feels like hyperactivity, brain fog, sleepiness, or fatigue. Also take note of joint pain, itchy skin, bloating, cramping, or heartburn, Be ready to talk about it next week!



Smoking & Vaping



Fungal Overgrowth from too much sugar



Nut or Seed Sensitivities



Gluten & Dairy Sensitivities

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Notes & Thoughts

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Week 10

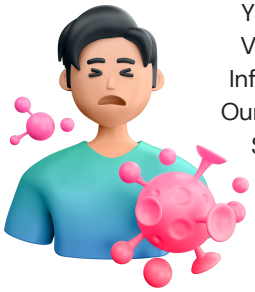
Boosting the Immune System

Session Objectives

- How infection Enters & Spreads in the Body
- Good Hygiene
- Importance of Rest & Sleep
- Managing Stress
- Vitamin D Levels
- The Right Fuel to Feed Cells
- Why Gut Health Matters
- Staying Active

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Week 10 Boosting the Immune System



You Tube Video on Infection & Our Defense System

Good Hand Hygiene

•Hand washing with soap and water before eating and drinking.
•Repeated use of hand sanitizer problems includes dry skin and eczema.

It may also lead to hormone imbalance. Some sanitizers contain triclosan which is thought to affect fertility.
Lastly, it may contribute to antibiotic resistance.

Importance of Rest & Sleep

•Lack of sleep or poor quality sleep is associated with:
•Increased viruses and bacterial infections (up to 64% in one study)
•Cytokines—interleukin 6 and C Reactive Protein are also increased.
•Contributes to long-term inflammation

Managing Stress

•Chronic Stress lowers the effectiveness of the immune system
•Higher levels of cortisol (the flight or fight hormone) keep your body in inflammation mode and hinder a response to a viral attack.
•Some studies report it also reduces white blood cell's ability to respond to an attack.

Vitamin D Levels

•Vitamin D regulates both innate and adaptive immunity
•Lack of vitamin D has been noted in SARS/Covid/Flu/HIV
•It has some antiviral properties
•Stimulates antimicrobial enzymes in the immune system
•Stimulates the macrophages to come in and sweep up debris



The Right Fuel to Feed the Cells

Quality Protein
Fruits & Vegetables
Reducing Sugar & Inflammatory foods
Vitamin C
Vitamin E
B vitamins
Zinc

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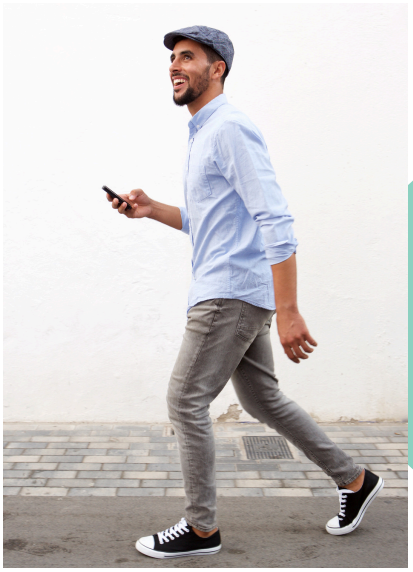
Week 10 Boosting the Immune System

Herbal & Home Remedy Prevention

Garlic
Ginger
Honey & Cinnamon
Echinacea Tea
Oregano



Staying Active



- Exercise is anti-inflammatory
- Excessive exercise without proper rest can reduce the immune system
- Moderate intensity for 60 minutes or less is ideal
- Stimulates the ongoing exchange of leukocytes between the circulation and tissues
- Enriches the blood compartment of highly cytotoxic T-cell and NK cell

Why Gut Health Matters

70-80% of immune cells are in the gut
An intact intestinal wall prevents pathogens from invading the body.
Gut health produces major immune system properties.
Gut bacteria manufactures most of our B vitamins which is essential in supporting the mood and the immune system.



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Week 10 Coaching Exercise

Let's review the food diary you kept last week.

