

Nutritional Wellness

What are you eating?



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Department of Correction

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Objectives

- Understanding healthy eating.
- Explain the macros of nutrition.
- Understand the benefits of ‘the blue zones’.
- Learn about the plate method of healthy eating.
- Points to focus on a health eating plan



Nutrition: the modern version- what the heck is it?

- Constant changes to nutrition standards and ‘best diet’ information.
- Every day a new ‘diet’.
- What are the right things to eat?
- What are “macros”?
- Are you really ‘what’ you eat?
- Is that good for you?
- What is nutrition anyway?



Nutrition vs diet

Nutrition

The act or process of nourishing or being nourished.

Specifically: the sum of the processes by which an animal or plant takes in and utilizes food substances.

Foods that are necessary for human nutrition.

The components of daily diet.



Diet

Food and drink regularly provided or consumed.

What you eat.

To eat and drink sparingly or according to prescribed rules.

Attempt to reduce or free from calories.

Promoting weight loss.



Macros: The essentials of nutrition

- These are the foods that the body needs in specific large quantities to help your body function properly.
- Carbohydrates: provide energy to the body.
- Protein: helps repair and rebuild body tissues.
- Fat: helps with hormone balance, feeling full, and absorbing vitamins A, D, E, and K.



Carbohydrates



- 4 calories per gram
- 45–65% of your daily calories
- Most carbohydrates get broken down into glucose (sugar) and is used for immediate energy-or converted to glycogen and stored in the liver for later use.



Carbohydrates: Too much of a good thing can be bad

- Too many carbohydrates regularly can have negative health effects:
 - Weight gain because of slowing the metabolism.
 - Can lead to diabetes-your pancreas can start to produce less insulin.
 - Elevated glucose levels.
 - Acne/Skin issues.
 - Brain fog.
 - Fatigue.
 - High cholesterol-triglycerides (highly processed)



Proteins

- 4 calories per gram
- 10-35% of your daily calories
- Recommend no more than 0.8-1g per kg of body weight for adults under age 50. Adults over 50 the recommendation is 1.2-1.6g per kg of body weight.



Plant vs animal

PLANT BASED PROTEIN			ANIMAL BASED PROTEIN		
PROTEIN PER 100G			@thefitnesschef_		
CHICKPEAS	OATS	TOFU	EGGS	TURKEY MINCE	CHICKEN BREAST
					
7g protein	11g protein	13g protein	14g protein	25g protein	25g protein
BROWN RICE	QUINOA	LENTILS	PRAWNS	TUNA	SALMON
					
3g protein	4g protein	6g protein	18g protein	25g protein	25g protein
CASHEWS	PEANUT BUTTER	ALMONDS	PORK CHOP	RIBEYE	DUCK
					
18g protein	28g protein	29g protein	19g protein	19g protein	27g protein
AVOCADO	BROCCOLI	EDAMAME	SEMI SKIMMED MILK	GREEK YOGURT	EDAM CHEESE
					
2g protein	4g protein	12g protein	4g protein	9g protein	26g protein
*Some incomplete proteins			*All complete proteins		

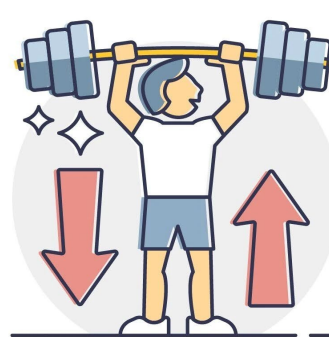
FUNCTIONS OF PROTEINS



**Digestive enzymes
help facilitate
chemical reactions**



**Antibodies support
immune function**



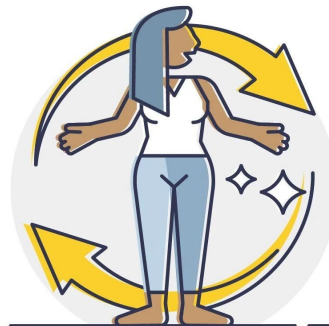
**Support muscle
contraction and
movement**



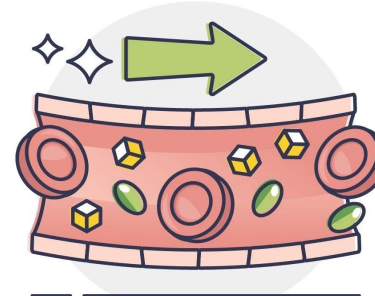
**Support the regulation
and expression of
DNA and RNA**



