The Six Nutritional Needs of the Body.

1. **Protein:**
   - growth and maintenance of tissue
   - compose basic structure of all living cells
   - essential life forming and life sustaining ingredient
   - contributes to body’s overall energy metabolism
   
   **Foods:** meat, milk, cheese, eggs, grain, legumes

2. **Carbohydrates:** starches and sugars
   - provides energy
   - "protein-sparing agents" - sparing proteins from being used to provide energy if sufficient amount of carbohydrates are present, protein won’t be used for energy
   
   **Foods (sugars):** fruit, honey, syrup, pineapple, sugar, milk (not cheese)
   
   **Foods (starches):** potatoes, rice, cereal grain

3. **Fats:**
   - produce energy - concentrated source of energy
   - mechanical or structural function
   - protection of vital organs
   - necessary for fat soluble vitamins
   - contribute to palatability of diet

<table>
<thead>
<tr>
<th>SATURATED FATS</th>
<th>UNSATURATED FATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>egg yolks, dairy fats,</td>
<td>vegetable oil, olives, peanut,</td>
</tr>
<tr>
<td>red meats, poultry, seafood</td>
<td>soybean, corn, cotton seed</td>
</tr>
</tbody>
</table>

4. **Minerals:** may play vital roles in metabolism:

   a. **Calcium:** build and maintain skeletal tissue, important part in tooth formation, aids in blood clotting, initiation of muscle contraction
   
   **Foods:** milk, cheese, egg yolk, green leafy vegetable, legumes, nuts

   b. **Phosphorous:** bone and teeth building
   
   **Foods:** milk, milk products, lean meats

   c. **Sodium:** maintain fluid balance, helps regulate acid-base balance
   
   **Foods:** salt, milk (cheese), meat (sausage, hamburger, cold cuts, luncheon meats), olive, pickles, bread, tomato catsup
b. Water Soluble Vitamins:

Vitamin B Complex
- affects growth, appetite, lactation
- necessary for carbohydrate metabolism
*Foods: meat, wheat grain, milk, liver, egg yolk, cereal*

Vitamin C
- necessary for formation of connective tissue
- aids in increasing resistance to infection (especially bacterial)
*Foods: citrus fruits, tomatoes, cabbage, potatoes, strawberries*

6. Water:
- vital to existence (can survive longer without food than water)
- important for absorption of nutrients
- chief ingredient of extracellular fluids