

## *Anemia Identification*

**Directions:** Look at the complete blood count table and see the normal values. Then look at each patient's CBC values and determine which ones are abnormal (too high or too low). Then using the chart on **page 299** of your text book, try to diagnose the type of anemia each patient may or may not have.

	<b>Normal Values</b>
Folate Content:	2-10 ng/ml
Hematocrit:	Women: 38%-47% Men: 40%-54%
Hemoglobin Content:	Women: 12-16 g/100 ml Men: 13-18 g/100 ml
Iron Content:	50-150 µg/100 ml
RBC Count (volume):	Women: 4.2-5.4 million/mm <sup>3</sup> Men: 4.5-6.2 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	200 to 900 pg/ml

<b>Patient 1: Female</b>	<b>Values</b>
Folate Content:	3.2 ng/ml
Hematocrit:	37 %
Hemoglobin Content:	11.4 g/100 ml
Iron Content:	165 µg/100 ml
RBC Count (volume):	5.8 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	180 pg/ml
<b>Diagnosis:</b>	

<b>Patient 2: Male</b>	<b>Values</b>
Folate Content:	8.4 ng/ml
Hematocrit:	25 %
Hemoglobin Content:	7.2 g/100 ml
Iron Content:	22.3 µg/100 ml
RBC Count (volume):	4.4 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	565 pg/ml
<b>Diagnosis:</b>	

<b>Patient 3: Male</b>	<b>Values</b>
Folate Content:	6 ng/ml
Hematocrit:	32%
Hemoglobin Content:	9.8 g/100 ml
Iron Content:	42.5 µg/100 ml
RBC Count (volume):	3.7 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	455 pg/ml
<b>Diagnosis:</b>	

<b>Patient 4: Female</b>	<b>Values</b>
Folate Content:	7.1 ng/ml
Hematocrit:	33 %
Hemoglobin Content:	11.1 g/100 ml
Iron Content:	145 µg/100 ml
RBC Count (volume):	5.2 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	515 pg/ml
<b>Diagnosis:</b>	

<b>Patient 5: Male</b>	<b>Values</b>
Folate Content:	1.5 ng/ml
Hematocrit:	36 %
Hemoglobin Content:	7.6 g/100 ml
Iron Content:	210 µg/100 ml
RBC Count (volume):	6.8 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	325 pg/ml
<b>Diagnosis:</b>	

<b>Patient 6: Male</b>	<b>Values</b>
Folate Content:	5.6 ng/ml
Hematocrit:	34 %
Hemoglobin Content:	12.2 g/100 ml
Iron Content:	130 µg/100 ml
RBC Count (volume):	6.1 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	705 pg/ml
<b>Diagnosis:</b>	

<b>Patient 7: Female</b>	<b>Values</b>
Folate Content:	6.5 ng/ml
Hematocrit:	39 %
Hemoglobin Content:	12.4 g/100 ml
Iron Content:	76 µg/100 ml
RBC Count (volume):	4.1 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	635 pg/ml
<b>Diagnosis:</b>	

<b>Patient 8: Female</b>	<b>Values</b>
Folate Content:	4.6 ng/ml
Hematocrit:	32 %
Hemoglobin Content:	12.2 g/100 ml
Iron Content:	151 µg/100 ml
RBC Count (volume):	5.14 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	635 pg/ml
<b>Diagnosis:</b>	

<b>Patient 9: Male</b>	<b>Values</b>
Folate Content:	2.1 ng/ml
Hematocrit:	39 %
Hemoglobin Content:	12.4 g/100 ml
Iron Content:	152 µg/100 ml
RBC Count (volume):	6.28 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	225 pg/ml
<b>Diagnosis:</b>	

<b>Patient 10: Female</b>	<b>Values</b>
Folate Content:	1.2 ng/ml
Hematocrit:	35 %
Hemoglobin Content:	10.4 g/100 ml
Iron Content:	175 µg/100 ml
RBC Count (volume):	5.5 million/mm <sup>3</sup>
Vitamin B <sub>12</sub> Content:	420 pg/ml
<b>Diagnosis:</b>	