

## Changes in Electrolytes After Surgery

You need electrolytes to maintain your body's balance. The most common electrolytes replaced after surgery are magnesium, potassium, phosphate, and sodium. They help your body to work, and they must be in balance with each other.

### Testing

Lab blood tests can measure your electrolyte levels.

### Sodium

Sodium works closely with water to maintain a proper fluid volume in the body. The kidneys respond to the amount of sodium. Your kidneys will either conserve fluid or get rid of it. Sodium helps control your blood pressure. During your stay in the hospital, IV fluids help control proper sodium levels. If your blood pressure or urine output is low, you may receive a large amount of fluid quickly. **Normal Level is 136-145 mmol/Liter.**

### Potassium

You need potassium for healthy heart function, cell growth, and muscle contraction. In your diet, good sources of potassium are dark green leafy vegetables, raisins, bananas, salt substitutes, and potatoes. While in the hospital, we can give you oral or IV supplements. IV potassium may cause pain at the IV site. Please let your nurse know if you have pain or burning when you receive it through an IV. Potassium pills or liquid may cause nausea if not taken with meals or a snack. **Normal Level is 3.5-5.1 mmol/Liter.**

### Magnesium

You need magnesium to maintain your metabolism, organ and tissue function. You can replace it through your diet. Food sources include dark green vegetables, whole grains, nuts, seeds, tap water, fruits, and meats such as tuna, pork, and chicken. We can also give you oral or IV supplements. It can take up to 24 hours to be absorbed. **Normal Level is 1.6-2.6 mg/dLiter.**

### Calcium

Calcium helps with nerve, heart and muscle function, blood clotting and forming teeth and bone. Calcium works closely with phosphorus. Calcium is mostly contained in your bones. Food sources include dairy products, salmon, fortified fruit juices, and dark green leafy vegetables. We can also give you oral supplements like calcium carbonate (TUMS®). In severe cases, it we may give it to you through an IV. **Normal Level is 8.4-10.2 mg/dLiter.**

### Phosphate

Phosphate helps muscle, red blood cells and the nervous system to function. With calcium, it helps form bone and teeth. Food sources include milk, cheese, eggs, meat, fish, and nuts. We may use oral supplements, such as Neutra-Phos®, to treat mild phosphate loss. You can mix this with juice or water. We may use IV supplements to treat a more severe lack of phosphate. **Normal Level is 2.3-4.7 mg/dLiter.**

The proper balance of fluids and electrolytes will help you heal.