

## VITAMINS, MINERALS AND ELECTROLYTES

*These three items are essential for proper bodily functions. Deficiencies in any of these substances may lead to life threatening conditions such as hypokalemia which would affect the heart and pernicious anemia which is caused by a decrease in vitamin B<sub>12</sub>.*

### VITAMINS

**Mechanism:** Two primary types, fat soluble and water soluble. Act principally as regulators (coenzymes) in metabolic operations.

**Indications:** To replace a deficiency in the patient

**Examples:** Thiamine, Riboflavin, Ascorbic acid, Vitamin E

**Side effects:** Specific for the agent administered

### MINERALS

**Mechanism:** Involved in many of the body's enzyme reactions.

**Indications:** To replace a deficiency in the patient

**Examples:** Chromium, Copper, Manganese, Selenium, Zinc

**Side effects:** Specific for the agent administered

### ELECTROLYTES

**Mechanism:** Four primary actions, promotes neuromuscular stability, maintain balanced osmolality, regulate acid-base balance, and helps distribute fluid among the various body compartments.

**Indications:** To replace a deficiency in the patient

**Examples:** Ammonium chloride, Magnesium oxide, Potassium phosphate

**Side effects:** Specific for the agent administered

## **COMMONLY TRANSPORTED VITAMINS, MINERALS, AND ELECTROLYTES**

This section is left blank for the services medical director or training officer to review those agents which are commonly used for transport. Topics which should be covered include dosages, indications, side effects, and any transport considerations.