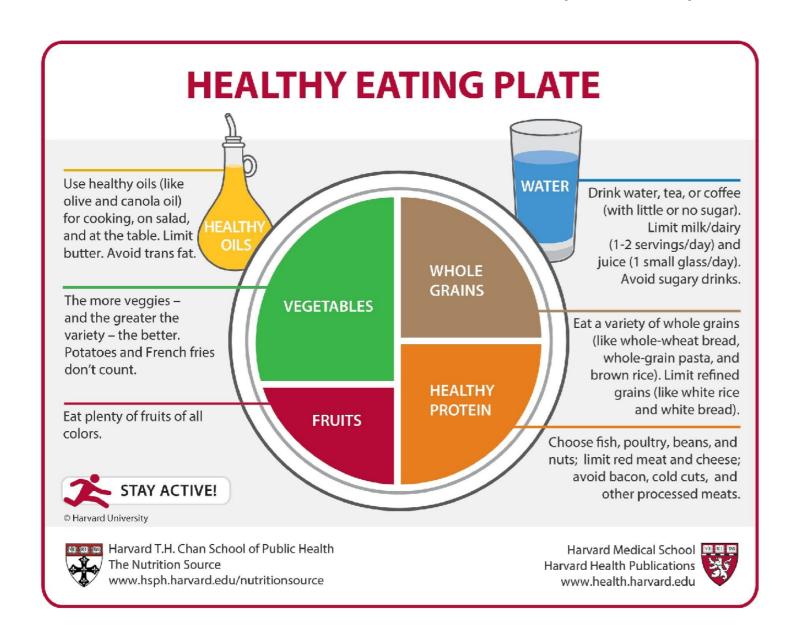


Chapter 1: Food Plan & Hydration

Author's Note

The information on this website, including all texts, graphics, images is provided to describe my pursuit of an expanded healthspan. My journey may not be appropriate for your individual circumstances. While I encourage all to have a strategy to expand their healthspan please develop your path in concert with your physician.

arvard Medical School recommends we use their Healthy Eating Plate menu to create our daily food and hydration plan. I have followed their advice for the past year. Yes, I have fallen off the wagon a time or two. Still the results were amazing. I never got hungry, lost 12 pounds and 2 inches off my waist. By maintaining the proper level of protein combined with resistance training (Chapter 2) I added 3.3 pounds of muscle mass. This is NOT a diet. It is a *food plan* to expand our healthspan.



Also....
The Government of
Canada has an excellent
Food Guide I recommend
you take a look at.

Daily Nutrient Recommendations

The first step on this journey is to determine your personal starting point.

This United States Department of Agriculture tool will calculate daily nutrient recommendations based on the Dietary Reference Intakes (DRIs) established by the Health and Medicine Division of the National Academies of Sciences, Engineering and Medicine. The data represents the most current scientific knowledge on nutrient needs. Individual requirements may be higher or lower than DRI recommendations.

Click **HERE** for the calculator:

Enter the data required and you will immediately receive a comprehensive report. Below is <u>my</u> submission and results. We will use my BMI, Protein and Water results to better explain what this means. Read on.....

Age	80	
Height	5' 11"	
Weight	165 lbs	
Activity Level	Active	
ВМІ	22.9	
Daily Calories Need	2,595	

Macronutrient	Intake/Day
Carbs	292 - 422
Fiber	30 grams
Protein	60 grams
Fat	58 - 101 grams
Water	16 cups

Increasing our knowledge about "healthy protein" is vital to increasing our healthspan.

☑ Why is healthy protein important?

- Protein is essential for life. It supplies the essential amino acids needed for the growth and maintenance of our cells and tissues.
- Protein is one of a complex group of molecules that do all kinds of jobs in your body. They make up your hair, nails, bones, and muscles. Protein gives tissues and organs their shape and also helps them work the way they should. In short, protein is one of the building blocks that make you into who you are.
- Quotes from the USDA Dietary guidelines: "Consuming enough protein is important to prevent the loss of lean muscle mass that occurs naturally with age. Monitoring protein intake is especially important as older adults transition through this life stage. Intake patterns show average intakes of protein foods is lower for individuals ages 71 and older compared to adults ages 60 through 70. About 50 percent of women and 30 percent of men 71 and older fall short of protein foods recommendations."

What mix of animal and plant protein should be in our food plan? The green light on protein intake does NOT mean red meat, mashed potatoes and fried okra. This will result in weight gain. Check out this great website for 10 High-Protein Vegetables That Are Filling & Nutritious.

Be sure to click on the three links under "Highest Protein Vegetables".... invaluable information!

How much should you consume daily? Go back and take a look at your USDA results for protein. Notice mine is 60 grams/day. This USDA tool provides us the "minimum" daily alliance. Our question is different. What is the "optimum daily protein consumption" for you. Working with my nutritionist it became clear I was consuming inadequate protein. Therefore, because of my age and active cardio and resistance training my goal was set at 100 grams/daily. Since each of us is different, work with your doctor and nutritionist to determine your "optimum daily protein" target.

Following is more information of how to do this.

