


*Impact of Diet on
Mental, Physical
and Emotional
Health*

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1

Learning Objectives

By the end of this seminar participants will be able to:

- Verbalize principles of healthy eating
- Identify the impact of inflammation on mental and physical health
- Understand the relationship between food choices, hunger, and mood
- Discuss the importance of micronutrients and macronutrients that affect mental, physical, and emotional health
- Recognize the importance of the gastrointestinal microbiome and make dietary changes to improve gastrointestinal microbiome
- Facilitate dietary changes to decrease inflammation and directly improve mental and physical health



2

Mental Health

In 2020, there were an estimated 52.9 million adults aged 18 or older in the United States with AMI (Any Mental Illness). **This number represented 21.0% of all U.S. adults.**

Any mental illness (AMI) is defined as a mental, behavioral, or emotional disorder. AMI can vary in impact, ranging from no impairment to mild, moderate, and even severe impairment

[NIMH's Mental Illness Facts page](https://www.nimh.nih.gov/health/statistics/2020-mental-illness-facts.aspx)

3



Physical Health

- ❖ Chronic Disease State
- ❖ Weight
- ❖ Biochemical Data
- ❖ Stamina: Physical and Mental
- ❖ Illness Frequency/Immune Function
- ❖ Energy Levels

4



Emotional Health

Emotional well-being has been defined as an overall positive state of one's emotions, life satisfactions, sense of meaning and purpose, and ability to pursue self-defined goals. **Emotional well-being has been shown to be associated with reduced risk of death from all causes by almost 20 percent among healthy people;** while having a sense of purpose in life reduces the risk of heart attack and stroke by 17 percent.

Chida Y, Steptoe A. Positive psychological well-being and mortality: A quantitative review of prospective observational studies. Psychosomatic Medicine. 2008;70(7):741-756.
Cohen R, Bavishi C, Razanski A. Purpose in life and its relationship to all-cause mortality and cardiovascular events: A meta-analysis. Psychosomatic Medicine. 2016;78(2):122-133.

5

Inflammation

Chronic Inflammation
Is a slower and generally less severe form of inflammation. It typically lasts longer. It has been linked to autoimmune disorders and even prolonged stress.

Acute Inflammation
Usually occurs for a short duration. Symptoms appear quickly. This type restores your body to its state before injury or illness.

Inflammation is an important part of our immune response and is beneficial by protecting us from acute stress and illness. The inflammatory response can be turned on and off - it becomes a problem when it is left on. Chronic inflammation makes a contributing factor to many disease states like coronary artery disease, diabetes, cancer, and Alzheimer's disease. **Some symptoms of chronic inflammation include depression, fatigue, weight gain, insomnia and gastrointestinal complaints.**

Poor diet, poor lifestyle choices and prolonged stress can all **increase** inflammation - keeping it turned on.

Healthy diet and lifestyle choices can **decrease** inflammation - turning it off.

[Inflammation: A unifying theory of disease? - Harvard Health](#)
[Understanding Inflammation: Causes, Symptoms, Diagnosis, Treatment, & Prevention.com](#)



6



7


How to decrease inflammation

Do	Do Not
<ul style="list-style-type: none"> • Eat plenty of fruits, vegetables, whole grains, lean protein and heart healthy fat • Exercise • Sleep • Relax • Aide body in removing toxins • Omega 3 > Omega 6 	<ul style="list-style-type: none"> • Stress • Smoke or other exposure to toxins and irritants • Leave chronic disease untreated • Consume excessive amounts of sugar, refined carbohydrates, alcohol, processed meats and trans fats* <p><small>*may increase inflammation in those with underlying autoimmune disease</small></p>

8

Healthy Diet

A healthy diet emphasizes whole foods like fruits, vegetables, nuts, seeds, whole grains, lean proteins and healthy oils. A healthy diet is not a perfect diet; there is no perfect diet. It is an eating style that you can maintain. It should be enjoyable, sustainable, and flexible – and include a wide range of whole and processed foods. Healthy diets also need to be practical and consider the limited amounts of time, culinary expertise and budget that many people face.