**Provide support
to the body**



**Hormones help coordinate
bodily function**



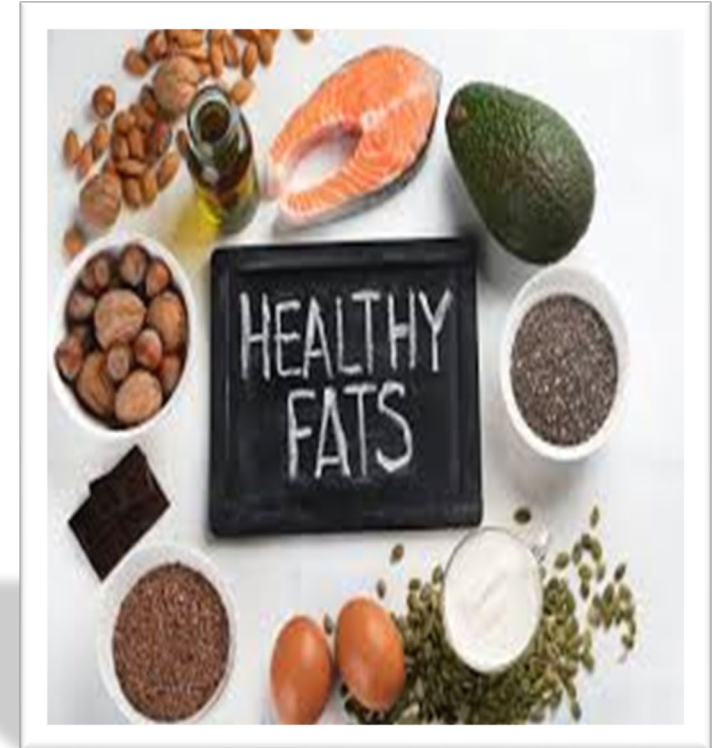
**Move essential molecules
around the body**

Proteins: Too much of a good thing can be bad

- Too much protein regularly can have negative health effects:
 - Kidney damage from the excess nitrogen and amino acids can cause renal failure.
 - Weight gain-proteins can be high in calories and difficult to metabolize.
 - Dehydration-when the body breaks down protein it produces extra nitrogen which your kidneys need to get rid of, causing you to lose more water.
 - Digestive issues-constipation, gas, bloating, and indigestion.
 - Fatigue-too much protein may cause the body to increase serotonin –which is a hormone that makes us sleepy.
 - Bad breath from the excess amino acid and nitrogen which produces a sulfur smell.
 - Higher risk of cardiovascular disease and increased cholesterol levels.