Calculating Your "Optimum Daily Protein" Target

"Nothing is easy" could be the title for figuring our personal "optimum daily protein target". The USDA calculation assumes a healthy person about 25 year's of age and then generates the "minimum daily protein target". We looked to a <u>Mayo Clinic article</u> which discusses additional levels of daily protein consumption based on age and exercise programs. The following chart can help explain Mayo's methodology and also gives you results in pounds vs. kilograms.

*NOTE: I am using my weight of 165 pounds as an example.

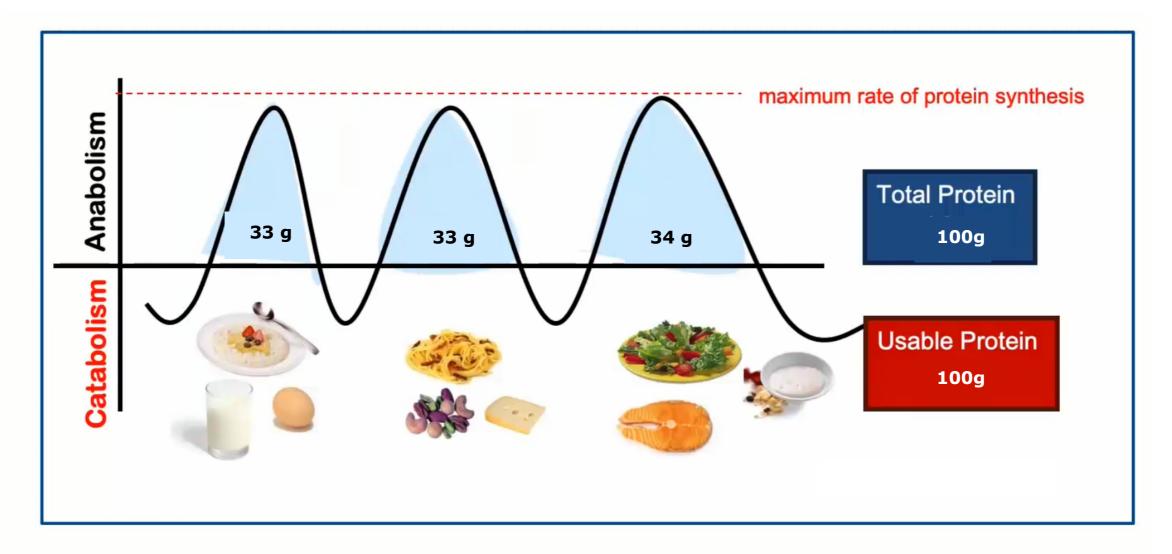
Age and Activity Level	*Your Weight in Pounds	Divide by 2.205 = Weight in Kg	Multiply by Grams Day/Kg per Mayo Article	Grams of Optimum Daily Protein
Sedentary adult less than 40 years old	*165 lbs	75	0.8	60
Sedentary adult older than 40 years Old	*165 lbs	75	1 - 1.2	75 - 90
People who regularly exercise	*165 lbs	75	1.1 - 1.5	82.5 - 112.5
People who regularly lift weights	*165 lbs	75	1.2 - 1.7	90 - 127.5

NOTE: Please work with your nutritionist and/or physician to calculate your optimum daily protein target.

Protein plays such an important role in our bodies you would be well served to read the following links to understanding various views regarding protein.

- <u>UCLA Medical</u>
- Harvard Medical
- National Library of Medicine

This graph shows how I spread my 100 protein evenly over three meals. Recently I added a Glucerna Protein drink to breakfast recommended by a doctor. I drink this about an hour after my normal breakfast of berries, greek yogurt and 100% whole grain shredded wheat. I now pack in about 45 grams of protein in the morning and have reduce dinner to 22 grams.



Ten Science-Backed Reasons to Eat More Protein

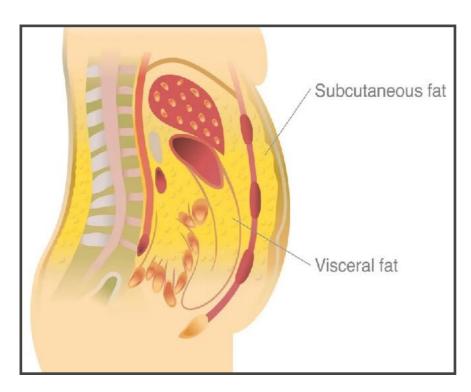
National Library of Medicine February, 2023

- 1. Reduces Appetite and Hunger Levels
- 2. Increases Muscle Mass and Strength
- 3. Good for Your Bones
- 4. Reduces Cravings for Late-Night Snacking
- 5. Boosts Metabolism and Increases Fat Burning

- 6. Lowers Your Blood Pressure
- 7. Helps Maintain Weight Loss
- 8. Does Not Harm Healthy Kidneys
- 9. Helps Your Body Repair Itself After Injury
- 10. Helps You Stay Fit as You Age

Your body uses more energy to digest protein and it takes a longer time to do so, boosting metabolic rate and helping you feel fuller for longer, so it's great for weight loss. The key? Front-loading your day with protein. Studies reveal that enjoying a breakfast high in protein can boost weight loss by 65%. In fact, new research in the journal *Cell Reports* reveals that the body is primed to break down protein and use it to create new muscle when it's consumed early in the day. Conversely, when the bulk of protein is eaten for dinner, the body stores most of it as fat. Thankfully, it's easy to load up on protein for breakfast.

