

BP Blogger

Myth Busting: The Fluids Issue

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Myth 1: Our bodies tell us when it's time to drink

Water is fundamental to life and is used in the body for transporting nutrients and wastes, regulating temperature, maintaining tissues and supporting cell functions such as the brain. We're made up of 60-65% water. Age-related changes make older adults very vulnerable to dehydration. It becomes a vital issue when they need help getting fluids. In fact, 30-36% of LTC residents have had episodes of dehydration. By not drinking enough water, dehydration can happen in only a few days.



concentration of urine. The kidneys' "fine tuning" capability decreases with age so by age 80 it's half of what it was at age 40.

The thirst response, which is the body's main way of signaling the need for fluid, becomes reduced with age. This means that even when residents are dehydrated, they will lack the desire to drink, making them more susceptible to constipation, bladder and chest infections, and delirium.

Watch for Dehydration WARNING SIGNS as they are often more subtle in older adults:

- | | |
|----------------------------|---------------|
| Clammy hands and feet | Dizziness |
| Concentrated, dark urine | Dry eyes |
| Low urine output | Sunken eyes |
| Confusion and irritability | Dry mouth |
| Dry, flushed skin | Coated tongue |
| Decreased salivation | Headache |
| Upper body weakness | Rapid pulse |
| Visual problems | Thirst |
| Responsive behaviours | |

***TIP*:** Skin turgor or axillary sweat are not reliable indicators in older adults

Maintaining the body's fluid balance is essential. A healthy fluid intake per day is about 3000ml: 1700 ml of it as pure fluids, 1000ml from foods, and 300ml created by the body. We lose fluids through urinating, defecating, and through our skin and lungs. The kidneys balance the body's fluid and electrolytes and "fine tune" the final

Myth 2: Behaviours and dehydration aren't linked

Chronic dehydration in residents with dementia can often result in responsive behaviours and delirium. Fluid intake of residents with dementia should be monitored closely because water loss of only 1-2% impairs cognitive and physical function. One of the main difficulties in preventing dehydration in residents with dementia is that they have reduced thirst responses, communication problems and may forget to drink so their ability to get water is impaired and must rely on caregivers.



cup or glass in the resident's hand and show them how to drink.

- **Poor short-term memory:** can forget to drink and need to be constantly reminded. Staff need to frequently offer them a drink of water, e.g. "sip and go"

- **Receptive and expressive dysphasia:** may not be able to express their needs or understand what staff are saying. It helps to have good eye contact, have them copy you using a cup or glass when asking residents if they would like a drink.

Residents with dementia have problems with:

- **Visual agnosia:** may not recognize a cup or a glass placed in front of them. It can be helpful to place the

More information on This and Other Best Practices

- **Contact your Regional LTC Best Practices Coordinator.** They can help you with Best Practices Info for LTC.

Find them at:

www.shrtn.on.ca click on these links "Tools and Resources" → "Current Research BP Practice Initiatives" → "LTC Regional BP Coordinators"

- **Check out the Hamilton Long Term Care Resource Centre** www.rgpc.ca

- **Surf the Web** for BPGs. Some sites and resources are listed on pg 2.



Cutting Through the Foggy Myths Using Best Practice Guidelines in Long Term Care

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Myth 3: Hydration at the end-of-life

In the last days of life when dying residents have reduced consciousness, scant urination and irregular breathing patterns, their swallowing ability also decreases making it difficult for them to drink and eat and more likely to aspirate into the lungs. As their organs begin to shut down and become unable to manage body fluids, dying residents no longer benefit from using artificial hydration (e.g. tube feeds, IV fluids). Dehydration (withholding fluids) at the end-of-life does not produce discomfort, rather it improves distressing symptoms from fluid overload such as lung secretions, nausea, swelling and pain. There is no evidence that artificial hydration prolongs life. It's difficult for families and caregivers to see the resident not eat and drink nor receive artificial hydration. Families need information to understand the benefits/risks of artificial hydration and support with their loved ones impending death. Caregivers must honour families' individual decisions whether it's not to hydrate, limit fluids or artificially hydrate. See April's BP Blogger re: Dry Mouth care.

