

# HYDRATION IN THE WORKPLACE

In the UK, average contracted hours for a full-time job are 37-hours a week and 16-hours a week for a part-time job (excluding overtime)<sup>1</sup>. Given how much time we spend at work it is important that we consider our hydration needs.

Staying hydrated at work can be difficult for many of us; busy schedules make it easy to forget to drink as much water as we should and for some, the type of work or specialist work clothes makes it awkward to access water regularly.

Not only can staying hydrated help to improve our work productivity, helping us to perform better mentally and physically, it can also help to offset potential safety risks. For example, dehydration could lead to reduced concentration, which is a risk for anyone operating machinery, or driving a vehicle.

This fact sheet provides advice and tips about how to maintain healthy hydration habits in the workplace – no matter where we work or what job we do.



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## **HYDRATION AT WORK**

Certain work environments and conditions can influence water requirements. For example, air conditioning units can speed up moisture evaporation from our skin and lungs, leading to increased water losses. Also, warm work environments and strenuous jobs can drive up perspiration rates, increasing the need for water. For example, in protective clothing and very hot environments, sweat rates have been reported to reach as much as 2 litres per hour<sup>2</sup>.

Employers are required by law to ensure workers have adequate access to safe drinking water. The 1992 Workplace Health, Safety and Welfare Regulations (Regulation 22) states that employers should meet certain requirements which include:

- 1 Providing an adequate supply of clean drinking water.
- 2 Making sure that this is readily accessible at suitable places and conspicuously marked by an appropriate sign.



The regulation also specifies that a sufficient number of suitable cups or other drinking vessels should be provided, unless the drinking water is from a jet which people can easily drink from <sup>3</sup>.

In spite of this, barriers still exist which can lead to poor hydration and they are outlined in the table below:

Factors influencing hydration	Examples
Access to water	Long-distance driving, working in controlled environments e.g. building sites, hospital operating surgeries, schools.
Barriers to water consumption	Face masks and helmets e.g. construction and emergency service workers.
Heavy/strenuous work	Agriculture, armed forces, construction, landscaping.
Air conditioning	Often fitted in offices, gyms, airports, shops and hospitals. Also in cars affecting long-distance drivers.
Warm environments	Armed forces, catering staff, heated buildings, working outdoors in the summer.
Working at altitude	Aircrew, armed forces, construction.

#### Table 1: What influences hydration at work?

## **HYDRATION AND WORK PERFORMANCE**

Our brains are about 70% water and our bodies around 50–75% water, depending on age and gender <sup>4</sup>. It is not surprising, therefore, that being inadequately hydrated can affect how we feel and perform at work.

Research has shown that even a reduction in dehydration levels of as little as 2% of body weight can influence mood, lead to greater feelings of fatigue and reduced levels of alertness <sup>5</sup>.

A growing body of work has also found that hydration status can affect cognitive (brain) function. Severe (and sustained) dehydration can also reduce short-term memory and the ability to process and interpret visual information <sup>6</sup>. There is some evidence that drinking water in examination settings can have cognitive benefits. When water was taken into examination settings, adult students achieved significantly better grades than those who did not drink water<sup>7</sup>. These findings suggest that water consumption may help to support cognitive performance in real-world settings e.g. out of lab environments.

#### **GP Survey**

A survey carried out by the Natural Source Waters Association of 300 UK General Practitioners found that 1 in 5 GP consultations were down to tiredness and fatigue and 1 in 10 of those were thought to be linked to dehydration <sup>8</sup>.

## **HYDRATION AND MOOD**

When we are lacking water, this can begin to affect our mood. One study of 25 young women (mean age 23 years) showed that dehydration (-1.36% loss of body mass) led to poor mood, reduced concentration, a tendency to find tasks harder and more frequent headaches<sup>9</sup>. In 2015 a study carried out on 120 American women (mean age 20 years) found total water intakes influenced mood throughout the day. It was concluded that this should be considered when attempting to optimise day to day mood <sup>10</sup>.

Another study carried out on 26 young men (mean age 20 years) found that mild dehydration (>1% loss in body mass) increased feelings of fatigue, tension and anxiety. Vigilance and working memory were also reduced <sup>11</sup>.

Amongst a sample of 119 cyclists dehydration was found to adversely affect mood state, which included feelings of reduced vigour and increased fatigue <sup>12</sup>.

Whilst these are small studies and not all conducted specifically in the workplace they demonstrate how poor hydration could affect our mood. In turn, this has broader implications when it comes to work productivity and enjoyment of being in the workplace.



## **HOW MUCH WATER?**

The European Food Safety Authority recommends a total water intake of 2.5 litres for men and 2 litres for women per day, via food and drink <sup>13</sup>. Ideally 70–80% of this should come from drinks and 20–30% from foods <sup>13</sup>. Whilst you can meet your body's water requirements from other drinks, water is one of the healthiest ways to hydrate as it has no calories or sugar.

Foods with a high water content, for example, melon, soups, stews, fruit and vegetables, will make the greatest contribution to your daily water intake.



## **TOP TIPS TO IMPROVE HYDRATION**

- Start your day with a glass of water, or have a drink of water during the commute to work.
- 2 Include a bottle of water in your work bag to ensure that you have access to water throughout the day. Some people find it useful to use a big bottle as a gauge, or count up the number of small bottles they are drinking, to track how much water they are consuming throughout the day.
- 3 If dehydration could affect your safety, or that of others, then don't risk it. Consider ways to improve access to water for you and your colleagues to make sure you keep well hydrated.
- Urine colour is a useful indicator to monitor hydration status. This should be a pale straw colour. Dark yellow, concentrated urine or a low urine output is a sign that you need to drink more water.
- 5 If you are feeling tired, have a headache or are experiencing any other signs of dehydration, try having a glass of water, as a first step.





## CHECKLIST FOR EMPLOYERS: Creating a healthy hydration culture



Do your employees have access to clean, safe drinking water?



Do you give your employees time to drink water?

Do you remind your employees to drink water?

#### Start your day with a glass of water, or have a drink of water during the commute to work.

#### References

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This information sheet has been based on scientific evidence available. The information contained in this fact sheet is not a substitute for medical advice or treatment, and we recommend consultation with your doctor or health care professional if you have any health concerns.

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FURTHER INFORMATION Natural Source Waters Association www.naturalsourcewaters.org.uk