



Every Day Nutrition

NUTRITION BASICS: MACROS, MICROS & MEAL BALANCING



Meet Your Guide - Jason Colomb

Introduction:

- Wellness Coordinator, Nutrition Expert, ACSM Certified Personal Trainer

Passion for Nutrition:

- Driven by personal and professional experiences in fitness and wellness
- Dedicated to promoting balanced, sustainable nutrition

Personal Journey:

- Accomplishments: Weight Loss, Ultra Runs, 7 Peak Death Races, Bodybuilding
- Overcoming an eating disorder through nutrition education

Program Philosophy:

- Blending practical experience with professional expertise
- Focusing on holistic, individualized nutrition approaches



Everyday Nutrition: Your 4-Week Guide to Healthier Living

Week 1: Nutrition Basics: Macros, Micros & Meal Balancing

Week 2: Label Literacy: Unveiling the Truth Behind Food Packaging

Week 3: Smart Shopping: Navigating Stores and Menus for Healthier Choices

Week 4: Sustainable Strategies: Meal Planning and Prep for Busy Lifestyles





Goals of Our Nutrition Journey

- Understanding Holistic Nutrition
- Practical Skills for Healthy Eating
- Balanced Approach to Meals
- Debunking Nutrition Myths
- Sustainable Lifestyle Changes
- Interactive Learning Experience
- Have Fun!

The Importance of Nutrition Fundamentals

Essential for Overall Well-being:

- Nutrition basics are the foundation of physical and mental health.
- Proper balance of macros and micros is key to body function.

Impact on Health:

- Affects energy levels, immune system, and disease prevention.
- Influences mood, cognitive function, and long-term health.

Building Blocks for Life:

- Understanding macros and micros guides healthier food choices.
- Essential for developing sustainable, balanced eating habits.

"Nutrition is not just about eating, it's about learning to live."



Essential for Overall Well-being: The Role of Nutrition

Nutrition Fundamentals:

- ▶ **Stat:** 90% of Americans lack essential nutrients from food alone (CDC).

Balance of Macros & Micros:

- ▶ **Stat:** 1 in 10 adults meet daily fruit or vegetable recommendations (USDA).

Health Impacts:

- ▶ **Stat:** Diets rich in fiber can reduce heart disease risk by up to 30% (American Heart Association).

Mental Well-being:

- ▶ **Stat:** Adequate omega-3 intake is linked to a 17% lower depression risk (Psychiatry Research).

Sustainable Eating Habits:

- ▶ **Stat:** Positive focus on adding healthy foods leads to 2.5x healthier eating patterns (Psychological Science).



Macronutrients vs. Micronutrients – The Essentials of Nutrition

Defining the Basics:

- **Macronutrients:** Carbohydrates, Proteins, Fats – the main building blocks of our diet, providing energy and structural materials.
- **Micronutrients:** Vitamins and Minerals – crucial for supporting body functions, immune system, and preventing diseases.

Role in Health:

- **Macronutrients** are vital for energy, growth, and bodily functions.
- **Micronutrients**, though needed in smaller amounts, are essential for maintaining health and preventing nutrient deficiencies.

