Parents/Carers Information Leaflet
Cow's Milk Allergy in Infants

What to expect if your child has a confirmed diagnosis of delayed cow's milk allergy (non IgE allergy)

- Your healthcare professional involved in confirming your child's diagnosis will help and support you and your child using the Northern Ireland 'HSCB Infant Feeding Guidelines' available at the following link: http://niformulary.hscni.net/Formulary/Adult/PDF/PrimaryCareInfant_Feeding_GuidelinesWeb.pdf
- It is important that you also have the support of a paediatric dietitian, following your child's diagnosis. It is essential that you attend these appointments to enable your child to follow the agreed dietary plan.
- Most children with mild to moderate delayed onset (non IgE) cow's milk allergy will usually begin to outgrow it, after they have been on a cow's milk protein free diet for at least 6 months or by 9-12 months of age. You can then gradually reintroduce cow's milk protein back into your child's diet, using a 'milk ladder', which will be given to you by your GP, paediatric dietitian or paediatrician.
- Some children with more severe delayed cow's milk allergy, will require the support of a children's allergy specialist team. It is that team who will advise when and where to reintroduce dairy products to your child.

Frequently asked questions
My child's symptoms have improved during the 2-4 week trial of removing cow's milk protein from their diet. Do I still have to reintroduce cow's milk protein back into their diet?
- Yes, many children have unsettled periods during their first few months, and it can be difficult to know the exact cause. It is therefore essential that this reintroduction of cow's milk protein back into the diet occurs, so that the diagnosis is truly confirmed.
- Children with a confirmed cow's milk allergy need careful management of their diet throughout some or most of their 1st year, and sometimes even beyond. Therefore, to avoid any unnecessary dietary restrictions for your child, it is essential that the diagnosis is confirmed by reintroducing cow's milk protein again at this early stage.

My child has shown more immediate symptoms to cow's milk e.g. reddening of the skin, hives, and puffiness around the mouth or eyes, within minutes of ingestion or has had more serious immediate symptoms e.g. breathing difficulties (this is called anaphylaxis). Should I reintroduce cow's milk protein back into their diet at home?
- No, this is a different form of cow's milk allergy, known as immediate onset cow's milk allergy (or IgE mediated cow's milk allergy). Such children should be referred promptly to a children's allergy specialist team in the hospital and that team will decide when and where to reintroduce cow's milk protein to the child.

What about lactose intolerance, is it the same as cow's milk allergy?
- No. Lactose intolerance is a condition where there is difficulty digesting lactose, a sugar present in milk and many other foods. It is very rare for a baby to have lactose intolerance. Symptoms of lactose intolerance include bloating, abdominal cramps and loose bowel motions. Rashes and vomiting are rare.

Home Challenge for Breast Fed Child
- You, the mother, should gradually reintroduce cow's milk and cow's milk containing foods into your diet over one week.
- If your child's symptoms return, STOP the challenge and return to a full exclusion diet and contact your "healthcare professional (you, the mother will need to continue your calcium and vitamin D supplement).
- If no symptoms return, you may continue to consume cow's milk and cow's milk containing products.
- During weaning, cow's milk can be introduced into your child's diet.

Prepared by HSCB Medicines Management Team in conjunction with NI Trust staff April 2016
What are the symptoms of Cow’s Milk Allergy?

Delayed or Non-IgE mediated Allergy
There are different forms of cow’s milk allergy. The most common form of cow’s milk allergy has a delayed onset and occurs within a few hours to a few days after having food containing cow’s milk protein. There are no skin or blood tests for delayed onset cow’s milk allergy (medical term is Non-IgE mediated allergy). The only reliable test is to take all the cow’s milk protein out of your child’s diet, or if you are breastfeeding, out of your diet and then to later reintroduce (re-challenge) in a planned way, to make the diagnosis. Typical symptoms usually include several of the following:

- Vomiting, loose or frequent stools, refusing or difficulty feeding, redness around the bottom, constipation (especially straining to pass even a soft stool), apparent pain in the tummy, a little blood or mucus in the stools, reflux.
- Itching of the skin, redness of the skin, eczema (dry inflamed itchy patches of skin).
- Sometimes airway/nasal symptoms, but usually not in isolation and often several of the above symptoms are also present.

