Nutrition Quick Reference

A handy guide to essential nutrition concepts, macronutrients, micronutrients, and dietary strategies for optimal health, fitness, and beauty.

Macronutrients

Proteins

Function:	Building and repairing tissues, enzyme and hormone production.
Sources:	Meat, poultry, fish, eggs, dairy, beans, lentils, tofu.
Daily Needs:	0.8 grams per kg of body weight (general health), 1.2-2.0 grams per kg for athletes/active individuals.
Benefits:	Muscle growth and repair, satiety, supports immune function.
Considerations:	Complete vs. incomplete proteins (combine plant-based sources). Excess protein can strain kidneys.
Tips:	Include a source of protein in every meal.

Carbohydrates

Function:	Primary energy source for the body, especially the brain.
Sources:	Fruits, vegetables, grains, legumes, dairy.
Types:	Simple (sugars) and complex (starches and fiber).
Daily Needs:	Varies with activity level; generally 45-65% of daily calories.
Benefits:	Provides energy, supports brain function, fiber promotes digestive health.
Considerations:	Prioritize complex carbs over simple sugars. Pay attention to glycemic index.
Tips:	Choose whole grains, fruits, and vegetables as your primary carbohydrate sources.

Fats

Function:	Hormone production, nutrient absorption, cell structure, insulation.
Sources:	Avocados, nuts, seeds, olive oil, fatty fish.
Types:	Saturated, unsaturated (mono- and polyunsaturated), trans fats.
Daily Needs:	20-35% of daily calories.
Benefits:	Supports hormone production, brain health, satiety, absorption of fat-soluble vitamins.
Considerations:	Prioritize unsaturated fats over saturated and trans fats. Omega-3 fatty acids are crucial.
Tips:	Incorporate healthy fats into your diet daily.

Micronutrients

Vitamins

Function:	Support various bodily functions, including energy production, immune function, and cell growth.
Types:	Fat-soluble (A, D, E, K) and water-soluble (B vitamins, C).
Sources:	Fruits, vegetables, fortified foods, supplements.
Key Vitamins:	Vitamin D (bone health, immune function), Vitamin C (immune function, antioxidant), B12 (nerve function, energy).
Considerations:	Supplementation may be necessary for certain individuals (e.g., Vitamin D in winter). Fat-soluble vitamins can accumulate to toxic levels.
Tips:	Eat a colorful variety of fruits and vegetables to ensure adequate vitamin intake.

Minerals

Function:	Essential for bone health, fluid balance, nerve function, and muscle contraction.
Types:	Major minerals (calcium, phosphorus, magnesium, sodium, potassium, chloride) and trace minerals (iron, zinc, iodine, selenium).
Sources:	Dairy, meat, vegetables, fruits, nuts, seeds.
Key Minerals:	Calcium (bone health), Iron (oxygen transport), Potassium (fluid balance, nerve function).
Considerations:	Mineral deficiencies can lead to various health problems. Certain minerals compete for absorption.
Tips:	Include a variety of mineral-rich foods in your diet. Consider iron supplementation if deficient.

Hydration and Supplements

Hydration

Importance:	Essential for all bodily functions, including nutrient transport, temperature regulation, and waste removal.
Sources:	Water, fruits, vegetables, beverages.
Daily Needs:	Varies with activity level, climate, and individual needs; generally 8-12 cups per day.
Tips:	Drink water throughout the day, especially before, during, and after exercise. Monitor urine color (pale yellow is ideal).
Dehydration Symptoms:	Thirst, headache, fatigue, dizziness, dark urine.

Common Supplements

Protein Powders:	Whey, casein, soy, pea, rice. Used to supplement protein intake, especially after workouts.
Creatine:	Enhances muscle strength and power. Primarily used by athletes.
Omega-3 Fatty Acids:	Supports heart health, brain function, and reduces inflammation.
Multivitamins:	Provides a range of essential vitamins and minerals. Can help fill nutritional gaps.
Vitamin D:	Important for bone health and immune function, especially for those with limited sun exposure.
Probiotics:	Support gut health and immune function. Found in yogurt, kefir, and supplements.

Dietary Strategies

Balanced Diet Principles

- **Variety:** Consume a wide range of foods from all food groups to ensure adequate nutrient intake.
- **Moderation:** Practice portion control and avoid overeating, especially of processed foods.
- **Balance:** Aim for a balanced intake of macronutrients (proteins, carbohydrates, and fats) and micronutrients (vitamins and minerals).
- **Adequacy:** Ensure you are meeting your individual nutrient needs based on age, sex, activity level, and health status.

Meal Planning Tips

Plan Ahead:	Take time each week to plan your meals and snacks.
Grocery Shopping:	Create a shopping list based on your meal plan to avoid impulse purchases.
Prep Ingredients:	Wash, chop, and portion ingredients in advance to save time during the week.
Cook in Bulk:	Prepare larger batches of meals and freeze portions for later use.
Healthy Snacks:	Keep healthy snacks on hand to avoid unhealthy cravings and maintain energy levels.

Mindful Eating

Pay attention to your body's hunger and fullness cues. Eat slowly and savor your food. Minimize distractions while eating. Practice gratitude for the nourishment you receive from your meals.