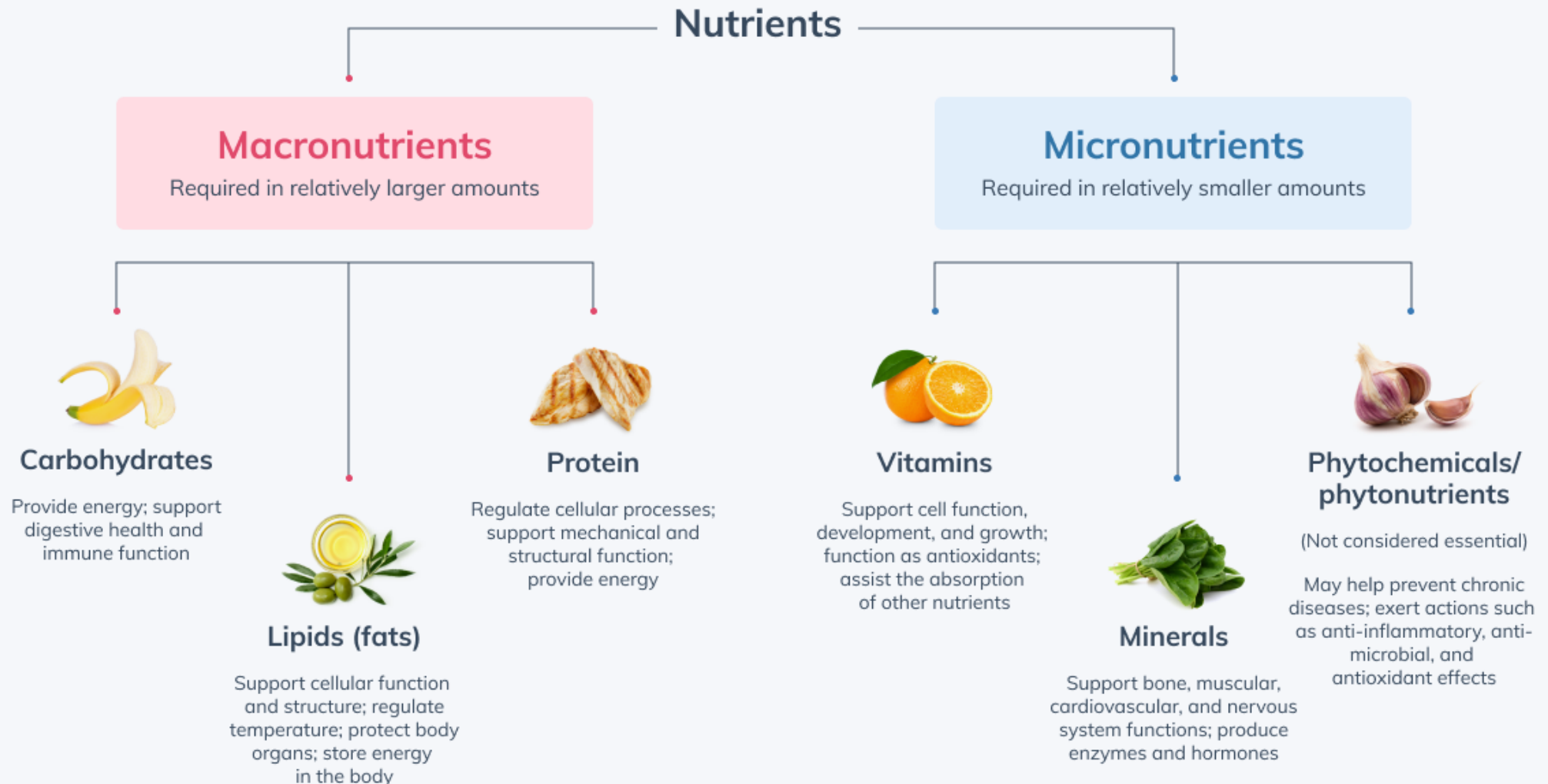
Balanced Nutrition:

- Understanding the balance and roles of each is key to optimal health and well-being.
- Each macro and micro nutrient plays a unique and complementary role in our diet.



Vitamin D and Calcium are among the most common deficiencies, affecting bone health and overall well-being.

What are macronutrients and micronutrients?



Focus on Fats – Understanding Their Role in Our Diet

Roles of Fats:

- Energy, cell growth, organ protection.
- Nutrient absorption (Vitamins A, D, E, K).

Fat Types:

- Saturated: Animal products (moderation 10%).
- Unsaturated: Plants, fish (beneficial 20 – 35%).
- Trans: Processed foods (avoid 0%).

Health Impact:

- Balance is crucial; prefer unsaturated fats.

Healthy Sources:

- Nuts, seeds, avocados, olive oil, fatty fish.

What is your favorite sources of healthy fats?





Fats – Separating Fact from Fiction

Myth: "Eating fat makes you fat."

- **Reality:** Dietary fats are crucial for health, including absorption of vitamins and production of hormones. It's the excess calories from any source that contribute to weight gain, not fats alone.

Myth: "All saturated fats are bad."

- **Reality:** While saturated fats should be consumed in moderation, they are not inherently 'bad' and can be included as part of a balanced diet.

