# Hyponatremia (Low sodium level) in Patients with Cancer:

## The Basics

### What is hyponatremia?

Hyponatremia is a condition where the sodium concentration in your body is low due to excess amounts of water. The normal sodium level is 135-145 mEq/L, but the normal range can vary among labs. Hyponatremia is defined as a sodium level **LESS** than 135 mE/L.

### What causes hyponatremia, specifically in patients with cancer?

Hyponatremia occurs when there is too much water relative to the sodium content in the body. This can be caused by different things, such as:

- SIAD (Syndrome of Inappropriate Antidiuresis): A condition where a hormone made in your brain tells your kidneys to hold on to excess water.
- Poor nutrition
- Severe pain, nausea, vomiting, or diarrhea
- Medications such as antidepressants and certain blood pressure medications
- Medical conditions such as thyroid disease, heart failure, lung disease, liver cirrhosis, and kidney disease

### What are the symptoms of hyponatremia?

- Headaches, nausea, vomiting, confusion, fatigue, muscle cramps or weakness
- Seizures, arrhythmias, loss of consciousness typically occur when sodium level is significantly low (below <120 mEq/L).

### How is hyponatremia treated?

The treatment of hyponatremia includes **addressing the underlying cause** of the low sodium and some other measures.

Common treatment options that are outlined below:

#### Correcting volume depletion:

- In cases of prolonged diarrhea, nausea, vomiting, or decreased food intake your doctors may prescribe intravenous fluids.
- When hyponatremia is related to diuretics use (e.g., hydrochlorothiazide) your doctor may give you intravenous fluids and stop the diuretic

#### Limiting your fluid intake:

- Some types of hyponatremia may respond to fluid restriction; you may be asked to consume less than 1-1.5 L or 4-6 cups or 32-48 ounces of fluid daily.

- This includes all liquids - water, tea, coffee, juice, soda, Gatorade, etc.
- Sports drinks such as Gatorade may not be beneficial in increasing the sodium level. They may even potentially lower the sodium level.

**1 Liter equivalents:**

8oz cups = 250mL = 500mL = 1L

**Increasing your protein intake in your diet**

- Eat healthy proteins such as chicken, fish, lean meats
- Drink protein and solute containing beverages or shakes

**Your doctor may also decide to prescribe medication such as:**

- Salt (sodium chloride) pills
- Urea packets
- Prescriptive medication to block ADH hormone in appropriate cases
- For treatment of dry mouth saliva substitutes such as Biotene gel, cephasol or other prescription agents may help while maintaining fluid restriction.
- Additionally, your doctor may require you to be hospitalized depending on how low your sodium level is.

As always, please consult with your doctor about your specific conditions or if you have any questions. This material is for informational purposes only and is not a substitute for professional medical advice, diagnosis, or treatment.

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