2 Nutrient and Toxic Elements

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Toxic Elements 51
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Table of Specimen Differences

	Nutrient Elements	Toxic Elements
Erythrocytes	Levels reflect cellular uptake in erythropoiesis	Detects recent acute or long-term chronic exposure
Whole blood, Serum or Plasma	Levels represent availability and transport issues	Most commonly used specimen; good for detecting recent, acute exposure; low sensitivity for chronic low level exposure
Hair	Long term status (~3 month)	High sensitivity for chronic exposure
Urine	Short term intake (~ 2 days), depending on renal metallothionein	Sensitivity improved by challenge with complexing agent such as DMSA