Myth: "Trans fats are a healthy choice."

- **Reality:** Trans fats increase the risk of heart disease and are best avoided. They raise LDL (bad cholesterol) and lower HDL (good cholesterol).

Cracking the Myth: The Truth About Eggs

What is really to blame?

- If cutting down your egg intake is not the answer, what is? The truth is, **saturated fat has a greater impact** on blood cholesterol levels than dietary cholesterol. So, it is not the eggs themselves, but what you eat with them that you need to look out for!
- “Saturated fat intake is related to increased blood cholesterol levels, and while eggs are not high in saturated fat, **it is important to select healthy foods to eat with eggs,**” explains Dr Rubin.
- Eggs should be eaten as part of a varied diet alongside foods that are good for heart health, such as fish, fruit, vegetables, whole grains, dairy foods, nuts and legumes.

Unscrambling the truth about eggs and cholesterol



Recent research confirms that eating eggs as part of a healthy diet **does not increase the risk of heart problems in most people.**



Whether you follow a Mediterranean, flexitarian, lacto-ovo vegetarian, plant-based, or low carb diet, eggs are the perfect complement as they provide both high-quality protein and unique nutrients.

Mickey Rubin, Executive Director
of the Egg Nutrition Center



Carbohydrates Uncovered – Energy's Key Source

Functions of Carbohydrates:

- Primary energy source for the body.
- Crucial for brain function, digestive health.

Types of Carbohydrates:

- Simple Carbs: Quick energy, found in fruits, milk, sweets. (Short Fuse)
- Complex Carbs: Long-lasting energy, in grains, legumes, vegetables. (Long Fuse)

Effects on Body:

- Impact blood sugar levels, energy, and digestion.

Importance of Fiber:

- Aids in digestion, regulates blood sugar, supports heart health.

Do you know how much fiber men and women need daily?

CARBOHYDRATES

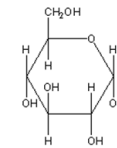
SIMPLE
Less of These..



COMPLEX
More of These..



Carbohydrates

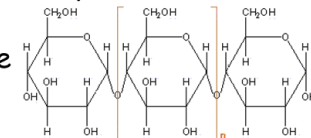


Monomer - The simple sugars

- Glucose, sucrose, fructose (and many others)

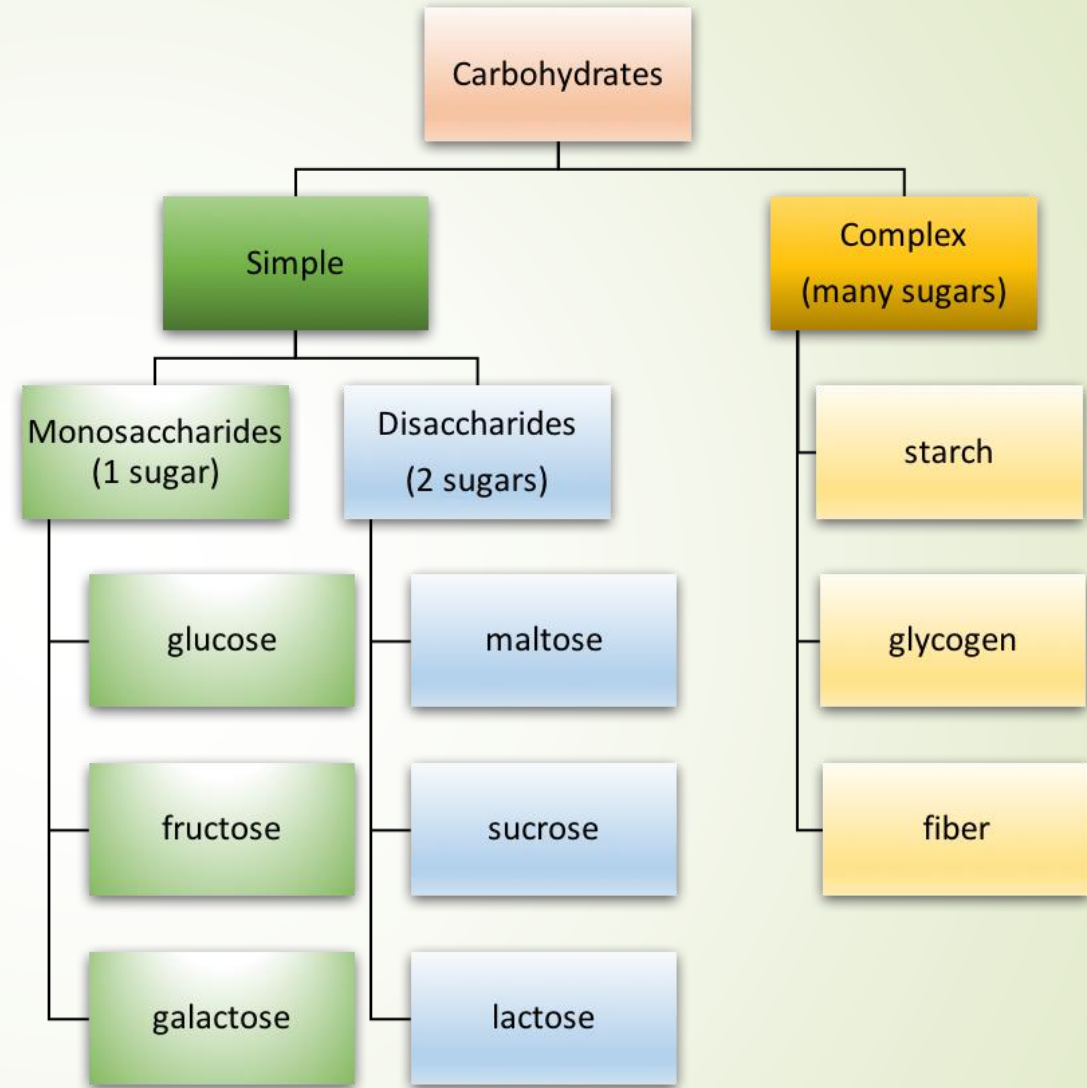
Polymer - The complex carbohydrates.

