FOR PATIENTS RECOVERING AT HOME

Nutrition and Hydration: Key Weapons in the Fight Against COVID-19

Importance of Hydration and Nutrition During Your Illness

The body is composed of about 70% water.[1] Water is normally lost in urine and stool and from our skin and respiratory tract. When ill with a fever, the body loses water rapidly.

For an adult with a fever of 102◦ (39◦ C), sweating results in the loss of about 30 ounces of fluid every 24 hours with an additional 3 ounces lost during coughing and breathing.[2] Fluid deficits are further magnified by losses due to nausea, vomiting and/or diarrhea, and inadequate fluid intake related to poor appetite.

Unintentional weight loss during illness is an indication that the body is losing fluids and utilizing the body's fat and muscle for energy and protein to maintain normal bodily functions. Body fluid, fat and muscle losses impact your ability to fight the illness and recover.

Hydration and nutrition play an important role in your body's response to and recovery from the COVID-19 virus and are an essential part of your medical treatment.

What You Need to Do

Even though you may not be thirsty or hungry, it is important that you continue to eat and drink fluids to support your body's ability to fight the virus and support your body's immune function.

Follow these simple steps to keep your body hydrated and nourished.

STAY HYDRATED

Drinking water and clear liquid beverages are important even if you do not feel thirsty. You need to replace your body's fluid losses and thin your respiratory secretions.

When you are dehydrated, your respiratory secretions thicken and are hard to clear from your lungs. Being unable to clear your secretions from your lungs may lead to pneumonia.

Signs of dehydration are increased thirst, fever, dark colored urine, reduced urine output, dry mouth, increased heart rate, tiredness and confusion. For more information on dehydration: anhi.org/resources/printable/dehydration-infographic-for-patients

Drink water or clear liquid fluids every hour. At a minimum, you should drink 2–4 ounces of fluid every 15 minutes.

Monitor yourself for signs of dehydration. Increase your fluid intake as needed to ensure that you are passing light yellow urine every 3–4 hours.

Consider the following:

- Take frequent small sips of liquids every few minutes if you are not able to drink large volumes of fluids at one time.
- Use a variety of liquids to avoid taste fatigue.
- Keep liquids at your bedside to sip during the night.
- If you are vomiting or have diarrhea, make sure that you are taking an oral hydration solution in addition to water.

The optimal liquids to take are clear liquid beverages with calories and protein, oral rehydration solutions or sports drinks. Drinking these types of beverages is particularly helpful as they provide your body with calories, essential electrolytes and minerals that your body needs to function.

The following are examples of appropriate solutions that can be purchased online:

abbottstore.com/infant-and-child/pedialyte.html

nestlenutritionstore.com/boost-breeze.html

dripdrop.com/collections/dehydration-relief

ceraproductsinc.com/collections/ceraproducts

gatorade.com/products/sports-drinks

powerade.com

Rehydration Solution Recipe

Mix the following in a pitcher:

½ – ¾ tsp salt

1 cup of juice (orange, grape, apple, cranberry)

3 ½ cups water

EAT A HIGH CALORIE, HIGH PROTEIN DIET

Although you may not have an appetite and food does not taste good to you now — it is critical that you eat. Your body needs calories and protein to maintain its metabolic functions and body weight during this critical time.

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Energy needs, expressed in terms of calories, vary by body size, age, sex, and health status. Intake of energy, especially as carbohydrates, is important to protect against breakdown of muscle for energy.

For normal weight maintenance caloric intake should be 1500–2000 calories. This should be increased by about 400–500 calories during increased stress and infection.

High protein intake is important to maintain your muscle mass. About 75–100 grams of protein (10–14 ounces of a protein source) are needed per day.

Eat high protein, high calorie meals and snacks throughout the day. Here are tips to increase protein intake: med.umich.edu/1libr/Nutrition/HighCalorieHighProteinIdeas.pdf

High Protein Shake Recipe

¾ cup of full fat yogurt (Greek yogurt may have more protein)

1 cup whole milk

2 tbsp peanut butter

Fresh fruit to taste (½ banana, mango and/or berries)

Add more milk if needed to desired thickness.

Provides about 12 grams of protein; 200 calories per cup.

Makes 2 ½ cups.

If the taste or smell of food is interfering with your intake, consider the following tips:

- Cold or room-temperature food may taste better (sandwiches, cottage cheese) than hot, which tend to give off stronger flavor and odor
- If food tastes metallic — eat with plastic utensils
- Choose less sweet foods
- Consider adding sugar if foods or beverages are too salty or too bitter
- Add spices to flavor plain foods

CONSIDER THE USE OF ORAL NUTRITION SUPPLEMENTS

When you do not feel hungry or are too tired to eat enough regular food, oral nutrition supplements are an easy way to get the calories and protein you need. Oral nutrition supplements are commercially available drinks that are nutrient dense and ready to drink. These drinks provide the extra calories, protein, and essential nutrients needed by the body in a concentrated form.

To optimize intake, consider oral nutrition supplements that provide a minimum of 150 calories and 15–30 grams of protein per 8 ounces.

Include oral nutrition supplements in your daily diet by:

- Sipping chilled oral nutrition supplements throughout the day.
- Using variety of flavors to avoid taste fatigue.
- Adding additional servings of oral nutrition supplements when you are unable to eat regular food.

Oral nutrition supplements can be purchased at the grocery store, pharmacy or ordered online directly from the manufacturers below:

abbottstore.com/adult-nutrition/ensure.html

nestlenutritionstore.com/shop-by-categories/supplemental-nutrition/protein.html

WEIGH YOURSELF DAILY

Body weight is an indication of your hydration and nutrition status. Weight loss is indicative of the continued loss of body fluids, body fat, and muscle. The loss of muscle will make you feel weaker and may affect your ability to get out of bed, walk, and perform your activities of daily living. Rebuilding lost muscle mass takes a long time so preventing muscle loss during the acute phase of illness will optimize your recovery.

Nutrition during your Recovery and Rehabilitation

As you recover from COVID-19, continue to eat a high calorie, high protein diet. This diet along with regular exercise, will help you regain any muscle mass that you lost during your illness and help you get back to your normal activities.

For more information, visit nutritioncare.org/COVID19.

References

1.Demling RH. Nutrition, anabolism, and the wound healing process: an overview. Eplasty. 2009;9:e9.

2.Reithner L. Insensible water loss from the respiratory tract in patients with fever. Acta Chir Scand. 1981;147(3):163-167.

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