



Essential Nutrients: Your Body's Building Blocks

Welcome! This presentation explores the essential nutrients. Learn how they fuel your body and maintain your health. We'll also discuss today's dietary challenges.

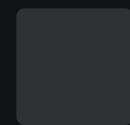


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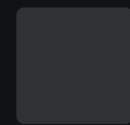


The 6 Essential Nutrients

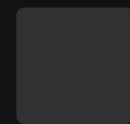
Six nutrient groups are key to survival and health. These include carbohydrates, proteins, and fats. Vitamins, minerals, and water are also essential. The WHO recommends a balanced intake of each.



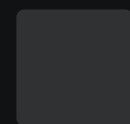
Carbohydrates



Proteins



Fats



Vitamins & Minerals

Carbohydrates: Your Primary Energy Source

Carbohydrates provide 4 kcal per gram. They are the body's main energy source. Simple carbs cause rapid blood sugar spikes. Complex carbs offer sustained energy.



Energy



Simple



Complex



Protein: Building and Repairing Tissues

Protein is vital for tissue repair and enzymes. It's also important for hormone production. Meat, legumes, dairy, and tofu are key sources. Protein is made of essential and non-essential amino acids.

Sources

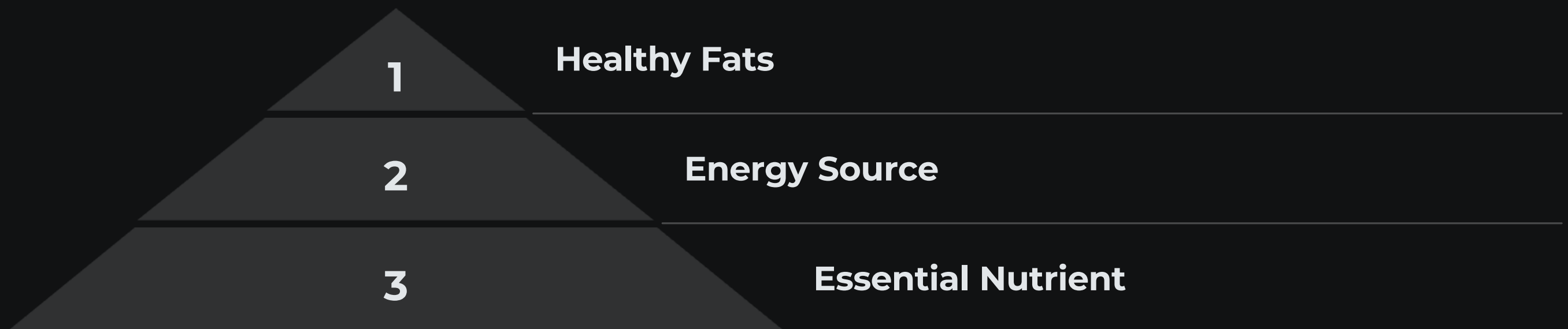
- Meat
- Legumes
- Dairy
- Tofu

Functions

- Tissue Repair
- Enzymes
- Hormones

Fats: Essential Yet Controversial

Fats provide 9 kcal per gram. They are a dense energy source. Healthy fats include monounsaturated and polyunsaturated fats. Harmful fats include trans and saturated fats.





Vitamins: Boosting Your Vitality

Vitamins are either fat-soluble or water-soluble. Fat-soluble vitamins (A, D, E, K) are stored. Water-soluble vitamins (B, C) need daily intake. Vitamin D deficiency can cause rickets.

Fat-Soluble

Stored in the body.

Water-Soluble

Need daily replenishment.

Vitamin D

Prevents rickets.

Minerals: Building Strength and Well-being

Major minerals include calcium, potassium, and magnesium. Trace elements include iron, zinc, and iodine. They support bones, muscles, and metabolic processes.