- Starch and Cellulose are long chains of simple sugars



Types of Carbohydrates

Carbohydrates can be divided into two main types: simple and complex. Simple carbohydrates are made up of just one or two sugar units, whereas complex carbohydrates are made up of many sugar units. We'll look at each of these in turn. This figure gives you an overview of the types of carbohydrates that we'll cover.





Fiber: Your Diet's Unsung Hero

What is Fiber?

- Essential for digestive health and more.

Two Types:

- Soluble (regulates blood sugar) and Insoluble (aids digestion).

Benefits:

- Weight management, reduced disease risk.

Sources:

- Fruits, vegetables, whole grains.

Myth Buster:

- "Fiber is only for digestion" – Debunked!

Quick Tip:

- Increase intake gradually.

Why Avoid Synthetic or Added Fiber:



LACK OF NUTRIENTS: UNLIKE NATURAL FIBER FOUND IN WHOLE FOODS, SYNTHETIC FIBERS DO NOT COME WITH ESSENTIAL VITAMINS, MINERALS, AND PHYTONUTRIENTS.



DIGESTIVE DISCOMFORT: ADDED FIBERS CAN CAUSE BLOATING, GAS, AND DIGESTIVE DISCOMFORT FOR SOME PEOPLE.



HEALTH CLAIMS: THE HEALTH BENEFITS OF FIBER ARE LARGELY ATTRIBUTED TO NATURAL FIBER SOURCES; ADDED FIBERS DO NOT NECESSARILY PROVIDE THE SAME BENEFITS.



PROCESSED FOODS: FOODS WITH ADDED FIBER ARE OFTEN PROCESSED AND CAN CONTAIN UNHEALTHY ADDITIVES, SUGARS, AND FATS.

Carbohydrate Myths Uncovered



Myth: "Carbs are the main cause of obesity."

- **Reality:** Obesity is multifactorial; blaming it solely on carbs is oversimplified.

Myth: "All carbs are the same."

- **Reality:** There's a significant difference between complex carbs (whole grains, vegetables) and simple carbs (sugary snacks).

Myth: "Low-carb diets are the best way to lose weight."

- **Reality:** Weight loss depends on calorie deficit, not just carb

The Power of Protein – More Than Just Muscles

Roles of Protein:

- Essential for muscle building and repair.
- Supports metabolism, immune function, and overall health.