TIP Armstrong Urine Color Chart:

Use of a urine colour chart during every-day care is a low-intensity and low-cost method to assess hydration status to help LTC staff to intervene early. It has eight standardized colours ranging from pale straw (1) to greenish brown (8). A colour reading of less than 4 is best, more than 4 puts them at risk of dehydration. Easier than measuring intake & output!

Myth 4: Only those with swallowing problems are at risk of dehydration

Know the residents' hydration habits ... Which type are they?



1. **Can drink** - on their own but may forget
2. **Can't drink** - have swallowing problems or are physically dependent
3. **Won't drink** - sippers, fear incontinence, say "no"

TIP: these residents are at greatest risk for dehydration, they usually only drink 25% of what is offered to them.

Match fluid promotion strategies to residents' hydration habits (type):

- Know who's at risk for dehydration
- Have residents drink 1500-2000ml per day, more if they are not eating, don't feel thirsty, are exercising or it's hot weather
- Explain why it's important to drink fluids
- Avoid caffeinated drinks as they dehydrate
- Make sure preferred drinks are available and accessible, are kept fresh, with lightweight cups and straws for easier drinking
- At least hourly, cue them to drink "sip & go"
- Provide thicken fluids for those who have swallowing problems as assessed by a SLP

Who's at risk for dehydration: Knowing dehydration risk factors:

- Older adults, those 85 years & older
- Females
- Underweight or overweight
- Dementia, depression, stroke, renal & cardiac diseases, urinary incontinence, uncontrolled diabetes, repeat infections, hypotension, chronic mental illness
- Communication problems
- Malnutrition (eats less than half of their food), ↓ appetite, eats poorly
- Swallowing problems or chokes, semi-dependent regarding feeding, tube feedings, dysphagia due to stroke
- Fever, vomiting, diarrhea, excessive sweating, rapid breathing, dizziness
- more than 4 medications: laxatives, diuretics, antipsychotics, and others....
- History of dehydration, forgets to drink (<1,500ml/day), spills when they drink, requires assistance to drink, thirst reduction, no access to drinks
- Draining wounds or pressure ulcers
- Voiding small amounts of concentrated (dark coloured) urine
- ↑ pulse rate, >100 beats per minute
- Falling, immobility, restraints
- Change in ability to do ADLs
- Isolation, ↓ attention from caregivers
- Hot weather
- Prolonged NPO (surgery)

Check out these Best Practices & Guidelines. Answers to the Myths came from them. Find out more!

Canadian:

Registered Nurses Association of Ontario. (2005). Prevention of constipation in the older adults. Toronto, ON: Author. www.rnao.org

The Canadian Hospice Palliative Care Association www.chpca.net

Canadian Stroke Strategy (2006). Canadian best practice recommendations for stroke care: 2006. Ottawa: Author. www.canadianstrokestrategy.ca

Others:

American Medical Directors Association. (2001). Dehydration and fluid maintenance. Columbia, MD: AMDA. www.amda.com

American Medical Directors Association. (2001). Altered nutritional status. Columbia, MD: AMDA. www.amda.com

University of Iowa Gerontological Nursing Interventions Research Center (2004). Hydration management. Evidence-based practice guideline. Iowa City, Iowa: Author www.nursing.uiowa.edu

Joanna Briggs Institute (2001). Maintaining oral hydration in older people. North Terrace, South Australia: JBI. www.joannabriggs.edu.au

Hodgkinson, B., Evans, D. & Wood, J. (2003). Maintaining oral hydration in older adults: A systematic review. *International Journal of Nursing Practice*, 9, S19-28.

Greene Burger, S., Kayser-Jones, J., & Prince Bell, J. (June 2000). *Malnutrition and dehydration in nursing homes: Key issues in prevention and treatment*. New York: National Citizen's Coalition for Nursing Home Reform & Commonwealth Fund, publication no. 386.

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