Pregnancy & Nutrition in Cystic Fibrosis

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**Introduction**
Planned pregnancies tend to result in both mum and baby doing better. Women who are well nourished also tend to have less complications during pregnancy and after your baby is born.

This leaflet aims to address important issues regarding nutrition and pregnancy in a bid to help mum and baby do as well as possible.

**Pre-pregnancy and nutrition**
If you are planning to get pregnant it’s important that you speak to your dedicated CF team. This will give your team the chance to review your treatment and give you good advice to help you and baby through your pregnancy.

Additionally, your Dietitian can carry out a thorough nutritional assessment and advise on important changes you may need to make to your diet in order to reduce risk of problems occurring.

**Does my weight matter if I’m planning to get pregnant?**
Yes. Research shows that a healthy body weight, measured by calculating your body mass index (BMI) reduces the chance of problems occurring during pregnancy for mum and baby. A healthy BMI defined as 19-25kg/m² is recommended. Your Dietitian will be able to calculate this for you.

**Do I need to take extra vitamins before I get pregnant?**
Yes. Research has shown that taking an extra 400 micrograms of folic acid (a B vitamin) every day whilst trying to get pregnant and for at least the first trimester (first 3 months of pregnancy) can protect against birth defects such as spina bifida.

It is difficult to get enough folate (the dietary form of folic acid found in green leafy vegetables, fortified breakfast cereals and brown rice) from your diet. Therefore it is important that you begin taking an appropriate pregnancy specific vitamin supplement as soon as you start trying for a baby. There are several products available ‘over the counter’, alternatively ask your CF team for more advice.
Some women require a higher dose of folic acid (5mg daily) before and during pregnancy, e.g. women with diabetes or if you take medication for epilepsy. Your CF team will advise you accordingly.

In non CF pregnancy extra vitamin D, a fat soluble vitamin, would be recommended. However you will probably already be getting enough vitamin D if you are already prescribed vitamin D supplements as part of your normal daily medication. If you are unsure you are having enough vitamin D please ask your CF team.

Do I need to eat ‘for 2’ by having more calories during pregnancy?
No. As long as you are a healthy weight and BMI and your weight is stable at conception you don’t need to eat extra calories for the first 6 months of your pregnancy.

Generally it is recommended that patients with CF eat a high fat diet as calorie requirements are generally higher for people with CF and this advice applies during pregnancy.

During the final 3 months (3rd trimester) calorie requirements do increase by 200 calories per day. Your CF Dietitian can advise on how to achieve this.

How much weight will I gain during pregnancy?
In non CF pregnancy the average weight gain is reported to be 12.5kg (2st). However in CF pregnancy weight gain tends to be less. Although better outcomes occur if weight gain is around 10kg (1st 8lb) it is not uncommon for weight gain to be less than this, especially if your health suffers during pregnancy e.g. such as a chest infection.

It is important that your CF team closely monitor your progress during your pregnancy, therefore you may be asked to attend more frequent appointments.

If you are struggling to eat enough to achieve weight gain then your CF Dietitian can advise on how to fortify your diet. Sometimes nutritional support in the form of high calorie oral nutritional supplements are beneficial. Again your CF Dietitian can advise.
Are there any foods I need to avoid or limit during my pregnancy?
Yes. Some foods can pose a risk to your unborn baby therefore it is important to either limit or completely avoid them. Please refer to table 1;

Table 1: Foods to avoid or limit during pregnancy

<table>
<thead>
<tr>
<th>Risk</th>
<th>Avoid</th>
<th>Limit</th>
<th>Take care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmonella</td>
<td>Raw and partially cooked eggs and dishes containing these e.g. homemade mayonnaise, mousses, and ice-cream. Soft whipped ice-cream from a machine. Raw shellfish.</td>
<td></td>
<td>Always wash hands after handling raw meats and poultry and store foods separately from cooked foods.</td>
</tr>
<tr>
<td>Listeria</td>
<td>Soft ripened cheeses including Brie, Camembert and some goat cheeses. Soft blue veined cheeses e.g. Danish Blue. All unpasteurised dairy products. All types of pate including vegetable.</td>
<td></td>
<td>Ensure takeaway and cooked-chill ready meals are heated thoroughly and piping hot. Chilled foods should be stored at the correct temperature (below 5°C). Foods should not be eaten after their ‘use by’ date.</td>
</tr>
<tr>
<td>Contaminants e.g. Mercury, dioxins.</td>
<td>Shark, marlin, swordfish.</td>
<td>Limit fresh tuna steaks to two a week. Limit canned tuna to four medium cans per week. Eat oily fish e.g. salmon, mackerel, sardines, no more than twice per week.</td>
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What about my fat soluble vitamin medication?
High amounts of vitamin A can be damaging to your unborn baby. However people with CF tend to have low levels of vitamin A and therefore are usually prescribed a fat soluble vitamin supplement which contains vitamin A. It is important to keep taking your medication unless your CF doctor advises otherwise. Rest assured your CF team will check your vitamin A levels as soon as they are made aware of your pregnancy and will advise you accordingly.

Can I drink alcohol or caffeine drinks in pregnancy?
It is unknown how much alcohol is safe during pregnancy, however research has shown that too much can be harmful to your unborn baby. It is best to avoid alcohol altogether whilst you are pregnant.

Caffeine is found in many foods and drinks particularly tea, coffee, cola (especially diet cola drinks), high energy drinks and chocolate. High caffeine consumption can increase the risk of miscarriage or low birth weight.

Current advice recommends limiting your caffeine intake to 200mg per day. This equates to about 2 mugs of coffee or three cups of tea per day. Alternatively try de-caffeinated tea and coffee during your pregnancy.

Other common problems such as constipation and reflux during pregnancy
Constipation is commonly reported during pregnancy. It is very important that you drink plenty of fluid and always take your enzymes when required. Some laxatives are safe to use during pregnancy, however please ask your CF doctor for advice.

Gastro-oesophageal reflux is also frequently reported as a problem during pregnancy. Eating small frequent meals throughout the day can help reduce these symptoms. Additionally your CF doctor may prescribe medication to help manage the symptoms.

Can I breastfeed my baby?
Yes. There are many benefits to breast feeding for mum and baby. However if you do plan to breastfeed then it is best to let your CF team know as soon as possible.
Breastfeeding can take time therefore you may need to consider if you can fit this into your daily treatment schedule e.g. physiotherapy and antibiotic treatment. A supportive partner and family will be of great help.

Additionally breastfeeding increases your nutritional calorie requirements by 600 calories per day. Please speak your CF Dietitian for further advice on how to increase your daily calories.

Some medication (including some antibiotics) are not recommended during breastfeeding as the drugs can pass to your baby via your breast milk. Therefore in some cases your CF doctor will advise not to breastfeed.