9

***Micronutrients:
Vitamins and
Minerals***

- Help control fluid balance and blood pressure
- Precursors for Neurotransmitters
- Antioxidants
- Hormonal regulation
- Enzymes
- Central nervous system
- Micronutrients that have been linked with depression: iron, folate, B6, B12, B1, B9, phosphorus, zinc and magnesium

10


***Micronutrients
Minerals***



Phosphorus Magnesium Zinc Iron Selenium

11


- Important in energy metabolism.
- Found in
 - Dairy
 - Nuts
 - Seeds
 - Whole grains
 - Legumes
 - Meat – like pork and chicken



Phosphorus

12


- Magnesium is important muscle and nerve function.
- Found in
 - Beans
 - Nuts
 - Leafy greens
 - Whole grains



Magnesium

13


- Zinc helps with healing and tissue repair.
- Found in
 - Oysters
 - Beans
 - Nuts
 - Oats
 - Hemp seeds
 - Dairy
 - Meat



Zinc

14


- Iron helps blood carry oxygen.
- Found in
 - Meat
 - Fortified foods
 - Leafy greens
 - Lentils
 - Sesame seeds
 - Soybeans



Iron

15

- Selenium is important in DNA synthesis and thyroid hormone production.
- Found in
 - Brazil nuts
 - Organ meats
 - Beans
 - Rice
 - Yellowfin Tuna



Selenium

16


Micronutrients
Vitamins



D B 12 B 9 folate B 6 B 1 thiamine

17


- Vitamin D important in hormone production, absorption of calcium and immune system function.
- Found in
 - Fatty fish
 - Egg yolks
 - Liver
 - Sunshine



Vitamin D

18

- B vitamins are important in energy production, red blood cell production, central nervous system function, detoxification and production of neurotransmitters.
- Found in animal foods, fortified foods, legumes, whole grains nutritional yeast and fortified foods
- **B12** – fish, poultry, meat, eggs, dairy
- **B9/folate** – leafy greens, nuts, beans, fruit, grains, meat and poultry
- **B6** – poultry, fish, Potatoes and some fruit
- **B1/thiamine** –fish, pork, legumes, milk, eggs, nuts, seeds, whole grains – highest flax seeds, salmon and navy beans




B Vitamins

19

Macronutrients

20

Macronutrients



Carbohydrate Protein Fat Water

21

Microbiome

Why is it important?

- 4-10 times more bacteria than human cells
- Aides in digestion
- Imbalance as been linked with chronic disease
- Also linked with food cravings
- Hormones and neurotransmitters
- Bacteria translocation

How do we support it?

- Fiber, Prebiotic foods Fiber
- Plant foods – fruits, vegetables beans, nuts, grains
- 30 different plant species a week
- Onions and garlic – inulin
- Probiotic foods/fermented foods
- Limit sugar intake
- No artificial sweeteners
- Limited traditional antibiotics
- May be affected by diet in as little as 3 days

22

•Opportunity for adequacy and variety

•Stabilize mood

•Prevent poor food choices

•Improve digestion

EAT!

23

Variety

- 10-12 servings of fruit and vegetables a day
- 30 different plant species
- 9 essential amino acids
- 2 essential fatty acids

24




Hangry

- Hypoglycemia
- Irritability
- Headaches
- Inability to concentrate




25

Better Digestion



Better Choices



26



Do regularly throughout the day
Have protein, carbohydrate and fat
5-10 servings of fruits and vegetables a day
Incorporate heart healthy fat
Drink water
Do not drink your calories
Be active every day
Enjoy your food

27

Include

- Whole grains
- Beans, nuts and seeds
- Fruit
- Vegetables
- Heart Healthy fats

28

How

- Wash and cut produce when you buy it
- Try a meal preparation delivery service
- Prepare your meals the day before or at the start of the week
- Have an emergency back-up
- Use a calorie tracking app – enter everything the night before after a week or two you will have weekly menus
- Make it easy for your self – buy prewashed and precut produce or frozen produce
- Be proactive when it comes to hunger
- 80/20 rule

29

Sample Menu

- Breakfast**
Steel Cut oats with walnuts, cherries and pomegranate seeds
- Snack**
Edamame beans steamed
- Lunch**
Lentil stew with marinated veggies
- Snack**
Greek yogurt with berries
- Dinner**
Roasted salmon with beets, greens and faro
- Snack**
Dark chocolate and almonds



30

Remember

- Sleep
- Exercise
- Relax
- See your health care team
- Take medication as prescribed
- Do something for others
- Be kind

31

Thank You!

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32