Protein Sources:

- Animal Proteins: Meat, dairy, eggs. Rich in essential amino acids.
- Plant-Based Proteins: Legumes, grains, nuts, seeds. Offer fiber and other nutrients.

Health Impact:

- Balancing protein sources can benefit overall health and dietary variety.



COMPLETE PROTEIN

COMBINATIONS CHART

PAIR THESE

WITH THESE



LEGUMES

Kidney Beans
Black Beans
Green Peas
Lima Beans
Black-eyed Peas
Navy Beans
Lentils
Pinto Beans
Peanuts
Split Peas
Chickpeas
(Garbanzos)

GRAINS



• Millet • Teff • Rye
• Wheat • Barley • Kaniwa
• Oats • Corn • Bulgur
• Rice • Triticale

NUTS



• Walnuts • Hazelnuts • Pine Nuts
• Brazil Nuts • Macadamia • Pistachio
• Cashews • Peanuts • Almond
• Coconut • Pecans

SEEDS



Sesame seeds
Pumpkin seeds
Flax seeds
Seed sprouts

Protein Myths Demystified

Myth: "More protein equals more muscle."

➤ **Reality:** Muscle growth requires a balance of protein, exercise, and rest.

Myth: "Plant-based proteins are incomplete."

➤ **Reality:** Many plant sources provide complete proteins, and combining different plants can ensure all amino acids are consumed.

Myth: "Protein supplements are better than natural sources."

➤ **Reality:** Whole foods offer additional nutrients and are usually preferable.

Myth: "Carbs should be avoided in the evening."

➤ **Reality:** Carbohydrate timing does not significantly impact weight gain; overall daily intake matters more.

The World of Micronutrients – Tiny but Mighty

Vital Roles:

- Vitamins and minerals support immune function, bone health, and cell repair.
- Essential for energy production and preventing nutrient deficiencies.

Key Micronutrients:

- Vitamin D: Sunshine vitamin, for bone health; found in fish, eggs, fortified foods.
- Iron: Critical for blood health; sources include red meat, beans, spinach.
- Calcium: Essential for bones and teeth; found in dairy, leafy greens, almonds.
- Vitamin C: Important for skin and immune health; in citrus fruits, bell peppers.

The perspective on multivitamins is that they can serve as a nutritional safety net for individuals who might not get enough vitamins and minerals from their diet alone. However, many health professionals and nutrition experts agree that it's generally better to focus on obtaining nutrients from real foods whenever possible.



