

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the left and right sides of the frame, leaving a large white central area. The shapes are angular and layered, creating a sense of depth and movement.

SULPHUR

Sulphur is present mostly in organic form in body .

- ▶ Methionine , cysteine and cystine are three Sulphur containing amino acids in the body .
- ▶ Proteins contain 1% of Sulphur by weight .

DIETARY REQUIREMENT

- ▶ No specific dietary requirement for Sulphur alone
- ▶ Adequate intake of Sulphur containing essential aminoacid methionine will fulfill body requirement
- ▶ SOURCES
- ▶ Food rich in methionine and cysteine are good sources of Sulphur .

FUNCTIONS

- ▶ Sulphur containing amino acids are important constituents of body proteins .The disulphide bridges keep polypeptides units together e.g insulin ,immunoglobulins .
- ▶ Chondroitin sulphates are seen in cartilage and bone
- ▶ Keratin is rich in Sulphur and is present in hair and nail .

- ▶ enzymes and peptides contain $-SH$ group at the active site e.g glutathione .
- ▶ Co enzymes derived from thiamine ,biotin ,pantothenic acid and lipoic acid also contain Sulphur .
- ▶ Sulphates are also important in detoxification mechanisms e g production of indoxyl sulphate .

- ▶ If sulphates is to be introduced in glycosaminoglycans or in phenols for detoxification . It can only be done by phosphoadenosine phosphosulphate (PAPS)

▶ EXCRETION

- ▶ The Sulphur from different compounds is oxidized in liver to sulphate and excreted in urine .
- ▶ The urine contain inorganic sulphate (80 %) organic or conjugated (10 %) , oxidized Sulphur (10 %) .