

Procedure:

- i) Clean the site with an antiseptic and wrap an elastic band around the arm to allow blood to fill the veins.
- ii) With the help of needle, draw 5 ml blood from an arm vein into a yellow top tube.
- iii) Serum is needed, for that allows the blood to clot and separate by centrifugation.

Pretest patient care:

- An overnight fast before testing is recommended, however nonfasting specimens may also be taken.
- A normal diet should be consumed for 7 days.
- The patient should abstain from alcohol for 48 hours before testing.
- Drugs like contraceptive pills should be avoided prior to test as they alter the cholesterol levels.

Values for Cholesterol			
	Normal level	Borderline level	High level
Children & Adolescents (12-18 yrs.)	<170 mg/dl	170-199 mg/dl	>200 mg/dl
Adults	140-199 mg/dl	200-239 mg/dl	> 240 mg/dl

Posttest patient care:

- Interpret test results and counsel appropriately.
- Cholesterol levels >200 mg/dl should be retested and the results averaged. If the two results differ by >10 %, a third test should be done.
- Once hypercholesterolemia has been established, the diet should be lower in animal fats and should replace saturated fats with polyunsaturated fats.
- Fruits, vegetables and whole-grain products should be increased.
- At least 6 months of dietary therapy should be tried before initiating cholesterol-reducing drug therapy.

Drug therapy involves_ lovastatin, simvastatin, fluvastatin, clofibrate, etc

Clinical implications:

1. Elevated cholesterol levels occur with the following conditions:

Hyperlipoproteinemia, cholestasis, hepatocellular disease, Nephrotic syndrome, Chronic renal failure, hypothyroidism, poorly controlled diabetes mellitus, alcoholism, glycogen storage disease (von Gierke's disease), Werner's syndrome, Diet high in cholesterol and fats and Obesity.

Procedure:

- i) Clean the site with an antiseptic and wrap an elastic band around the arm to allow blood to fill the veins.
- ii) With the help of needle, draw 5 ml venous blood into the yellow/red top tube.
- iii) Serum is needed, for that allow the blood to clot and separate by centrifugation.

Pretest patient care:

- An 8-12 hour fast is recommended.
- Alcohol should not be consumed for at least 24 hours before test.
- A person should be on a stable diet for 3 weeks.

Withhold all medications for at least 24 hours before testing

Values for HDL Cholesterol	
Age and Sex	Normal HDL Level
People aged 19 years and younger	More than 45 mg/dl
Men aged 20 years and older	40 mg/dl or higher
Women aged 20 years and older	50 mg/dl or higher