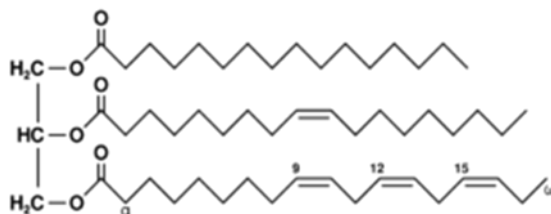


Quantification of phospholipids in serum/plasma using spectrophotometry

Phospholipids are a class of lipids that are a major component of all cell membranes as they can form lipid bilayers. Most phospholipids contain a diglyceride, a phosphate group, and a simple organic molecule such as choline.

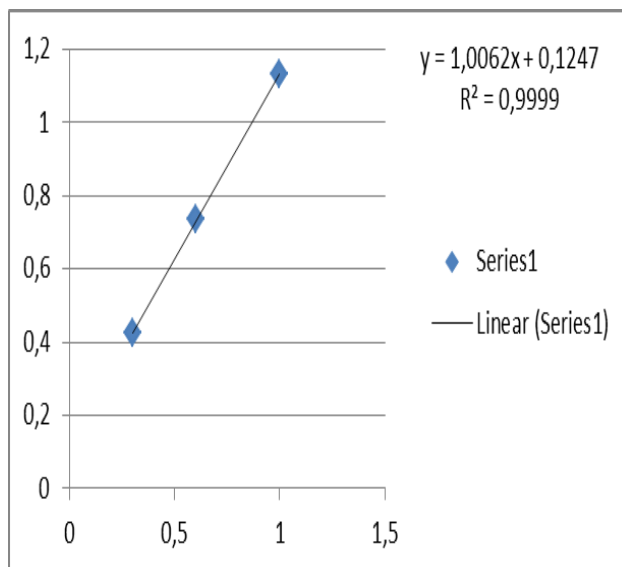
The reference interval for phospholipids are 1.61 – 3.55 mmol/L. Altered phospholipid concentrations are associated with liver disease, coronary heart disease, diabetes, obstructive jaundice.

Vitas AM-259 is a simple, direct and high-throughput assay for measuring phospholipids in biological samples. In this assay, phospholipids (such as lecithin, lysolecithin and sphingomyelin) are enzymatically hydrolyzed to choline which is determined using choline oxidase and a H₂O₂ specific dye.



Example of an unsaturated fat triglyceride. Left part: glycerol, right part from top to bottom: palmitic acid, oleic acid, alpha-linolenic acid. Chemical formula: C₅₅H₉₈O₆

Calibration curve for the quantification of triglycerides in human serum



Method details:

- Technique: Quantitative photometry
 - Sample Matrix: Plasma ,serum
 - Species: All
 - Anticoagulant: All
 - Required sample volume: 50 μ L
 - Shipping: Dry Ice
 - Method Range : 0.05-5 mmol/L
 - LOD: 0.01 mmol/L
 - Precision: 4.4 %
- Accuracy: Seronorm™ Lipid

Vitas is a Norwegian GMP certified chemical analysis contract lab, with 20 years experience in providing a high quality, custom chromatographic analytical service based on cutting-edge knowledge and technology.