Great Sources of Vitamins & Minerals

That American Adults May Lack

Vitamin D



Potassium



Magnesium



Iron

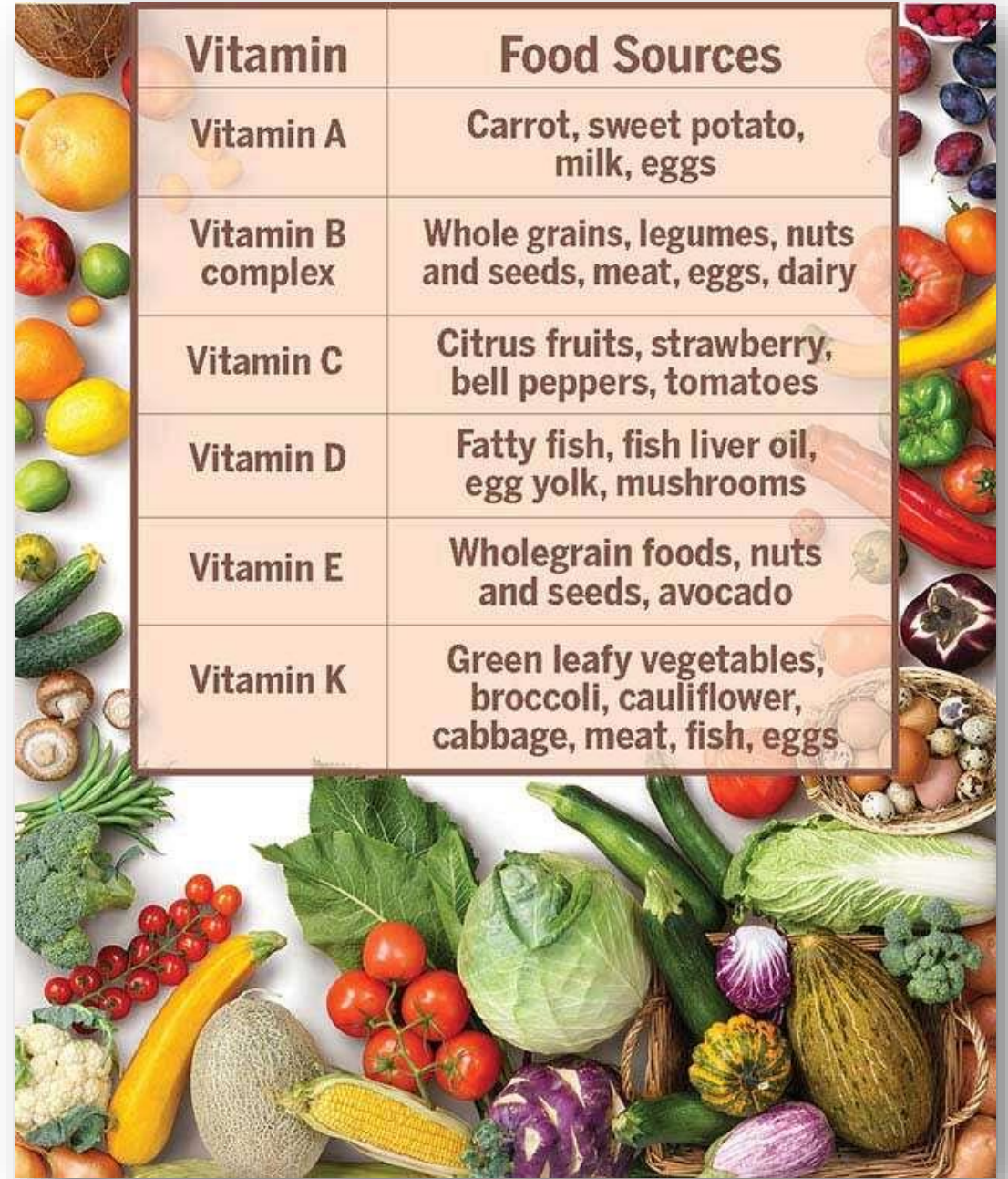


Calcium



Lisa Belman, Nutrition Student

Vitamin	Food Sources
Vitamin A	Carrot, sweet potato, milk, eggs
Vitamin B complex	Whole grains, legumes, nuts and seeds, meat, eggs, dairy
Vitamin C	Citrus fruits, strawberry, bell peppers, tomatoes
Vitamin D	Fatty fish, fish liver oil, egg yolk, mushrooms
Vitamin E	Wholegrain foods, nuts and seeds, avocado
Vitamin K	Green leafy vegetables, broccoli, cauliflower, cabbage, meat, fish, eggs



Nutrition Fads and Trends – Evaluating the Hype

What is a Fad Diet?:

- Typically promises quick weight loss or health fixes.
- Often lacks scientific evidence and may be overly restrictive.

Recognizing Fad Diets:

- Unrealistic Claims: Rapid weight loss, detoxification, or miracle cures.
- Strict Rules: Eliminating entire food groups or excessive focus on specific foods.
- Short-term Focus: Not sustainable or balanced for long-term health.

Evaluating Diet Trends:

- Seek Evidence: Look for scientific research, not just anecdotal success.
- Consult Healthcare Professionals: Get advice from dietitians or nutritionists.
- Listen to Your Body: Pay attention to how your body feels and responds.

Interactive Tip:

- "When encountering a new diet trend, ask yourself: Does it promote balance and sustainability, or is it a quick-fix solution?"



Popular Diets Claims vs Evidence

Ketogenic Diet

- **Media Claims:** Promotes rapid weight loss, improves brain function, and more.
- **Scientific Evidence:** Studies show it may lead to short-term weight loss and can be beneficial for certain neurological conditions, but long-term effects are still under research. It can be hard to stick to due to its restrictive nature.