What did you learn?

Is it possible your immune system was triggered?

Discuss the importance of the immune system in feeling better.

What effect does this have on the health decision you want to make?

How confident are you on a scale of 1-10 you can make this decision?:

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Week 11

What to Know About Supplements

Session Objectives

- Define Supplements
- Note Regulations and Safety
- Health Claims
- Verification
- Who Needs Them

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What Are Supplements?

Dietary Supplements are products such as vitamins, minerals, amino acids, enzymes, tissues from organs or glands, or extracts of these items that supplement one's diet.

Herbal supplements are also called botanicals.
They are made from plants, algae, fungi or a combination of these.

They are sold as teas, extracts, capsules, and powders.

Regulations

•Health Claims are illegal.
•Structure/Function claims like calcium builds strong bones, has to be followed by, "This statement has not been evaluated by the FDA.
•Advertising should be truthful and not misleading.

What to Look for Choosing a Brand

•USP Verification
United States Pharmacopeia
•NSF Certified for Sport
National Sanitation Foundation
•Third Party Verification



A Billion $ Industry

Safety and Side Effects

What's on the label may not be in the product.
Health Fraud Product Database
23,000 ER Visits per year
Rare---acute liver damage
"Verified, Certified, Standardized"
Surgery Risks—some may increase bleeding or effects of anesthesia
Always be open about any supplements you are taking with your health care provider.
Always be aware of interactions with medications.

Who Needs A Supplement?

•Food is Preferred Choice
•Follow a Restrictive Diet
•Eliminate Entire Food Groups
•Have a Diagnosed Deficiency
•Have a Medical Condition
•Or Take Medications Interfering with Absorption
•Pregnancy Requiring Added Nutrients

Always be aware of possible toxicity with higher doses.

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Week 12

Wrapping Up What We Learned

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Review & Discuss

We have covered a lot of material these past few weeks. Congratulations for hanging in there and doing the work!

You now understand how nutrition, activity, lifestyle, and attitude are foundational to our daily choices and our health.

We've learned things from science and each other. We may have even learned a few things about ourselves.

So let's talk about it.
Self-efficacy is the confidence to make and sustain changes that impact our health and resisting the temptation to relapse. On a scale of 1-10 how confident are you that you can make a change in your health?

We learned about extrinsic (temporary /external) and intrinsic (permanent, life-altering, no one can take away) rewards. What is something you learned about internal rewards that can help you make the changes you want to make?

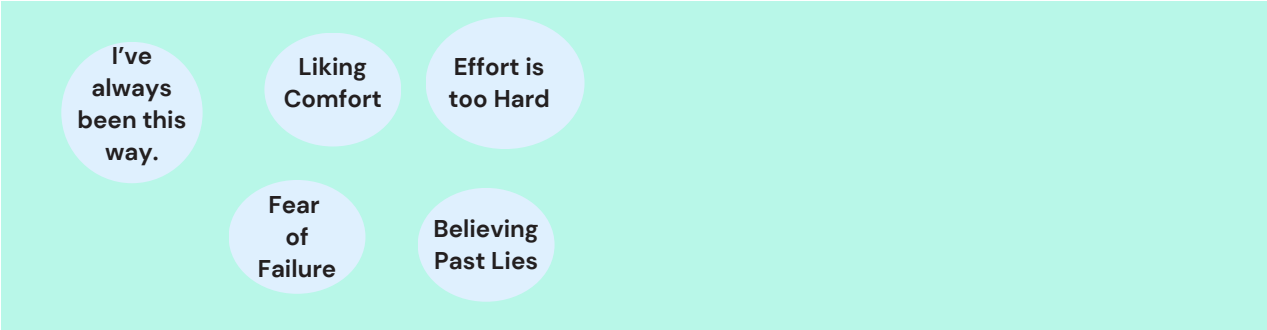
Thirdly, we talked about a fixed mindset (thinking our ability is limited) and a growth mindset (believing hard work, skills, and strategies help us grow new ability). How did this program help you think outside the box? In other words, what patterns and behavior that were once fixed in your mind, do you see differently?

