The main age related changes are as follows:

The response to the changes in concentrations of salts and sugars that occur when an individual drinks less, does not work as well as in older people.

There is reduced awareness of thirst due to reduced production and sensitivity to the anti diuretic hormone, especially in individuals with dementia and those who have had a stroke.

There is reduced ability to conserve water and concentrate urine and a reduced rate of fluid filtration through the kidneys. The kidneys are less efficient at resolving problems.

The total body water reduces with age so there is less reserve.

The ability to taste reduces with age so drinks may taste different.

Older people may be taking medication which affects fluid balance. They may be reliant on carers for drinks and/ or prompting to drink. This reliance on another person increases the risk of inadequate hydration leading to dehydration. In addition isolation producing reduced social contact reduces the opportunity for the enjoyment of social drinking. Many older people believe that increased fluid intake worsens frequency and incontinence in the long term so they may deliberately reduce their intake. In fact the opposite is true, concentrated urine from poor hydration irritates the bladder and makes incontinence worse.

Encouragement to drink

People with dementia may not be aware when they are thirsty so you will need to encourage them to drink liquids. Just placing a drink in front of them doesn't mean they will drink it. Describe the drink and where it is so if they have a sight problem they know where to find it. Offer a variety of drinks and foods with high water content. Using coloured tumblers helps to make water more appealing and makes it easier for the person with dementia to recognise that there is liquid in the glass.



HYDRATION AND DEMENTIA

Water (often referred to as the forgotten nutrient) makes up more than two thirds of human body weight, and without water, we would die within a few days. A 2% drop in our body's water supply can trigger signs of dehydration, fuzzy short-term memory and confusion, poor concentration, and difficulty focusing on small print. Water carries nutrients and oxygen to the cells through our blood and helps cool the body through perspiration.

Water gives the brain the electrical energy for all brain functions, including thought and memory processes. Research shows that neurons in the brain detect dehydration and may signal the parts of the brain that regulate mood, as a way of alerting us that the body requires more water.

Drinking water regularly throughout the day helps to ease tension, slows breathing and provides energy. The brain cannot store water so it's important that we drink water regularly throughout the day. It is best to drink water between meals as too much water with meals can dilute the digestive juices.

We cannot rely on the body to regulate the amount of water we drink by the time we feel thirsty, we are already slightly dehydrated.

Most people become dehydrated by not drinking enough fluids or losing fluids and not replacing them. Thinning skin can mean that older people are vulnerable to greater water loss.

The Basics of Hydration in older people

Dehydration is linked to malnutrition, and is an additional risk factor for older people as the thirst factor becomes less sensitive with age, even more so in people living with dementia, who are often unable to

recognise thirst and are unaware that they may need to drink more fluids.

Medication can prevent absorption of water into the body or, in the case of diuretics act to remove excess water, compounding the problem. For those with dementia, one of the symptoms of cognitive impairment is a reduction in an individuals' ability to recognise that they are thirsty; putting this group at a significantly higher risk of dehydration. Related to this is that those older people who are dependent on others for their care, whether living in a care home or independently, rely entirely on others to remember to offer and provide access to fluids on a regular basis.

Adequate fluid consumption in older adults has been found to be associated with fewer falls, lower rates of constipation and lower rates of laxative use, as well as better rehabilitative outcomes in orthopaedic patients. In understanding hydration it is important to note that food choice can affect hydration and approximately 20% of water in the average diet comes from food.

A recent study showed that adequate hydration in older people resulted in better appetites because people were more alert and able to enjoy the experience of food and drinks, which also had a positive effect on social interaction. Medications were better utilised by the body so doses could generally be lower. The study also showed that being hydrated had a positive effect on sleep as being thirsty could cause restlessness, disrupted sleep patterns and bad dreams. If someone doesn't sleep well at night, they are likely to sleep during the day, causing them to miss out on vital fluids, and so the cycle continues.

The Signs and Symptoms of Dehydration in older people

Diagnosing dehydration in an older person can be challenging and requires consideration of a number of factors including fluid intake and physical changes.

The following signs and symptoms are thought to suggest that an individual is dehydrated but in older people they may also be due to other conditions (such as UTIs) and GP advice should be sought

- Thirst, headache, dry mouth and lips and eyes.
- Tiredness, feeling dizzy or lightheaded, confusion
- Passing small amounts of dark coloured, concentrated urine
- Dry sunken eyes, fragile skin

Foods with high water content also help improve hydration, i.e.

- ice-lollies
- jelly and milk puddings
- pureed fruit
- smoothies made from fruit, vegetables and water
- cut up water rich fruit or vegetables such as melon and cucumber
- soups
- vegetables and salad with meals

Get creative with drinks:

- Provide still or sparkling water
- Include ice cubes and straws.
- Add flavouring for taste and colour (i.e slice of lemon)
- Use a variety of drinking vessels and glasses
- Make the person a drink rather than asking if they would like one
- Make sure a drink is always available for the person to help themselves to

Evidence suggests that a typical elderly person should consume at least 1500ml of fluid a day although this should be increased when the weather is particularly warm.

Encourage loved ones to have water by the bedside and to drink a glass before they get up, as this may help to prevent the dizziness that some people experience when they first get out of bed.

For references or further information please contact the dementia advice service on 01252 624808 or by email dementiaadvicehartrushmoor@andovermind.org.uk

