Fluid intake varies depending on activity levels, diet, health status and climate
Different fluids, such as caffeine and alcohol, affect the body in different ways
There is no general consensus on how much fluid people should take in daily

The amount of fluid people need is directed by their level of activity, diet, state of health and climate. Different fluids also have different effects on the body. There is no general consensus that people should consume eight cups of fluid a day but every system of the body depends on an adequate fluid intake. The easily identified signs of dehydration include: reduced elasticity of the skin, dry lips and mouth, headache, constipation and lethargy.

Some signs include: a rise in serum urea and electrolytes; dark urine (straw-coloured urine indicates adequate hydration); lower urine output; and cognitive decline.

The specific gravity of urine 1.035 or above indicates frank dehydration.

Fluid intake should be monitored in conditions that cause states of fluid retention and overload, such as end-stage renal disease or congestive cardiac failure. In healthy adults, the British Dietetic Association advises 1.5-2.5L of fluid per day; that equates to approximately 6-10 cups. The recommendation for children is 6-8 drinks per day (BDA, 2007).

Different fluids have different effects on the body; for example, alcohol and caffeine can contribute to increased diuresis. Caffeine often makes up a great deal of an adult’s daily fluid intake so a reduction in the proportion of caffeine to non-cafﬁnated drinks may reduce urinary symptoms like frequency and urgency; this appears to have a greater effect when caffeine consumption is high (Bryant et al, 2002). Evidence linking the high consumption of sugary drinks with obesity requires further evaluation as these drinks may be linked to a calorific or poorly nutritious diet.

Documenting fluid intake is integral to continence management; this should include noting the types of fluids, as well as the quantity and the timing of intake. One study showed an improvement in urinary urgency, frequency and nocturnal symptoms in people who reduced their fluid input by 25% (Hashim and Abrams, 2008). Guidelines for managing urinary incontinence in women recommend that high or low ﬂuid intakes are modiﬁed (National Institute for Health and Clinical Excellence, 2006).

A reduced ﬂuid intake may lead to constipation. NICE (2007) recommends that when assessing for constipation, health professionals encourage people with hard stools and/or clinical dehydration to aim for an intake of at least 1.5L of ﬂuid per day unless contraindicated.

There is little evidence to support increasing ﬂuid intake when common conditions are present. A Cochrane review found no evidence for or against increasing ﬂuid intake, advice often given to people with acute respiratory infections (Guppy et al, 2011). The frequently used intervention of an increase in water intake to reduce the reoccurrence of renal calculi is supported in the literature by just one study in the review.

Needing eight cups of ﬂuid a day is debatable. Self-reported intakes of six or less glasses per day in older people living at home found no signiﬁcant association with postural hypotension, falls, chronic constipation, fatigue or electrolyte imbalance (Lindeman et al, 2000).

Although popular media promotes the consumption of eight cups of ﬂuid a day, in the scientiﬁc arena there appears to be no general consensus. With the focus on obesity and undernourishment – including dehydration and alcohol abuse – as risk factors for poor health, further research may be expected into the properties of different ﬂuids and their effects on wellbeing.

Alison Harris is senior lecturer in primary healthcare, Middlesex University

References