

**National Health and Nutrition Examination Survey  
Codebook for Data Release (1999-2000)**

**Blood Lead, Blood cadmium, Erythrocyte protoporphyrin, Iron, Total iron binding capacity(TIBC), Transferrin saturation, Ferritin, Serum folate, Vitamin B12, Homocysteine, Methylmalonic acid(MMA), Total mercury, Inorganic mercury, Red blood cell folate, Serum cotinine, Vitamin A, Vitamin E, Gamma tocopherol, Retinyl palmitate, Retinyl stearate, and Urine mercury (LAB06)**

**Person level data -- use Examination Weights for analysis**

May 2004

<b>SEQN</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Respondent sequence number
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b> Respondent sequence number.	
<b>English Instructions:</b>	

<b>LBXBPB</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 99.9	Lead (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Lead (ug/dL)	
<b>English Instructions:</b>	

<b>LBDBPSI</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>

	Lead (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXBCD</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 99.9	Cadmium (ug/L)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Cadmium (ug/L)	
<b>English Instructions:</b>	

<b>LBDBCDSI</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Cadmium (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXEPP</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999	Protoporphyrin (ug/dL RBC)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Protoporphyrin (ug/dL RBC)	
<b>English Instructions:</b>	

<b>LBDEPPSI</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)

<b>Hard Edits</b>	<b>SAS Label</b>
	Protoporphyrin (umol/L RBC)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXIRN</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	Iron (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Iron(ug/dL)	
<b>English Instructions:</b>	

<b>LBDIRNSI</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Iron (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXTIB</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	TIBC (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Total iron binding capacity (ug/dL)	
<b>English Instructions:</b>	

<b>LBDTIBSI</b>	<b>Target</b>
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	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	TIBC (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXPCT</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999.9	Transferrin saturation (%)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Transferrin saturation(%)	
<b>English Instructions:</b>	

<b>LBXFER</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0. to 9999	Ferritin (ng/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Ferritin (ng/mL)	
<b>English Instructions:</b>	

<b>LBDFERSI</b>	<b>Target</b>
	B(1 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Ferritin (ng/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXFOL</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999.9	Folate, serum (ng/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Folate, serum (ng/mL)	
<b>English Instructions:</b>	

<b>LBDFOLSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Folate, serum (nmol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXB12</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999999	Vitamin B12, serum (pg/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Vitamin B12, serum (pg/mL)	
<b>English Instructions:</b>	

<b>LBDB12SI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Vitamin B12, serum (pmol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXHCY</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999.99	Homocysteine (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Homocysteine(umol/L)	
<b>English Instructions:</b>	

<b>LBXMMA</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 99.99	Methylmalonic acid (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Methylmalonic acid (umol/L)	
<b>English Instructions:</b>	

<b>LBXTHG</b>	<b>Target</b>
	B(1 Yrs. to 5 Yrs.) F(16 Yrs. to 49 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 99.9 0 to 99.9	Mercury, total (ug/L)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBDTHGSI</b>	<b>Target</b>
	B(1 Yrs. to 5 Yrs.) F(16 Yrs. to 49 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Mercury , total (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	

**English Instructions:**

<b>LBXIHG</b>	<b>Target</b>
	B(1 Yrs. to 5 Yrs.) F(16 Yrs. to 49 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 99.9	Mercury, Inorganic (ug/L)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBDIHGSI</b>	<b>Target</b>
	B(1 Yrs. to 5 Yrs.) F(16 Yrs. to 49 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Mercury, Inorganic (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXRBF</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999	Folate, RBC (ng/mL RBC)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Folate, RBC (ng/mL RBC)	
<b>English Instructions:</b>	

<b>LBDRBFSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Folate, RBC (nmol/L RBC)
<b>Source Activity</b>	<b>Source Component</b>

<b>English Text:</b>
<b>English Instructions:</b>

<b>LBXCOT</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999.999	Cotinine (ng/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Cotinine (ng/mL)	
<b>English Instructions:</b>	

<b>LBDCOTSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Cotinine (nmol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXSEL</b>	<b>Target</b>
	B(3 Yrs. to 11 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	Selenium (ng/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Selenium (ng/mL)	
<b>English Instructions:</b>	

<b>LBDSELSI</b>	<b>Target</b>
	B(3 Yrs. to 11 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Selenium (nmol/L)
<b>Source Activity</b>	<b>Source Component</b>



<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXGTC</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999	Gamma tocopherol (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Gamma tocopherol (ug/dL)	
<b>English Instructions:</b>	

<b>LBDGTCSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Gamma tocopherol (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXRPL</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	Retinyl palmitate (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Retinyl palmitate (ug/dL)	
<b>English Instructions:</b>	

<b>LBDRPLSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Retinyl palmitate (umol/L)

<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXRST</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	Retinyl stearate (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Retinyl stearate (ug/dL)	
<b>English Instructions:</b>	

<b>LBDRSTSI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Retinyl stearate (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXVIA</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 999	Vitamin A (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Vitamin A (ug/dL)	
<b>English Instructions:</b>	

<b>LBDVIASI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>

	Vitamin A (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>LBXVIE</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999	Vitamin E (ug/dL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Vitamin E (ug/dL)	
<b>English Instructions:</b>	

<b>LBDVIESI</b>	<b>Target</b>
	B(3 Yrs. to 150 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
	Vitamin E (umol/L)
<b>Source Activity</b>	<b>Source Component</b>
<b>English Text:</b>	
<b>English Instructions:</b>	

<b>URXUHG</b>	<b>Target</b>
	F(16 Yrs. to 49 Yrs.)
<b>Hard Edits</b>	<b>SAS Label</b>
0 to 9999.99	Mercury, urine (ng/mL)
<b>Source Activity</b>	<b>Source Component</b>
LAB	LAB06
<b>English Text:</b> Mercury, urine (ng/mL)	
<b>English Instructions:</b>	