

# My Treatment: Albumin

Albumin is a protein made by the liver that flows in the blood stream. It keeps fluids in the blood from leaking into tissues and has many other tasks that help maintain good health. A low albumin (less than 3.8) can be a sign of an illness, infection and/or inflammation in the body. For dialysis patients, the preferred range for the serum (blood) albumin is 4.0 g/dl or greater. Your dietitian and healthcare team can help you improve a low albumin by teaching you about good nutrition and helping you get care quickly for medical problems that may come up.



## What Does Albumin Do?



Provides the protein needed to maintain growth and repair tissues.



Helps to pull extra fluid from swollen tissues into the blood stream where it can be removed during dialysis.



Transports nutrients, hormones, and medications in the blood.



Helps with blood clotting.



Helps make antibodies that fight disease.



Supports muscle strength and movement.

## Signs of Low Albumin



Swelling



Poor wound healing



Trouble fighting infection



Muscle weakness



Being tired

## What Causes Low Albumin?

There are a wide variety of reasons an albumin level may become low including:

- **Poor nutrition**, not eating enough protein. Protein is found in meats, milk-products, and eggs, as well as in beans, nuts, and seeds. This may be caused by:
  - Lack of appetite. This may be due to poor dialysis (a low Kt/V), an illness, side effects from medication or feeling depressed.
  - Not being able to afford protein foods.
  - Food allergies and/or not knowing what foods to eat.
  - Trouble with chewing and/or swallowing.

## What Causes Low Albumin? (cont.)

- **Inflammation**—often noticed as a red, swelling, or painful area— may feel “warm.”
  - Sudden inflammation can be caused by an access infection, an infected foot, gum disease, urinary tract infection, heart attack, or recent surgery.
  - Chronic inflammation, due to arthritis, cancer, lupus, or poorly controlled diabetes.
- **Protein loss**
  - Digestive disorders that affect how proteins are absorbed in the body.
  - With some types of kidney disease, protein may be lost in the urine.
  - With peritoneal dialysis, some protein crosses the peritoneal membrane and exits the body in the dialysate (the solution drained from the peritoneal cavity).
  - Liver disease (protein is made in the liver) or blood loss.
- **Extra fluid** stored in the body’s tissues.

## How Can I Improve My Albumin?

Improving albumin is more than eating extra protein. It also means handling medical problems as best as possible. Some ideas to boost albumin:



**Get adequate dialysis.** Dialysis cleans the blood, removes excess fluids, and improves your appetite. Make sure to go to all your treatments and stay the full time.



**Talk with your Dietitian.** Get help setting goals, finding feeding patterns and food choices that will fit your preferences and needs.



**Visit your dentist regularly.** Poor dental health lowers albumin and puts you at risk for other serious health problems including heart issues.



**Manage health problems quickly.** Infections, wounds, persistent diarrhea and other health issues can often be taken care of with some expert help.



**Ask for help.** Tell your dialysis team if you need assistance getting food. There may be nutrition programs, delivered meals and food pantries that can help you.

## My Questions: Ask Your Care Team

- What can I do to improve my albumin?
- How much protein should I eat each day?
- What can I do if I do not like meat?

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