

- Mechanism: Soluble fiber, particularly pectin found in apples, forms a gel-like substance in the digestive tract. This gel can bind to cholesterol and bile acids, preventing their absorption and promoting their excretion from the body.
- Cholesterol Reduction: By reducing the absorption of cholesterol, soluble fiber helps lower levels of LDL (low-density lipoprotein) cholesterol, often referred to as the "bad" cholesterol.

- Cardiovascular Benefits of Antioxidants:

- Types of Antioxidants: Apples contain various antioxidants, including flavonoids, polyphenols, and vitamin C. These compounds act as antioxidants by neutralizing free radicals in the body.
- Free Radicals and Cardiovascular Disease: Free radicals are molecules with unpaired electrons that can cause oxidative stress, damaging cells and contributing to inflammation. Oxidative stress is implicated in the development of cardiovascular diseases.

- Additional Cardiovascular Benefits:

- Blood Pressure Regulation: Some studies suggest that the antioxidants in apples may contribute to the relaxation of blood vessels, helping to regulate blood pressure.