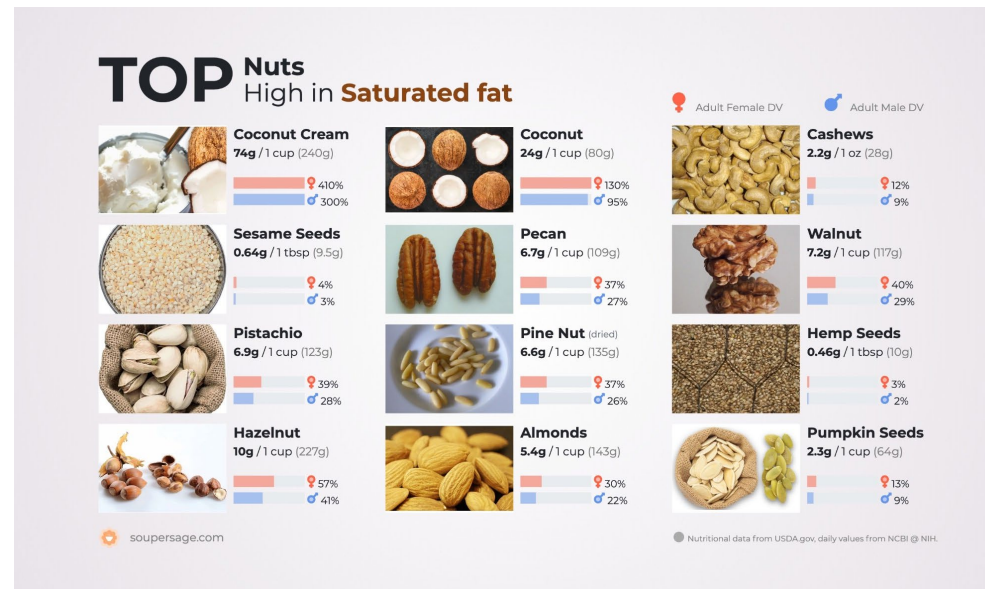
Fats

- 9 calories per gram
- 20–35% of daily calories from fats
- Can be converted to cellulite.
- Provide insulation for organs.
- Transports/helps in absorption of vitamins.
- Can support/assist in metabolizing food.
- Helps to build cell membranes.
- There are ‘saturated’ (bad fats) and ‘unsaturated’ (good fats).



FATS

- Who doesn't love bacon?
 - Can lead to heart disease
 - Can clog your arteries
 - Can be stored as cellulite



Saturated vs. Unsaturated

- Saturated fats
 - Most often solid at room temp
 - Unhealthy fat
 - Examples include:
 - fat in animal meats
 - palm and coconut oil
 - Cheese
 - Dairy
 - Processed meats
 - Baking with saturated fats.
- Unsaturated fats
 - Usually liquid at room temp
 - Healthier fat
 - Examples include:
 - Eggs
 - Advocado
 - Salmon
 - Nuts
 - Olive oil
 - Seeds.

Fats: Too much of a good thing can be bad

- Too much fat regularly can have negative health effects:
 - Increased risk of obesity.
 - Increased risk of coronary heart disease.
 - Increased risk of some cancers.
 - Can increase blood lipids and triglycerides.
 - And obviously more fat deposits.

How can you make the macros of nutrition work for you? Do many people eat this way?

Meal plate

Divided plates:

- Like when we were kids, gives a good visual of how much of the plate should be covered with which food group.
- Half of the plate should be filling nonstarchy vegetables which are filling.
- Simple way to achieve healthier proportions.

Well known diets:

