
Guideline 4:

Vegetables, Legumes & Healthy Fats

Power of Vegetables & Legumes

- ◊ **Why it matters:** Vegetables and legumes are foundational to disease prevention and gut health.
- **Eat 400g+ vegetables daily:** Include leafy greens (spinach, methi), gourds (lauki, tori), cruciferous veggies (cauliflower, cabbage), and roots (carrot, beetroot).
- **Legumes** like lentils, chickpeas, rajma, and moong dal are rich in **plant-based protein, iron, and fiber**.
- **Phytochemicals** in veggies reduce inflammation and protect against diabetes, heart disease, and cancer.
- Use minimal salt and oil when cooking vegetables to retain nutrients.

Nutrient-Rich Plant Foods

- ◊ **Why it matters:** Whole plant foods offer complete nutrition and are culturally rooted.
- Choose **whole, unrefined foods** like millets, pulses, and tubers to retain fiber and antioxidants.
- Combine **legumes + cereals** (e.g., rajma + rice, dal + roti) for **complete proteins** and better amino acid balance.
- Embrace **seasonal and regional produce**—they're fresher, affordable, and reduce carbon footprint.
- **Starchy vegetables** like sweet potatoes, yams, and raw bananas provide energy and vitamin A.

Healthy Fats from Natural Sources

❖ **Why it matters:** Fats are essential—but quality and quantity matter.

- Prefer **nuts (almonds, walnuts), seeds (flax, sesame), and oilseeds (groundnut, mustard)** for healthy fats. These provide **omega-3 & omega-6 fatty acids**, supporting brain, heart, and hormonal health.
- Avoid **hydrogenated oils and trans fats**—commonly found in bakery items, chips, and fried snacks.
- Fats help absorb fat-soluble vitamins (A, D, E, K)—but excess leads to obesity and metabolic issues.

Plant foods (ALA)	g	Vegetable oils (ALA)	g
Cereal/Millet			
Wheat & Bajra	70	Mustard/Rapeseed	0.7
Oats	70	Soyabean	1.5
Wheat	1.4	Canola	0.5
		Flaxseed	0.2
Pulses			
Black gram, Rajmah & Cowpea	20	LC n-3 PUFAs from animal foods	
Soyabean	7	Fish	
Other pulses	60	Low/medium fat fish	20–50
Vegetables			
Green leafy	60	Oily fish (>5% fat)	10
Purslane	25		
Radish seed (sprouted)	14		
Spirulina (dried)	12		
Spices			
Fenugreek seed	5	Poultry egg	
Mustard seed	2	Standard	2–3 eggs
		DHA enriched (flaxseed)	1 egg
Nuts		DHA enriched (meal from marine sources)	1/3 rd egg
Walnuts	2	Chicken	100
Almonds	25		
Unconventional oilseeds			
Flaxseed (linseed)	0.5	Lean meats	
Perilla seed	0.5	Lamb, sheep, goat, beef, pork	150

Approximate quantity of food required to furnish minimum 100mg n-3 PUFAs



Diversity in Oils

❖ **Why it matters:** Rotating oils ensures balanced fatty acid intake and supports traditional cooking.

- Rotate oils like **mustard (omega-3)**, **sesame (antioxidants)**, **groundnut (monounsaturated fats)**.
- **Blending oils** or alternating weekly helps meet **EFA needs** and reduces inflammation.
- Prefer **shallow frying, sautéing, steaming**—deep frying increases trans fat formation.
- Include **nutricereals** (ragi, bajra, jowar)—they're rich in fiber, iron, and healthy fats.

Requirement of fatty acids (FA) for health

PUFA (Essential FA)

- **n-6 PUFA:** Minimum requirement is 3% energy/day. This implies 60 Kcal or 6.6g n-6 PUFA for a 2000 Kcal diet.
- **n-3 PUFA:** Minimum requirement is 0.6% to 1.2% energy/day. This implies approximately 20 Kcal or 2.2g n-3 PUFA for a 2000 Kcal diet.
- The above requirement is met from a balanced healthy diet and adequate intake of nuts and oil seeds (refer My Plate for the Day & Table 6).
- Additional cooking oils/fats containing MUFA, PUFA or ghee/butter can be added for taste and flavor, upto 27 to 30g for a 2000 Kcal diet.
- Limit ghee or butter to just 1 to 2 teaspoons/day or avoid, if possible.

Practical Tips for Daily Use

❖ **Why it matters:** Small changes in cooking and pairing can amplify nutrient absorption.

- **Use 20g oil/person/day**—measure with spoons or oil dispensers.
- **Add roasted seeds or crushed nuts** to salads, chutneys, and curries for crunch and nutrition.
- Pair legumes with **vitamin C-rich foods** (lemon, tomatoes, amla) to boost iron absorption.
- Encourage **family-wide adoption**—make healthy eating a shared habit.