Acute or IgE mediated Allergy
Other reactions are immediate in onset, with symptoms developing immediately after drinking or eating foods containing cow’s milk protein. These include itchy skin rashes, hives, swelling of the lips/eyes. On rare occasions these symptoms can be severe (anaphylaxis) with breathing problems and pallor developing. Infants with an acute allergic reaction (medical term IgE mediated allergy) to cow’s milk should be referred to a paediatric allergy service for further assessment.

How to confirm the diagnosis of Delayed Cow’s Milk Allergy
The diagnosis of a delayed cow’s milk allergy is a 2 stage process.

**BOTH STAGES SHOULD BE COMPLETED**

**STAGE 1**
The first stage involves removal of cow’s milk protein from your child’s diet, usually for a period of 2 to 4 weeks.

- If you are exclusively breast feeding, you will be advised to remove all cow’s milk and dairy products from your own diet for a period of 2 to 4 weeks. You (the mother) will need a calcium and vitamin D supplement (please ask your *healthcare professional for advice).
- If your child is formula fed or mixed feeding (bottle and breast) they will be prescribed a specialised hypoallergenic formula for a period of 2 to 4 weeks.
- During the trial of specialised hypoallergenic formula your child’s symptoms may improve or there may be no change, which may rule out the presence of allergy. However this should be discussed with your *healthcare professional.

**STAGE 2**

**Confirming the diagnosis**
After the 2-4 week trial, in order to confirm the diagnosis of cow’s milk allergy, **it is essential** that you reintroduce cow’s milk protein back into your child’s diet. This is still necessary even if you have seen an improvement in your child’s symptoms during the trial.

**The Home Milk Challenge**

- If you are exclusively breast feeding, you can simply start eating dairy products again. Further information is included overleaf.
- If your child is bottle fed, formula containing cow’s milk protein should be reintroduced in a gradual way over a period of 1 week (See Table 1).
- **This will allow your *healthcare professional to assess if any improvement seen in symptoms during the trial was directly related to removing the cow’s milk protein or just a natural improvement.**

How to do the home milk challenge

- Do not challenge if your child is unwell.
- Do not challenge if your child is receiving medication that may affect the gut e.g. antibiotics/antihistamines.
- Do not introduce any other new foods during the milk challenge.
- It may be useful to keep a record of your child’s oral intake, stool pattern and any symptoms during the challenge.
- Do not challenge if your child has an acute or IgE mediated allergy (see first page of this leaflet).

**Home Challenge for Formula Fed Infant**
Gradually reintroduce cow’s milk formula into your child’s diet over 1 week using the following steps:

**Day 1:** Into ONE morning bottle only, put 180mls (6oz) of previously boiled water, add 1 scoop of cow’s milk based formula and 5 scoops of specialised hypoallergenic formula.

**Days 2-7:** Continue to increase the cow’s milk formula and reduce the specialised hypoallergenic formula using Table 1.

<table>
<thead>
<tr>
<th>Day</th>
<th>Specialised Hypoallergenic Formula Number of Scoops</th>
<th>Cow’s Milk Formula Number of Scoops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Day 3</td>
<td>4</td>
<td>2</td>
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<td>Day 4</td>
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<td>Day 5</td>
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<td>5</td>
</tr>
<tr>
<td>Day 7</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Make up each bottle on the day in exactly the same way. Do not interchange scoops. If your child’s symptoms return, STOP the challenge and return to the specialised hypoallergenic formula only and contact your *healthcare professional. Do not continue to use a mixture of specialised hypoallergenic formula and cow’s milk formula. If no symptoms return, you may continue to use cow’s milk based formula and milk containing products.