Intermittent Fasting

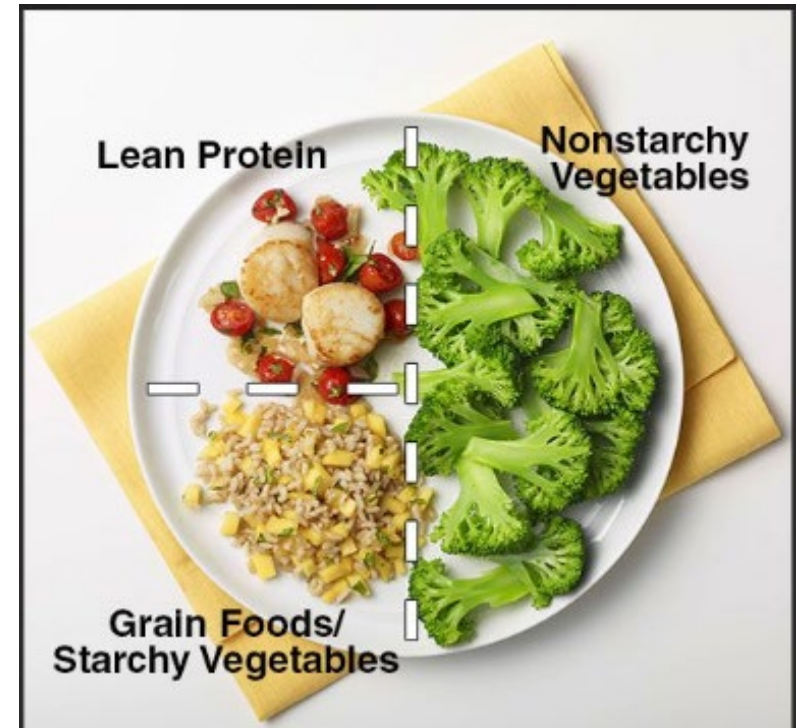
Mediterranean

DASH

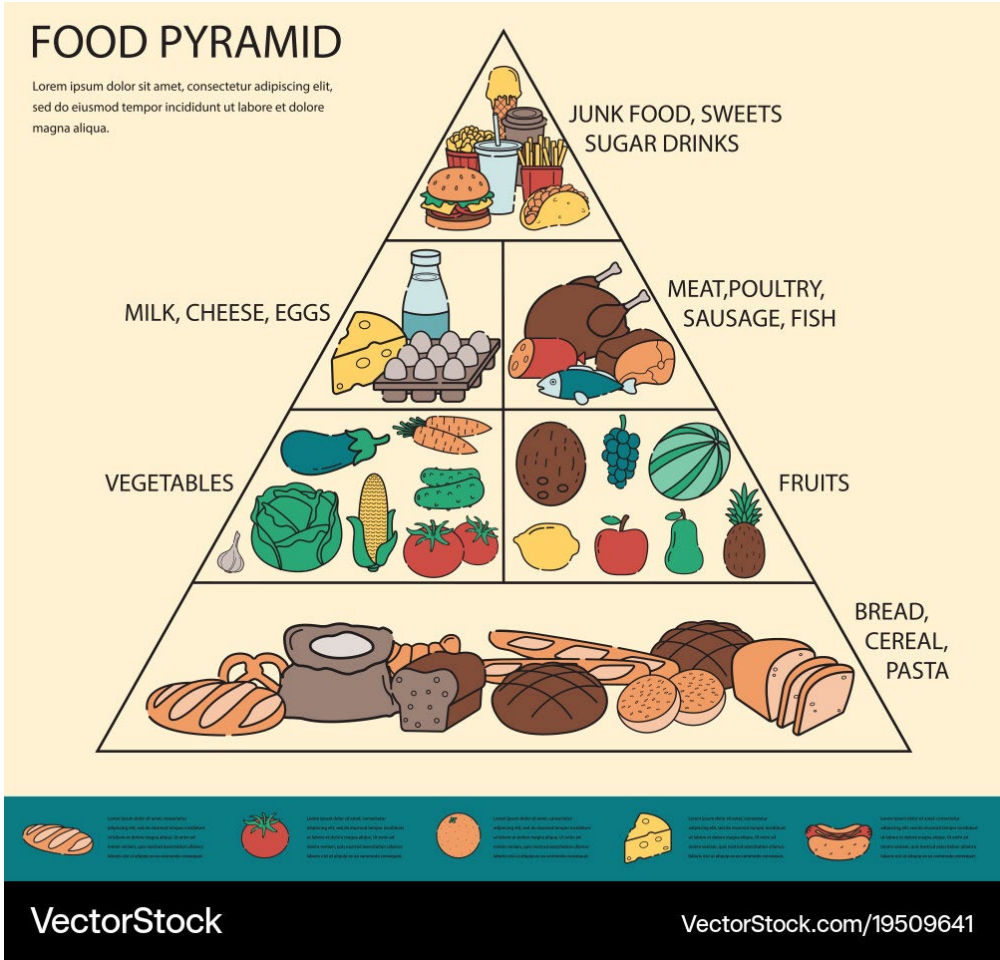
Low carb

Atkins

And sooooo many more- a new diet a day!



