DASH DIET

DASH stands for Dietary Approaches to Stop Hypertension. The DASH diet is a healthy-eating plan designed to help treat or prevent hypertension. This diet includes foods that are rich in potassium, calcium and magnesium. These nutrients help control blood pressure. The diet limits foods that are high in sodium, saturated fat and added sugars.

The diet was created after researchers noticed that high blood pressure was much less common in people who followed a plant-based diet, such as vegans and vegetarians. Studies have shown that the DASH diet can lower blood pressure in as little as two weeks. The diet can also lower the levels of LDL in the blood. High blood pressure and high LDL cholesterol levels are two major risk factors for heart disease and stroke. The regular DASH diet program encourages no more than 1 teaspoon (2,300 mg) of sodium per day

When following the DASH eating plan, it is important to choose foods that are:

- Low in saturated and trans fats
- Rich in potassium, calcium, magnesium, fiber, and protein

Other benefits of dash diet:

- Lower in sodium
 Lower in sodium
 her benefits of dash diet:
 <u>Decreases cancer risk:</u> A recent review reflected that people following the DASH diet had a lower risk of some carcer, including colorectar and breast cancer.
- Lowers metabolic hyndrome risk: Some rudi shote that the DASH diet reduces your risk of metalouz syndrome by upter al%.
- <u>Powers diabetes risk</u>: The ditence been linked to a lower risk of type 2 diabetes. Some studies demonstrate that it can improve insulin resistance as well.
- Decreases heart disease risk: In one recent review in women, following a DASH-like diet was associated with a 20% lower risk of heart disease and a 29% lower risk of stroke.

Recommended Servings In DASH Diet:

The recommended servings from each food group for a 2,000-calorie-a-day DASH diet:

- **Grains:** 6 to 8 servings a day.
- Vegetables: 4 to 5 servings a day.
- **Fruits:** 4 to 5 servings a day.
- Fat-free or low-fat dairy products: 2 to 3 servings a day.
- Lean meats, poultry and fish: six 1-ounce servings or fewer a day.
- Nuts, seeds and legumes: 4 to 5 servings a week
- Fats and oils: 2 to 3 servings a day.
- Sweets and added sugars: 5 servings or fewer a week.



to ASCVD and was associated with increased LDL cholesterol levels. Trans fat intake is inversely associated with HDL levels.

Monounsaturated Fatty Acids

Substituting oleic acid for carbohydrate has almost no appreciable effect on blood lipids. However, replacing SFAs with MUFAs (as would happen when substituting olive oil for butter) lowers serum cholesterol levels, LDL cholesterol levels, and triglyceride levels. Oleic acid as part of the Mediterranean diet has been shown to have anti-inflammatory effects.

Polyunsaturated Fatty Acids

The essential fatty acid linoleic acid (LA) is the predominant PUFA consumed in the American diet; its effect depends on the total fatty acid profile of the diet. Large amounts of LA decrease HDL serum cholesterol levels. High intakes of omega-6 PUFAs may exert adverse effects on the function of vascular endothelium or stimulate production of proinflammatory cytokines. Replacing PUFAs for carbohydrate in the diet results in a decline in serum LDL cholesterol. When SFAs are replaced with PUFAs in a low-fat diet, LDL and HDL cholesterol levels are lowered. Overall, eliminating SFAs is twice as effective in lowering serum cholesterol levels as increasing PUFAs. O.UK

Omega-3 Fatty Acids

The main omega-3 fatty acids are high in fish oils, disc capsules, and ocean fish. The recommendation for the general population is the real fish consumption specifically of fish high in omega-3 fatty acids (salmor, ft n, mackerel, and srdines). Patients who have hypertriglyceridemia need 2 to 4 y of EPA and DIA or day for effective lowering.

lower tricing the els by inhibiting VLDL and Apo B-100 synthesis, Omega thereby decreasing postprandial upenia. Fish oil consumption has been associated with high levels of HDL cholesterol

Dietary Cholesterol

The ACC/AHA guidelines no longer make this recommendation, and they specifically state that dietary cholesterol does not raise LDLs. The US Dietary Guidelines also eliminate the recommendation to restrict cholesterol. However it is important to remember that most high cholesterol foods are also high in saturated fats that do raise LDL cholesterol.

Type of Fatty Acids	Example of Sources	Health Impacts and Intake Recommendations
Saturated • No Double Band • Straight Structure • Solid at Room Temperature	Red Meet Dairy Freduets (Eg. Cheese)	Increased Risk of Heart Disease Less than 20gm of Saturated Fats Per Day (for a 2000 kcal diet) Raises both LDL and HDL Increases Total Cholesterol
Trans • One or More Double Bands in Trans Configuration • Straight Structure • Semi-Solid/Solid at Room Temperature	Margerine Crombing Margerine Crombing With Diff Party Chickan Pro	Increased Risk of Heart Disease Less than 2.2gm of Trans Fats Per Day (for a 2000 kcal diet) Raises LDL (Bad) and Lowers HDL (Good) Increase Risk of Stroke and Diabetes
Monounsaturated • One Double Bond in cis Configuration • Bent Structure • Liquid at Room Temperature	Olive Oli Olive Oli	 Moderate intake reduces risk of Heart Disease Lowers LDL (Bad) and Raises HDL (Good)
Polyunsaturated • Multiple Double Bond in Cia Configuration • Even more "bent" in Structure • Liquid at Room Temperature	Comego-3 (ALR, DHA, EPA) Comego-5 (Likolatic Acid)	 Moderate intake reduces risk of Heart Disease High Omega-3 to Omega-6 ratio is good for reduced heart disease & anti-inflammation