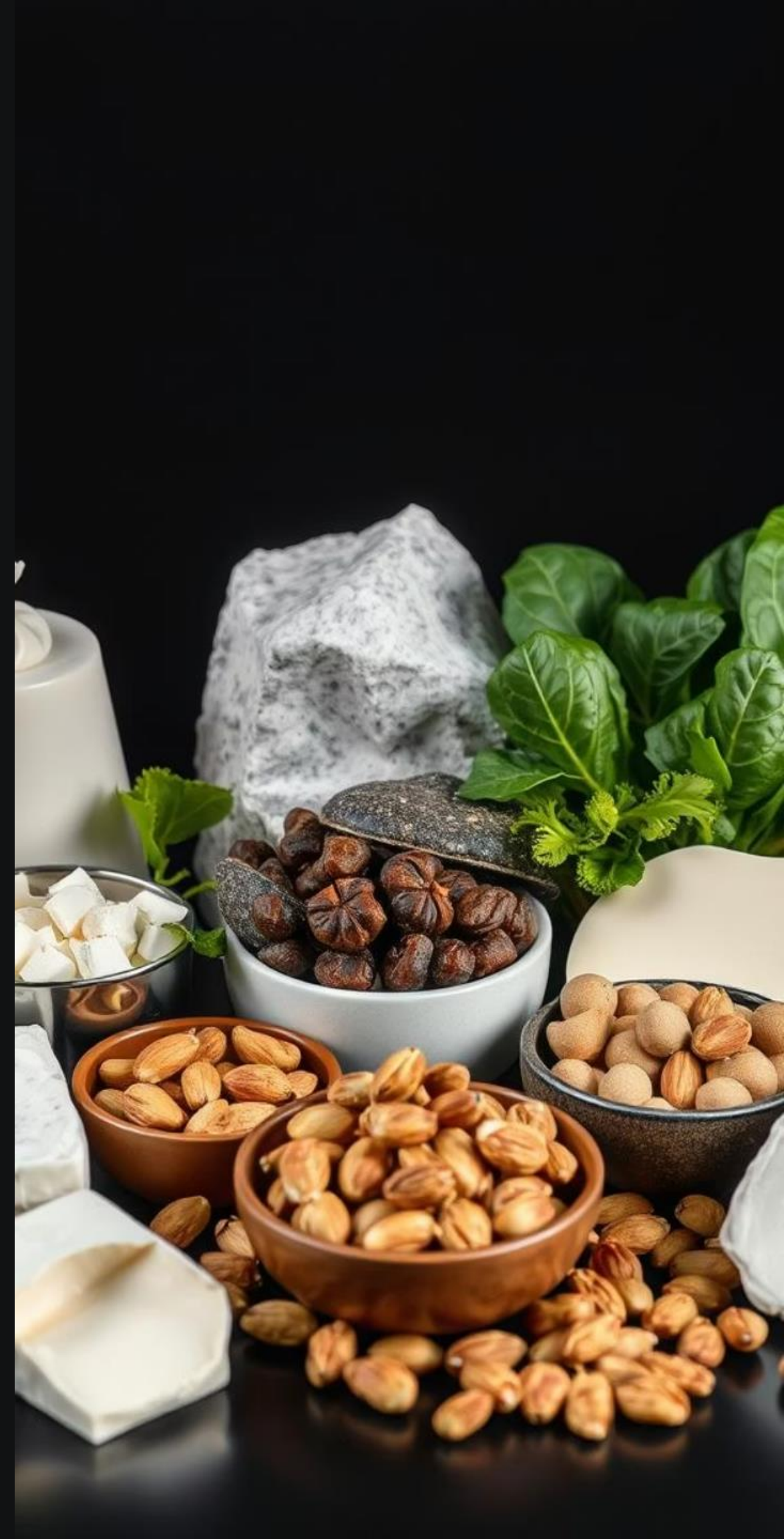
Bones



Muscles



Metabolism



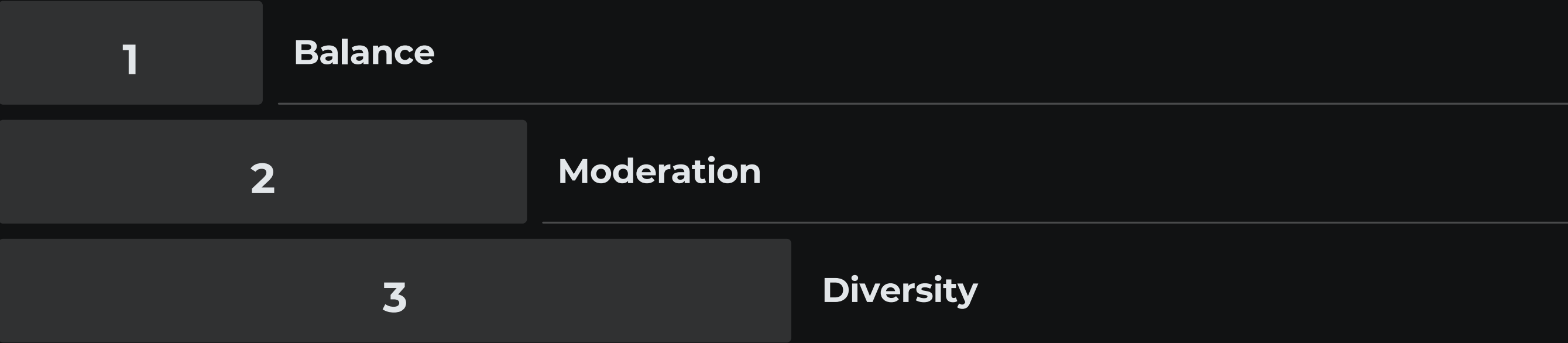
Water: The Essential Fluid

Water makes up 60% of the human body. It's needed for all bodily functions. Water aids digestion and regulates temperature. It also supports detoxification.



Deficiency and Excess: Striking a Balance

Malnutrition includes both undernutrition and overnutrition. Iron and iodine deficiencies are widespread. Over-supplementation poses risks like hypervitaminosis.





Conclusion: Nutrition as the Key to Health

A balanced diet is key to good health. Prioritize whole, unprocessed foods. Strive for nutrient diversity. Nutrition is essential for overall well-being.

1

Balanced Diet

2

Whole Foods

3

Nutrient Diversity