USDA Food Pyramid

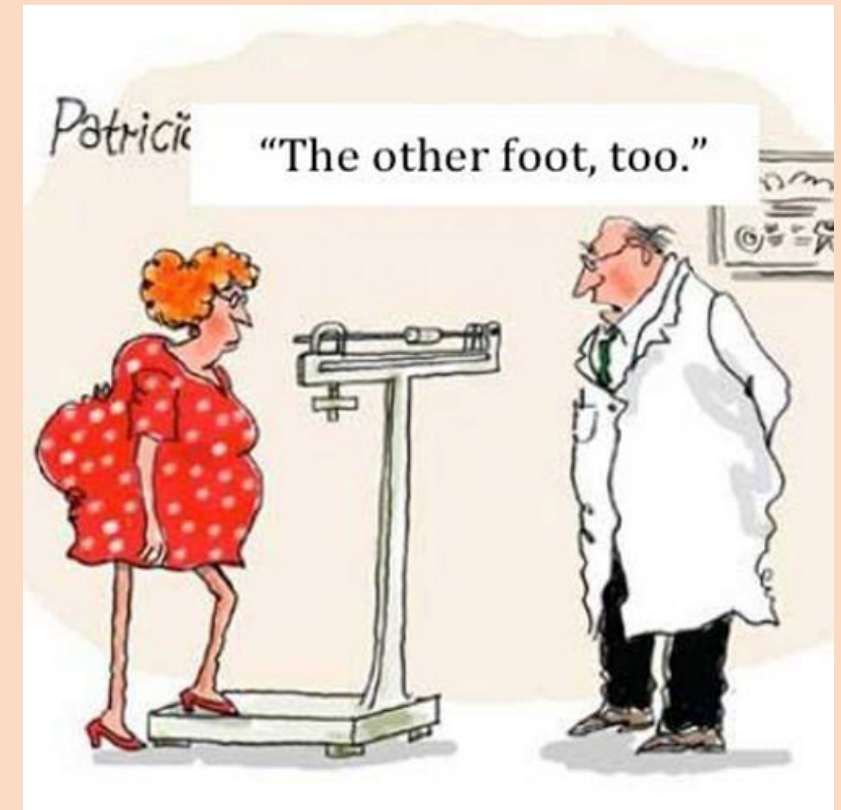


Weight Loss or Weight Maintenance

- Counting calories in any way, shape, or form is how to maintain a healthy weight and lifestyle.
 - To lose weight you need a calorie deficit. (3500 calories/one pound fat)
 - Recommended calories per day:
 - Women 1600 to 2400 calories per day
 - Men 2000 to 3000 calories per day
- *Calories are used by the body for energy and increased exercise or activity will raise your calorie needs or help to lose weight by creating calorie deficits.

Feelings About Calories

**EXERCISING WOULD
BE SO MUCH MORE
REWARDING IF
CALORIES
SCREAMED WHILE
YOU BURNED THEM**





Blue zones



- Beginning in 1999, journalist and explorer Dan Buettner led a series of expeditions with National Geographic and a team of anthropologists, demographers, and scientists to discover the world's longest-living populations and the commonalities between these unique groups of people.
- Through their research, they identified five regions of the world with the largest percentage of individuals 100 years of age or older, collectively called the Blue Zones. The people of these regions engage in similar lifestyle habits, such as consuming a plant-heavy diet, lots of physical activity and prioritizing tight-knit social networks.



Blue Zone Map

- The Blue Zones map includes the five regions of the world with the longest-living populations, including Loma Linda, Nicoya, Sardinia, Ikaria, Okinawa.



Blue Zone Population

1. Natural movement

- Individuals living in Blue Zone regions engage in everyday physical activities, such as gardening, walking, and climbing hills and mountains. Many of them maintain traditional lifestyles, refraining from using modern mechanical conveniences, such as washing machines and farming equipment. Physical activity is protective against certain chronic conditions, including heart disease, stroke, and type 2 diabetes, and is associated with improved psychological health and quality of life.

2. Sense of purpose

- One's purpose in life, “why I wake up in the morning”, contributes to human longevity and overall health and well-being. Individuals with a purpose in life are goal-driven, move through life with intention, and analyze life experiences for their personal growth and development. Having a greater purpose in life, whether that be a hobby, fulfilling career, or responsibility to care for loved ones, is associated with numerous psychological benefits, including improved happiness, self-esteem, gratitude, and a positive outlook on life.

Blue Zone Population

3. Stress management

- Although stress is nearly impossible to avoid, chronic (long-term) stress can cause problems. When left unaddressed, chronic stress may contribute to inflammation and certain health conditions, such as heart disease and depression. The world's longest-living people engage in activities that help manage stress, such as napping, praying, and attending happy hour with friends.

4. 80% rule

- People in the Blue Zones tend to avoid overeating by eating until their stomachs are about 80% full. Many individuals also eat smaller meals throughout the day and abstain from eating late in the evening. Sticking to this simple rule prevents overeating, encourages more mindful eating practices, and contributes to longevity

Blue Zone Population

5. Plant-centric diet

- The vast majority of individuals living in Blue Zone regions consume meals consisting of mostly plant-sourced foods. Animal proteins are generally consumed in small amounts and are often reserved for special occasions.
- Most of their eating patterns align with the Mediterranean diet, emphasizing the consumption of vegetables, fruits, whole grains, nuts, seeds, beans, legumes, and healthy oils such as extra-virgin olive oil. Extensive research has demonstrated that a plant-heavy diet, such as the Mediterranean diet, is associated with a lower risk of all-cause mortality, lower incidence of depression, and reduced cognitive decline.

Thoughts to take away today

- Live like you are in a “Blue Zone”.
- Be mindful of what you are eating.
- Too much of anything isn’t good.
- No ‘diet’ is the solution but good nutrition is.
- Healthy eating can improve your life expectancy and wellness.
- It isn’t easy, but the benefits are great



Questions