

## What Hamburgers, Arthritis & Albumin Have In Common

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### What is albumin?

Albumin is a protein, found in animal sources such as meats, milk-products, and eggs. It is also found in plant sources such as beans, nuts, and seeds.

Albumin provides the body with the protein needed to both *maintain growth* and *repair tissues*. It can also help with *fluid removal* during the dialysis treatment. If your albumin level is good, fluid will move more easily from swollen tissues into the blood, where it can then be removed by the dialyzer.

For dialysis patients, the preferred range for the serum (blood) albumin is 4.0 g/dl or greater.

### *Test Your Knowledge*

- 1) What was your last serum (blood) albumin reading? \_\_\_\_\_
- 2) Was this reading in the acceptable range? \_\_\_\_\_

Answer: If you are unsure, check with your nurse, dietitian, PCT or physician.

### What can cause your Albumin level to drop

There are a wide variety of reasons an albumin level may become low. Areas may include:

- I. Inadequate nutrition** (not eating enough protein)
  - Lack of appetite possibly from poor dialysis (a low Kt/V), an illness, a side effect of medications, or feeling depressed can all lead to a poor intake of protein-rich foods.
  - Not knowing what foods to eat or not having protein-foods available can also create a poor albumin level.
- II. Protein loss**
  - With some types of kidney disease, protein may be lost in the urine (proteinuria).

- With *peritoneal dialysis*, some protein crosses the peritoneal membrane and exits the body in the effluent dialysate (the solution drained from the peritoneal cavity). This loss increases in a person with peritonitis, an infection of the peritoneum.
- Liver disease (protein is synthesized in the liver) or blood loss can also cause the albumin level to drop.

### **III. Inflammation**

- Albumin levels *decrease* when an inflammation is present.
- Examples of a sudden inflammation include (1) an access infection, (2) an infected foot, (3) gum disease, (4) a urinary tract infection, (5) a myocardial infarction (heart attack), or (6) recent surgery.
- Chronic inflammation, such as present with arthritis or cancer, also can cause the albumin to drop.

#### Our goal: An acceptable Albumin level

As the title indicates, keeping an acceptable albumin level is more complicated than just eating a good portion of meat each day. Many areas other than diet can also affect your albumin.

To help achieve an albumin of 4.0 mg/dl or greater, your **dialysis team:**

- *Monitors* your monthly albumin level.
- Provides *dietary education*.
- Helps with both the prevention and treatment of *inflammations and infections*.

**You** can help by:

- *Eating* adequate protein.
- *Reporting* any signs or symptoms of an infection or an inflammation.
- *Preventing* infections through good hygiene practices.

Thanks for your interest in learning!