We have to talk about this...sorry



(Excerpts for Living Better, Living Longer and "thatsaladlady.com" and Johns Hopkins Medical.)

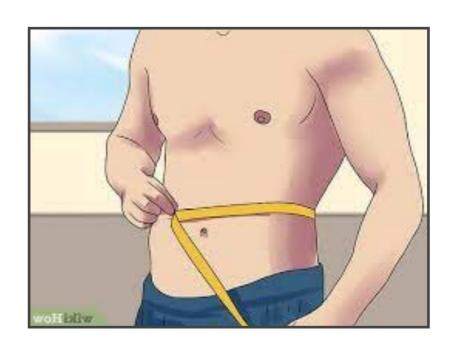
Our abdomen is composed of an outer layer of skin and an inner layer of subcutaneous fat.

There is another deeper layer of fat called visceral fat. This fat surrounds all our vital organs like the pancreas, liver and intestines. Too much visceral fat is extremely harmful as it is linked to a higher risk of heart disease, type 2 diabetes and certain cancers.

Here is a great article from <u>Johns Hopkins</u>

<u>Medicine</u> explains 8 ways to lose belly fat to live a longer life!

"Maintaining a trim midsection does more than make you look great—it can help you live longer. Larger waistlines are linked to a higher risk of heart disease, diabetes and even cancer. Losing weight, especially belly fat, also improves blood vessel functioning and also improves sleep quality. It's impossible to target belly fat specifically when you diet. But losing weight overall will help shrink your waistline; more importantly, it will help reduce the dangerous layer of visceral fat, a type of fat within the abdominal cavity that you can't see but that heightens health risks," says Kerry Stewart, Ed.D., director of Clinical and Research Physiology at Johns Hopkins."



Understanding Your BMI

Body Mass Index (BMI) is a person's weight in kilograms divided by the square of height in meters. BMI is an inexpensive and easy screening method for weight category—underweight, healthy weight, overweight, and obesity. Complicated right?

Here's the net: BMI is correlated with direct measures of body fat. Furthermore, BMI is strongly correlated with various metabolic and disease outcome as these are more direct measures of body fatness. It is a measurement we should pay attention, however, AMA suggests that BMI be used in conjunction with other valid measures of risk such as, but not limited to, measurements of visceral fat, body adiposity index, body composition, relative fat mass, waist circumference and genetic/metabolic factors. See AMA New Policy clarifying role of BMI as a measurement.

	BMI	Weight Status	
	Below 18.5	Underweight	
GOAL	18.5 - 24.9	Healthy Weight	
	25.0 - 29.9	Overweight	
	30 and Above	Obesity	

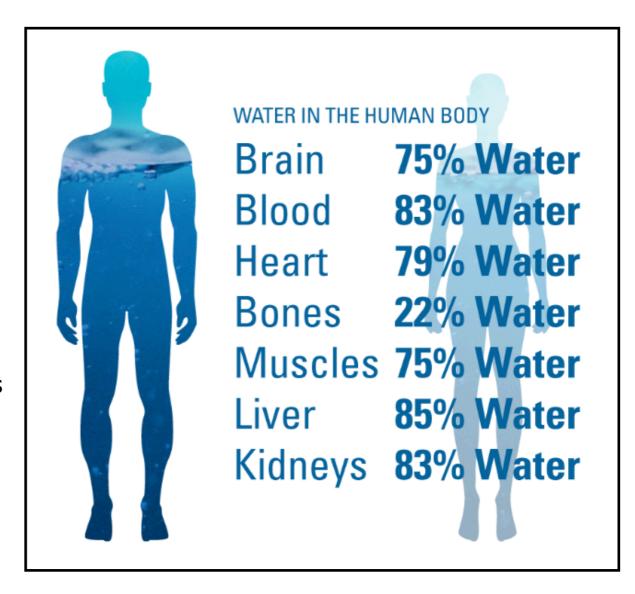
Most of us probably have some work to do to squeeze into "Healthy Weight". The USDA Dietary Guidelines are excellent but a bit exhaustive in length. Go to page 121 if you are 60 and older. Excellent information. I also URGE you to read p. 128 regarding protein and Vitamin B-12.

Click HERE for USDA Dietary
Guidelines

Hydration

Per our doctor, Patty and I were both well short of the required hydration goals for 80 year olds. In fact over the past 5 years we had rushed Patty to the Emergency Room on several occasions for dehydration. Scary stuff.

The doctor calculated how much water I should drink in a four hour round of golf. It was two quarts of water compared to my normal two cups. WOW, four times more! As you just read the USDA calculated I need a total of four quarts per day. Lots to learn! The bottomline is hydration needs to be a part of our aging plan. A way to think about this is we are watering our organs which we want to continue to regenerate themselves. Water and protein are two vital ingredients. Suggest you read this excellent Harvard Medical School article on hydration.



END CHAPTER 1 - Return to Chapter Index