Intermittent Fasting

- **Media Claims:** Claims include longevity, improved mental clarity, and fat loss.
- **Scientific Evidence:** Research indicates potential benefits for weight loss and metabolic health, but more research is needed on its long-term effects and efficacy compared to other diets.

Paleo Diet

- **Media Claims:** Alleges to align with our genetic makeup for optimal health, claiming benefits like weight loss and reduced inflammation.
- **Scientific Evidence:** Some research supports the diet's effectiveness for weight loss and improving some health markers, but it may not be sustainable or balanced, with potential nutrient deficiencies.

Vegan Diet

- **Media Claims:** Often cited as the most ethical and environmentally sustainable diet, with claims of reducing the risk of chronic diseases.
- **Scientific Evidence:** Well-planned vegan diets can provide health benefits and are associated with a lower risk of heart disease, high blood pressure, type 2 diabetes, and certain cancers. However, they require careful planning to avoid nutritional deficiencies.

Gluten-Free Diet

- **Media Claims:** Claims to aid in weight loss, improve digestion, and increase energy levels.
- **Scientific Evidence:** Essential for those with celiac disease or gluten sensitivity, but there is no evidence that it benefits the general population, and gluten-free products can sometimes be higher in calories and sugar.

Popular Diets Claims vs Evidence

Whole30 Diet

Media Claims: Purports to reset your metabolism, improve digestion, and promote weight loss by eliminating certain food groups for 30 days.

Scientific Evidence: There is limited scientific research on the Whole30 program specifically. While some may report feeling better or losing weight due to cutting out processed foods, the diet's restrictive nature can be difficult to maintain and may not be necessary for everyone.

Mediterranean Diet

Media Claims: Associated with longevity and claims to reduce the risk of heart disease, cancer, Parkinson's, and Alzheimer's diseases.

Scientific Evidence: Numerous studies support the benefits of the Mediterranean diet for cardiovascular health and its potential to reduce the risk of chronic diseases. It's considered one of the most balanced and healthful dietary patterns.

Atkins Diet

Media Claims: Suggests that you can lose weight by eating as much protein and fat as you want, as long as you avoid carbs.

Scientific Evidence: Can lead to quick weight loss due to ketosis; however, concerns exist regarding its high saturated fat content and the long-term impact on heart health. The diet may also be hard to sustain over time.

Flexitarian Diet

Media Claims: Touted as a flexible approach to vegetarianism that can help with weight loss and improve overall health without completely eliminating meat.

Scientific Evidence: Research indicates that a plant-based diet, with occasional meat consumption, can provide health benefits similar to a vegetarian diet and is a more sustainable and adaptable approach to eating healthily.

DASH Diet

Media Claims: Claims to lower blood pressure and cholesterol levels without medication, through a balanced diet rich in fruits, vegetables, whole grains, and low-fat dairy.

Scientific Evidence: The DASH diet is well-supported by scientific evidence showing that it can lower blood pressure and reduce the risk of heart disease. It is often recommended by health professionals for heart health.

Building a Balanced Plate – A Guide to Wholesome Eating

Balancing Macronutrients:

- Aiming for a mix of carbohydrates, proteins, and fats in each meal.
- Example: Grilled chicken (protein), quinoa (carb), mixed greens with olive oil dressing (fat).

Incorporating Micronutrients:

- Ensure a variety of fruits and vegetables to get a range of vitamins and minerals.
- Example: Spinach (rich in iron and calcium), berries (antioxidants), sweet potato (vitamin A).

Meal Plan Examples:

- Breakfast: Oatmeal with nuts and berries.
- Lunch: Salad with mixed greens, chickpeas, avocado, and a vinaigrette dressing.
- Dinner: Grilled fish, brown rice, and steamed broccoli.

Tips for Daily Meals:

- Half the plate with vegetables, a quarter with lean protein, and a quarter with whole grains.
- Adjust portions based on individual energy needs and health goals.



Q&A and Next Week's Preview

Today's Q&A:

- Got questions or thoughts about today's session? Let's discuss!

Next Week's Focus:

- Coming Up: 'Label Literacy: Unveiling the Truth Behind Food Packaging.'
- Learn to interpret food labels and understand their impact on your choices.

