



## BIOCHEMISTRY

BLOOD - SERUM	Result	Range	Units	
<b>LIPIDS</b>				
CHOLESTEROL	<b>5.8 *H</b>	0.0 - 5.5	mmol/L	
TRIGLYCERIDES	<b>1.3</b>	0.2 - 1.5	mmol/L	
<b>LIPID STUDIES</b>				
HDL(Protective)	<b>1.1 *L</b>	> 1.2	mmol/L	
LDL(Atherogenic)	<b>4.1 *H</b>	0.5 - 3.5	mmol/L	
Cholesterol/HDL Ratio	<b>5.3</b>			
LDL/HDL RATIO (Risk Factor)	<b>3.7 *H</b>	0.0 - 3.2		
Trig/HDL Ratio	<b>1.2</b>	0.5 - 1.7	RATIO	

**Lipid Profile Comment**

**CHOLESTEROL COMMENT:**

For secondary prevention, total cholesterol Treatment Target is <4.0 mmol/L  
Triglycerides Treatment Target <2.0 mmol/L  
HDL Treatment Target Value >1.0 mmol/L

**LDL-CHOLESTEROL COMMENT:**

As there is an elevated LDL level, we suggest a Liposcreen (LDL Subfractions) Test to determine the presence of small, dense (highly atherogenic) LDLs which are a primary cause of Coronary Artery Disease (CAD).  
The LDL subtypes are not detectable through conventional Lipid Profiles.

**TRIG/HDL RATIO COMMENT:**

HDL is closely related to triglycerides. Commonly, patients with elevated triglycerides also have low HDL levels, and also tend to have elevated levels of clotting factors in their blood stream, which is unhealthy in protecting against heart disease.  
The triglyceride/HDL ratio is found to be one of the better predictors of heart disease. Research shows that people with an elevated ratio of triglycerides to HDL have 16 times the risk of heart attack as those with the low/normal.

Therefore, in adults, the triglyceride/HDL ratio should ideally be below 2.0 .

**TRIG/HDL Reference Range:**

< 0.9	Considered ideal	(minimal risk)
> 1.7	High	(moderate risk)
> 2.6	Very High	(high risk)