



# HYDRATION FOR PREGNANCY AND MOTHERHOOD

**Pregnancy is an exciting and sometimes nerve-wracking time when we face the unknown experience of motherhood and watch the profound changes our bodies undergo in preparation for the birth of a child.**

For many women, early pregnancy is a time of reappraisal of behaviour, nutrition and lifestyle to ensure that their unborn child has the best and healthiest start in life. Most pregnant women are likely to pay more attention to living healthily and eating a healthy diet than they did prior to pregnancy, but there is a chance that they may still overlook a key element in antenatal well-being; hydration.

Adequate hydration is especially important during and after pregnancy to help meet the physiological changes that occur during these important phases of the life-cycle. Water is needed to form amniotic fluid that surrounds the baby, support the increase in blood plasma volume and produce breast milk. Also, in the early stages of pregnancy vomiting can lead to fluid losses. In some cases hyperemesis gravidarum, a medical condition where pregnant women experience acute vomiting, has been found to cause dehydration symptoms and weight loss.<sup>1</sup>

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# SO, HOW MUCH?

Table 1: Water requirements for women

Key: EFSA, European Food Safety Authority

Reference	Source	Recommended intake women (ml/day)		
		Non-pregnant	Pregnant	Lactating
EFSA (2010)	Total water (foods + beverages)	2000 (2 litres)	+300 (0.3 litres)	+700 (0.7 litres)

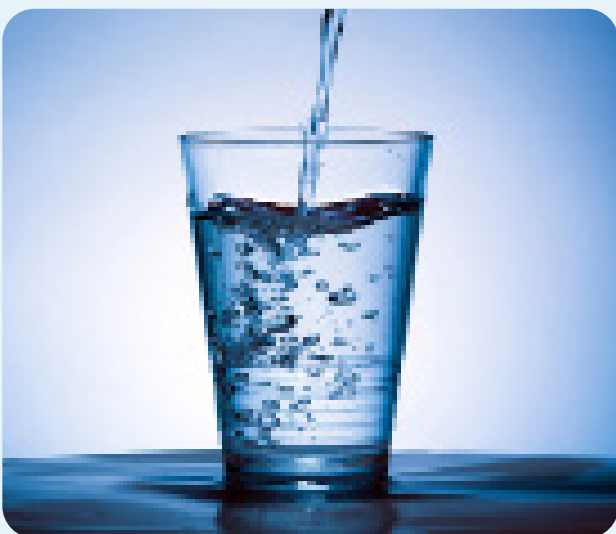


## Pregnancy

A summary of water requirements for women is shown above in **Table 1**. Pregnant women have different hydration needs to non-pregnant women. Water requirements are 0.3 litres (300ml per day) higher<sup>2</sup>, equating to about 1–2 glasses of water extra each day during pregnancy. For women having twins or multiples, whilst there are no official hydration guidelines, attention should be paid to their water intake to avoid dehydration and any difficulties associated with breastfeeding after birth.

## Breastfeeding

For women who choose to breastfeed, water requirements are 0.7 litres (700ml/day) higher than standard guidelines for women. This is the amount of water estimated to be in daily breast milk secretions, though this is likely to vary from mother to mother<sup>2</sup>. Putting this into practice this equates to about 3–4 glasses of water extra each day during breastfeeding.



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# HYDRATION HABITS BEFORE PREGNANCY

It is a good idea that women establish healthy hydration habits before pregnancy in advance of the extensive physiological changes that are about to take place. Women of childbearing age should aim to consume 2 litres (2,000ml) of fluid a day, ideally with 70–80 per cent (1.4 to 1.6 litres) of this coming from drinks and 20–30 per cent from foods<sup>3</sup> with a high moisture content such as soups, stews and melon.

Water is often regarded as the ‘forgotten-nutrient’, yet it makes up around two-thirds of our body weight<sup>4</sup> with demands increasing further during pregnancy.

Pregnancy leads to significant changes in weight gain, with the average woman gaining 12 kg at term<sup>5</sup>. One major contributor to this weight gain is body water which increases by about 6 to 8 litres in healthy pregnant women<sup>6</sup>.

Furthermore, the water content of the fetus has been estimated to be about 75 to 90<sup>7</sup> per cent while that of amniotic fluid (that surrounding the fetus) has been estimated to range between 0.5 to 1.2 litres during pregnancy<sup>8</sup>.

## HYDRATION AND HEALTH DURING AND AFTER PREGNANCY

During pregnancy it is important to have a balanced diet containing adequate amounts of fluid. More than half of pregnant women will suffer from nausea and vomiting, typically between the 4<sup>th</sup> and 16<sup>th</sup> week of pregnancy, while 1 in 200 suffer from hyperemesis gravidarum<sup>9</sup>.

Equally, drinking enough water during pregnancy may help to prevent constipation, with around 32 per cent of women being affected, especially during the first and second trimesters<sup>10</sup>. This is thought to be due to rising levels of pregnancy hormones (namely progesterone) which can relax the bowel<sup>11</sup>.

