Children with very low vitamin D levels can develop rickets. This can be serious (see picture).

Because the bones don’t form normally the child can be short and the legs bowed. Sometimes the calcium level in the blood can be very low and this can lead to the child having seizures (fits).

Does my baby need extra vitamin D?

If you are, or were, vitamin D deficient during your pregnancy you will need to continue to take vitamin D supplementation for another 3-6 months after your baby is born, especially while you are breastfeeding.

If your baby requires vitamin D supplementation you will need to discuss this with your doctor or midwife. Do not stop giving the vitamin D supplement to your baby until you have discussed this with your doctor.

For further information

Talk to your local doctor, midwife, obstetrician or paediatrician.

If you are attending a hospital appointment, a free and confidential interpreter service is available. Ask staff to arrange an interpreter for you. AUSLAN interpreters are also available.
Vitamin D during pregnancy

Vitamin D is a very important vitamin for both mother and baby. You need to make sure your vitamin D levels are normal during pregnancy and while breastfeeding. Low levels of vitamin D are common in pregnant women. This leaflet explains to you how to make sure your vitamin D levels are normal.

What is vitamin D?

Vitamin D is formed mainly in the skin and then altered in the body to a more active component. It is a vitamin that is needed in every cell for the body to function properly.

Why is vitamin D important?

- Low levels of vitamin D in children and adults have been linked to the development of many illnesses.
- A normal level of vitamin D is needed to absorb calcium from food. Calcium is vital in building strong bones and teeth and is important for the nervous system. Adequate levels of vitamin D are important for the immune system to work properly.
- A newborn baby’s vitamin D level is the same as its mother. So if mother has a low vitamin D level during pregnancy her baby will be born with a low vitamin D level.
- There is very little vitamin D in breast milk. If a baby has vitamin D deficiency they will remain vitamin D deficient while being breastfed.

How does my body get vitamin D?

Ninety percent of vitamin D is made from sunlight exposure directly (not through glass) onto the skin. Only about ten percent of vitamin D comes from food (including oily fish, fortified milk and egg yolks).

How will I know if I have low vitamin D?

A blood test may be done as part of your antenatal assessment at the hospital or through your local doctor. If you have low Vitamin D you will be advised to increase your sun exposure and take a vitamin D supplement during pregnancy and while breastfeeding. The amount of extra vitamin D needed depends on how low in vitamin D you are. After treatment, a follow up blood test will be taken (after six weeks) to make sure your vitamin D level is normal.

Can taking extra Vitamin D harm my baby or me?

There is no evidence to show that taking supplements in the quantities advised will harm either you or your baby. But there is a lot of evidence to show that vitamin D deficient babies can develop serious medical conditions.

What can I do to prevent having low vitamin D levels?

Low vitamin D levels are mainly seen in women who do not get enough sun. To prevent getting low vitamin D levels you need sun exposure to bare skin and, if necessary, to take a vitamin D supplement. The table below gives an estimate of how long you need to expose your skin to sun per day to make enough vitamin D. The darker your skin, the more sun exposure you need.

<table>
<thead>
<tr>
<th>Area exposed</th>
<th>Summer</th>
<th>Spring/Autumn</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair skin</td>
<td>10 minutes</td>
<td>20 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Dark skin</td>
<td>20 minutes</td>
<td>60 minutes</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Face, arms and hands</td>
<td>Face, arms and hands</td>
<td>Face, arms and hands</td>
<td></td>
</tr>
</tbody>
</table>

What about the risk of skin cancer?

Skin cancer due to sun exposure is a concern in Australia, however following advice in the table should not put you at undue risk. Stay out of direct sunlight in the middle of the day and don’t stay in the sun long enough for your skin to become reddened. If you have had skin cancer you need to discuss sun exposure and vitamin D supplementation with your doctor.

How often do I need to take extra vitamin D?

Because you use vitamin D every day, you should take vitamin D supplementation every day while pregnant and breastfeeding if your vitamin D level is low. Vitamin D is stored in fatty tissue; this may affect the amount of vitamin D supplementation that you will need to take.

What if I wear clothing that covers most of my body for cultural/religious reasons?

This often makes it hard to get enough sun to make vitamin D. It is therefore recommended that you take extra vitamin D in the form of a supplement; this will benefit both you and your baby.

What are the main long-term effects of not having enough vitamin D?

Women who are vitamin D deficient are at risk of having softer bones that are prone to breaking. Muscles can be weak and sore in severe deficiency. Vitamin D deficiency may also be a risk factor for pregnancy related conditions including pre-eclampsia, hypertension, cardiovascular diseases and pre-term labour.