

Dehydration in the Older Adult

What is Dehydration and Why is it Important?

Dehydration occurs when the loss of water leaving the body exceeds the amount of water entering the body. Dehydration is very common in the older adult. As the body ages it is more susceptible to dehydration due to less fluid content in the body. In addition the physiological changes that occur as one ages such as loss of appetite, decreased taste sensation and decreased sense of thirst can trigger dehydration in the geriatric patient. The signs and symptoms of dehydration can often be similar to those found in a patient who has Alzheimers and/or Dementia.

More than 70% of the body is composed of water. A large majority of the water is found in the cells of the body, also referred to as intracellular space. The rest of the water is found in what is referred to as the extracellular space, which consists of the blood vessels and the spaces between cells what is known as intravascular space. Water is lost through activities like sweating, urination and exhalation during breathing. Though it can occur in any age group, dehydration is most common among senior citizens

How does the body lose water content?

- When we take medications, the body loses water in the processing of the drug
- When we breathe, humidified air leaves the body
- When we are overheated, we sweat to cool the body.
- When we urinate or have bowel movements to rid the body of waste product
- When we have illness leading to vomiting, diarrhea, blood loss and/or malnutrition.

Signs of Dehydration in the Elderly

Common signs and symptoms of dehydration include:

- Lethargy
- Muscle Weakness
- Cramps
- Dizziness
- Increased heart rate
- Confusion
- Deep rapid breathing

Less common signs and symptoms of dehydration include:

- Excessive loss of fluid through vomiting, urinating, stools or sweating
- Poor intake of fluids
- Sunken eyes
- Dry or sticky membranes in the mouth
- Skin lacking normal elasticity
- Decreased or absent urine output
- Decreased tears
- Dark Urine

Dehydration is a very serious condition. One of the best ways to monitor for dehydration amongst this population is to monitor body weight every day. Mild dehydration is considered a weight loss of two percent, whereas, a severe case is greater than or equal to five percent loss of body weight. In either of these cases it is necessary to consult a physician.

How to Prevent Dehydration

It is recommended by the Institute of Medicine to consume eight, eight ounce glasses of water a day. Almost everyone gets about half their daily water requirement from solid foods and fruit and vegetable juices. Here's the water content (by weight) of a variety of fruits and vegetables. Include the ones with the highest water content in meals or serve as snacks to help avoid dehydration.



GERIATRIC EDUCATION
& RESEARCH INSTITUTE

Food	% water
Avocados (raw)	73%
Bananas (raw)	74%
Bell Peppers (raw)	92%
Blackberries (raw)	86%
Blueberries (raw)%	85%
Broccoli (cooked)	91%
Broccoli (flower clusters, raw)	91%
Cabbage (raw)	92%
Cantaloupe (raw)	90%
Carrots (raw)	88%
Cauliflower (raw)	92%
Cauliflower (cooked)	93%
Celery (raw)	95%
Cherries (raw)	81%
Corn (1 ear, cooked)	70%
Cucumbers (raw)	96%
Grapefruit (pink or red, raw)	91%
Grapes (raw)	81%
Honeydew Melon (raw)	90%
Kiwi fruit (raw)	83%
Lettuce (raw)	96%
Mangoes (raw)	82%
Nectarines (raw)	86%
Olives (ripe, canned)	80%
Oranges (raw)	87%
Peaches (raw)	88%
Peaches (canned)	79%
Pears (raw)	84%
Pears (canned)	80%

7 Carnegie Plaza
Suite 101
Cherry Hill, NJ 08003
T 1 877 407 3469
F 1 877 407 4329
W foxgeri.org

fox GERI is a 501(c)(3)
not-for-profit company

Plums (raw)

85%

For more information check out:

MedlinePlus, a service of the US National Library of Medicine and the National Institutes of Health

<http://www.nlm.nih.gov/medlineplus/ency/article/000982.htm>

The American Geriatrics Society Foundation for Health in Aging Tip Sheet

http://www.healthinaging.org/public_education/hot_weather_tips.php

The Mayo Clinic

<http://www.mayoclinic.com/health/dehydration/DS00561>

COMPILED BY:

Elizabeth Olkowski, PT, GCS

References:

Anderson, M.K. Sports Injury Management. Lippicott Williams & Wilkins. Philadelphia. 1995.

<http://www.caring-for-aging-parents.com>

Bottomley, J., Lewis, C., Geriatric Rehabilitation: A Clinical Approach.