Urinary tract infections (UTIs) can also be problematic with research showing that around 3 per cent of women may be hospitalised due to UTIs in pregnancy<sup>12</sup>. Studies in the past have not been adequately designed to determine ‘how much’ fluid should be consumed but it is thought that water consumption may help with the elimination of bacteria that can lead to UTIs<sup>13</sup>.

Adequate hydration can help to replenish lost fluids and prevent some of these uncomfortable pregnancy ailments, so more fluid is needed.

After birth, breastfeeding increases water requirements (see **So, how much?** section for more details). Equally for mums who are not breastfeeding, looking after a new baby can be a busy time but it is important to drink regularly, even before feeling thirsty, to help you feel at your best.

### Gestational Diabetes

The Department of Health advises that food and drinks containing sugar can contribute to excess sugar consumption amongst adults in the UK<sup>14</sup>.

Having too much sugar in the diet can lead to weight gain which in turn increases the risk of health conditions such as type 2 diabetes<sup>15</sup>. There is a greater risk of developing gestational diabetes during pregnancy, which results in high levels of blood sugar.

Women who are overweight / obese are more likely to develop gestational diabetes<sup>16,17</sup>. High blood sugar levels increase the likelihood of having a very large baby (usually greater than 4 kg) and thus termed macrosomia. Babies who have macrosomia are more likely to develop type 2 diabetes as adults.

Women over 35 years, who are not obese, are also at greater risk of developing gestational diabetes<sup>18</sup>.

There is good evidence that it is possible to reduce the risk of macrosomia in women with gestational diabetes by controlling their blood sugar in pregnancy<sup>19</sup>.

For these reasons, it may be sensible to follow Public Health England’s advice to swap sugary drinks for water, lower fat milk or sugar-free drinks and limit fruit juice and/or smoothies to a total of 150ml a day (i.e. one small glass)<sup>20</sup>.

# THE ROLE OF BEVERAGE CHOICES



## Alcohol

The latest Chief Medical Officer's guidelines, published by the Department of Health, are that if you are pregnant or planning a pregnancy, not drinking alcohol at all is the safest approach.

The report emphasises that drinking in pregnancy can lead to long-term harm to the baby, with the more you drink being directly linked to greater risks<sup>21</sup>.

For women who have consumed small amounts of alcohol before knowing they were pregnant the risk of harm to the baby is small. That said, further drinking should be avoided. Any concerns should be discussed with a doctor or midwife<sup>21</sup>.



## Caffeine

Women should limit the amount of caffeine they consume during pregnancy. The Department of Health advises that during pregnancy women shouldn't consume more than about two

standard mugs of instant coffee or two standard mugs of tea per day<sup>22</sup>.

Equally, pregnant women should be cautious of certain herbal teas that can contain high levels of pyrrolizidine alkaloids (plant chemicals produced to stave off insects)<sup>23</sup>. Borage leaf and comfrey tea have been found to contain these. The use of energy drinks containing caffeine during pregnancy and lactation should also be avoided<sup>24</sup>.



## Milk

Milk is a good source of calcium, a mineral that helps build and maintain healthy bones which is particularly important during pregnancy. It also contains protein, vitamins and minerals,

and does not pose any risks in terms of tooth decay<sup>25</sup>.



## WHY CHOOSE WATER?

Water is an essential nutrient. It is a natural, healthy drink for pregnant and breastfeeding women. Water is calorie free and does not contain sugar or caffeine.

Drinking water can go some way towards helping regulate energy intake and as a consequence body weight, although more work is needed to study this specifically in pregnancy.



## TOP TIPS

- 1** Whilst pregnant women can meet their body's requirements from other drinks, water is one of the healthiest ways to hydrate as it has no calories, sugar or caffeine.
- 2** Women should aim to increase their total water intake by an extra 300ml/day during pregnancy over and above the 2,000ml/day (2 litres) of total water intake recommended by EFSA<sup>26</sup>.
- 3** Women breastfeeding should make sure that they are getting enough fluids, and should aim to increase their total water intake by an extra 700ml/day during breastfeeding over the 2,000ml/day (2 litres) of total water intake recommended by EFSA<sup>27</sup>. Try to remember to keep a glass of water on hand when you sit down to feed your baby, whether from breast or bottle.
- 4** Foods can also contribute to your daily water intake. Those with a high water content; for example, melon, soups, stews, fruit and vegetables, will make the greatest contribution.
- 5** Pregnant women should try to drink water little and often, as drinking large volumes of water at any one time may be uncomfortable for a mother-to-be due to bladder expansion and fetal growth.
- 6** Drinking plenty of water can help relieve the symptoms of constipation, which around 32 per cent of pregnant women are affected by, especially during the first and second trimesters<sup>28</sup>.
- 7** If you are pregnant or planning a pregnancy, the Department of Health advises drinking no alcohol at all as this can lead to long-term harm to your baby<sup>29</sup>.
- 8** Limit the amount of caffeine you drink during pregnancy. The Department of Health advises that during pregnancy women shouldn't consume more than about two standard mugs of instant coffee or two standard mugs of tea a day<sup>30</sup>. Equally be cautious of certain herbal teas that can contain high levels of pyrrolizidine alkaloids<sup>31</sup>.



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### Please note

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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