### Summary of Deficient Test Results

<table>
<thead>
<tr>
<th>Micronutrient analysis (WBC) determined the following deficiencies:</th>
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<tbody>
<tr>
<td>Vitamin B12</td>
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<tr>
<td>Spectrox</td>
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</tbody>
</table>
Repletion Suggestions

1. Vitamin B12 (Cobalamin) 300 mcg daily (methylcobalamin or adenosylcobalamin)

2. Biotin 1000 mcg daily

3. Vitamin D (Ergocalciferol) 1000 IU daily of Cholecalciferol (Vitamin D3-1-alpha 25-dihydroxyvitamin D)

4. Total Antioxidant Function Based on Spectrox and individual Antioxidant tests:
   * Glutathione: 600 mg daily of N-Acetylcysteine (NAC)
   * Cysteine: The daily dose of N-Acetylcysteine (NAC) listed for Glutathione is usually sufficient for Glutathione and/or Cysteine repletion.
   * Vitamin E: 200 IU daily of mixed tocopherols
   * Selenium: 50 mcg daily
   * Coenzyme Q10: 30 mg daily of CoQ10 Take each dose with a meal
   * Lipoic Acid Deficient: 200 mg daily
   * Vitamin C: 250 mg daily

Please note: Supplementation is usually required for four to six months to effect the repletion of a functional deficiency in lymphocytes

Suggestions for supplementation with specific micronutrients must be evaluated and approved by the attending physician. This decision should be based upon the clinical condition of the patient and the evaluation of the effects of supplementation on current treatment and medication of the patient.
Values in this area represent a deficiency and patient may require nutrient repletion or dietary changes.

**B Complex Vitamins**

- Vitamin B1 (Thiamin)
- Vitamin B2 (Riboflavin)
- Vitamin B3 (Niacinamide)
- Vitamin B6 (Pyridoxine)
- Vitamin B12 (Cobalamin)
- Folate
- Pantothenate
- Biotin

**Amino Acids & Metabolites**

- Serine
- Glutamine
- Asparagine
- Choline
- Inositol
- Carnitine
- Oleic Acid

**Other Vitamins & Minerals**

- Vitamin D (Ergocalciferol)
- Vitamin A (Retinol)
- Vitamin K2
- Calcium
- Zinc
- Copper
- Magnesium
Values in this area represent Accession Number: J16360

Jane Doe

Adequate deficiency and patient may require nutrient repletion or dietary changes.

**Carbohydrate Metabolism**

- Fructose Sensitivity
- Glucose-Insulin Interaction
- Chromium

**Spectrox**

A Spectrox value above 65% indicates a desirable status for apparently healthy individuals. Since antioxidants are protective nutrients, the most desired status would be the greatest ability to resist oxidative stress.

A Spectrox value between 40% and 65% indicates an average antioxidant function for apparently healthy individuals. An average status means the ability to resist oxidative stress similar to the majority of persons. However, average status is not ideal, nor is it clearly deficient.

A Spectrox value below 40% indicates a deficient antioxidant function resulting in a decreased ability to resist oxidative stress or an increased antioxidant load.

**Individual Antioxidants**

- Glutathione
- Cysteine
- Coenzyme Q-10
- Selenium
- Vitamin E (α-tocopherol)
- Alpha Lipoic Acid
- Vitamin C

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