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Week 12 Wrapping Up What We Learned

Things that hinder a growth mindset are what I call growth stoppers. What are some growth stoppers you deal with each day?

Here are a few to get you started. . .



Revisiting your list of strengths, how have you overcome these growth stoppers before?

How does using everything you've learned in MetS Busters give you the confidence to do something different?

What, if anything, are you ready to do in the area of:

Lifestyle

Activity

Attitude

Nutrition

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The following recipes are for one or two servings, double it if you want more for the next day!)

1. Thousand Island---a tangy version of this dressing provides good gut bacteria too. All you need is; ½ cup plain Greek yogurt, 1 tsp tomato paste, 1 tsp of dill pickle relish (with no sugar).
2. Ranch--½ Cup plain Greek yogurt, 1 tsp onion powder, 1tsp garlic powder, pinch of salt, 1 tsp parsley, 1 tsp dill (Fresh or dried). When it sits 8 hours or more the better it tastes.
3. Honey Mustard--1 teaspoon of mustard (plain or spicy brown) ¼ cup yogurt, 2 teaspoons of raw honey
4. Mayonnaise--2 eggs (pasteurized eggs are supposed to be free of bacteria) ½ teaspoon dried mustard (or 1 tsp of jar) 1tsp Himalayan salt, ½ to 3/4ths cup avocado oil or olive oil. Drizzle the oil into the eggs and spices, blend well with an emersion blender
5. Apple Cider Vinaigrette (You can Substitute Lemon Juice here too!) 1 ounce apple cider vinegar, 2 ounces organic extra virgin olive oil, ¼ tsp salt, ¼ tsp. pepper, ¼ tsp onion powder. (Optional sweetness--add 2 ounces apple juice or 1tsp raw honey)
6. Balsamic Vinaigrette--1-ounce Balsamic vinegar, 2 ounces organic extra virgin olive oil (EVOO), ½ tsp onion powder, ½ tsp garlic powder, 1 tsp minced red pepper, ¼ tsp salt, ¼ tsp dried basil.
7. Italian Dressing--1-ounce white wine vinegar, 2 ounces EVOO, ½ tsp each onion powder, garlic powder, basil, & oregano, ¼ tsp salt, pepper to taste. (Optional sweetness add 1 tsp raw honey or 2 ounces white grape juice).
8. Hot Sauce--½ tsp cayenne pepper, 1 tablespoon EVOO, ¼ tsp salt, 1 tsp apple cider vinegar, 1 cup filtered water. Mix and store in a jar and keep in the fridge.
9. Avocado Dressing-- ½ Cup plain yogurt, 1 tsp onion powder, ½ tsp garlic powder (of course you can use fresh, it will just be stronger) ½ squeezed lemon juice about a tbsp, 1 mashed avocado.
10. Tzatziki Sauce--1/2 cup plain yogurt, ½ shredded cucumber with juice, 1 tsp ground garlic paste, a pinch of salt and pepper, and 1 tsp lemon juice.

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Thank you!



Author Bio

Mysty is National Board Certified Health & Wellness Coach and registered nurse. Her background is cardiovascular intensive care, cardiopulmonary rehabilitation, and diabetes education.

She became a wellness coach because of her passion to see people overcome chronic disease spiritually and physically.

She is a wife, mother of two, and grandmother of seven. She enjoys gardening, developing recipe devotions, studying the Bible, and all things science.

You'll find her writing articles on her blog, speaking at events, and hosting the Family Focused Health Podcast.



All recipes in this program are on the blog!

Click on the recipe name or type it in the search tab at www.mystypfeffer.com

Salad in a Jar Recipe

Easy, No Knead Bread

Sugar Free Berry Crisp

Energy Bars, Copycat Kind Bars

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