

LIVER ENZYME REFERENCE CHART (ALT/AST)

ENZYME TYPE	REFERENCE RANGE (U/L)	CLINICAL INTERPRETATION
ALT (Alanine Aminotransferase)	7 - 55 U/L	Primary indicator of liver-specific injury. Found predominantly in the liver.
AST (Aspartate Aminotransferase)	8 - 48 U/L	Found in liver, heart, muscles, and kidneys. Used alongside ALT for diagnostic ratios.
Mild Elevation	2x - 3x Normal	Common in fatty liver (NAFLD), chronic hepatitis, or certain medications.
Moderate Elevation	3x - 10x Normal	Seen in acute hepatitis or heavy alcohol consumption.
Severe Elevation	>10x Normal	Indicates acute liver damage, toxin exposure, or severe viral hepatitis.

Note: Reference ranges may vary slightly between different laboratories. This chart is for educational reference only. Clinical decisions must be made by a healthcare professional based on individual patient history and comprehensive diagnostic testing.