# Appendix 1 – Presentation of Suspected Cow's Milk Allergy

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UK Adaptation of iMAP Guideline for Primary Care and 'First Contact' Clinicians

#### Presentation of Suspected Cow's Milk Allergy (CMA) in the 1st Year of Life

Clinicians Having taken an Allergy-focused Clinical History and Physically Examined

Less than 2% of UK infants have CMA. There is a risk of overdiagnosis of CMA if mild, transient or isolated symptoms are over-interpreted or if milk exclusion diets are not followed up by diagnostic milk reintroduction. Such situations must be avoided. There should be increased suspicion of CMA in infants with multiple, persistent, severe or treatment-resistant symptoms. IMAP primarily guides on early recognition of CMA, emphasizing the need for confirmation of the diagnosis, either by allergy testing (igE) or exclusion then reintroduction of dietary cow's mile (non IgE). Breast milk is the ideal nutrition for infants with CMA and any decision to initiate a diagnostic elimination diet trial must include measures to ensure that breastfeeding is actively supported. Refer to accompanying leaflet for details of supporting ongoing breastfeeding in milk allergic infant. Firststepsnutrition.org is a useful information source on formula composition.

Mild to Moderate Non-IgE-mediated CMA         Mostly 2-72 hrs. after ingestion of Cow's Milk Protein (CMP)         Usually formula fed, at onset of formula feeding. Rarely in exclusively breast fed infants         Usually several of these symptoms will be present, Symptoms persisting despite first line measures are more likely to be allergy related e.g. to atopic dermatitis or reflux. Visit gpifn.org.uk for advice about other infant feeding issues.         Castrointestinal         Persistent irritability "Colic"         Yomiting "Reflue" - GORD         Foor reflux of these abormally loose +/- more frequent Constipation - especially soft stools, with excess straining Addominal discomfort, painful flatus         Boarthoes-like stools - abnormally loose +/- more frequent Constipation - especially soft stools, with excess straining Addominal discomfort, painful flatus         Boarthoes-like stools - abnormally loose +/- more frequent Constipation - especially soft stools, with excess straining Addominal discomfort, painful flatus         Boarte persistent atopic dermatitis         Moster represent respecially soft stools, with excess straining Addominal discomfort, painful flatus         Boarte persistent atopic dermatitis         Nonspecific rashes Moderate persistent atopic dermatitis         Nonspecific rashes Moderate persistent atopic dermatitis         Ver         Cow's Milk Protein form her own exclusion strongly suggests CMA, especially in exclusively breast feeding mother*         Norsy Milk Protein form her own exclusively breast feeding mot	Severe Non-IgE-mediated CMA Mostly 2-72 hrs, after ingestion of Cow's Milk Protein (CMP) Usually formula fed, at onset of mixed feeding. Barely in exclusively breast fed infants One but usually more of these severe, persisting treatment resistant symptoms: Gastrointestinal Diarrhoea, vomiting, abdominal pain, food refusal or food aversion, significant blood and/or mucus in stools, irregular or uncomfortable stools +/- Faltering growth Skin	<ul> <li>Mild to Moderate IgE-mediated CMA</li> <li>Mostly within minutes (may be up to 2 hours) after ingestion. of Cow's Milk Protein (CMP)</li> <li>Mostly occurs in formula fed or at onset of mixed feeding</li> <li>One or more of these symptoms:</li> <li>Skin – one or more usually present</li> <li>Acute pruntus, erythema, urticaria, angloedema Acute 'flaring' of persisting atopic dermatitis</li> <li>Gastrointestinal</li> <li>Vomiting, diarrhoea, abdominal pain/colic</li> <li>Respiratory – rarely in isolation of other symptoms Acute rhinitis and/or conjunctivitis</li> </ul>
	Severe atopic dermatitis +/- Faltering Growth  V  Cow's Milk Free Diet Exclusively breast feeding mother*  If symptomatic, trial exclusion of all Cow's Milk Protein from her own diet and to take daily Caldum & Vit D  Formula fed or 'Milxed Feeding'*  If mother unable to revert to fully breastfeeding, trial of replacement of Cow's Milk formula with Amino Aod Formula (AAF). flinfant asymptomatic on breast feeding alone, do not exclude ow's milk from maternal Gitt. Ensure: Urgent referral to local paediatric allergy service	receive cow's mile from maternal diff.     Formula fed or 'Mixed Feeding'*     If mother unable to revert to fully breast feeding     1st Choice-Trial of Extensively Hydrolysed Formula – eHF     Infant soy formula may be used over 6 months of age if         not sensitised on igE testing     If diagnosis confirmed (by igE testing or a Supervised     Challenge in a minority of cases) :     Follow-up with serial igE testing and later Planned     Challenge to test for acquired tolerance     Dietetic referral required

IMAP was developed without any funding or support from industry but note that authors do make declarations of interest.

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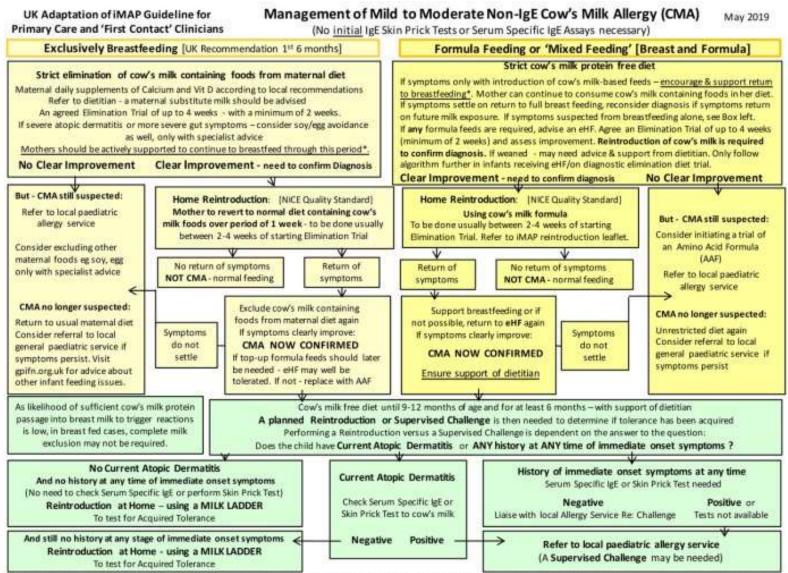
Appendices



Apr 2019

# Appendix 2 – Management of Mild to Moderate Cow's Milk Allergy

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\*Breast milk is the ideal nutrition for infants & hence continued breastfeeding should be actively encouraged as far as is possible. WHO recommends breastfeeding until 2 years and beyond. Mothers should be offered support of local NHS breastfeeding support services & signposted to further support. Please refer to IMAP patient information leaflet on supporting breast feeding.

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# Appendix 3 - Additional Resources

### National Infant Feeding Support Organisations

**National Breastfeeding Helpline** Funded by Public Health England and the Scottish Government, the National Breastfeeding Helpline offers independent, non-judgmental support from trained volunteers. The Helpline operates from 9:30am to 9:30pm every day of the year and the number is available in the Child Health Record (the 'Red Book').

<u>Association of Breastfeeding Mothers (ABM)</u> A charity which trains breastfeeding peer supporters, breastfeeding counsellors and health professionals and provides a range of information on breastfeeding issues. Support options are listed <u>here</u>.

**The Breastfeeding Network (BfN)** A charity which trains peer supporters and breastfeeding supporters who work in locations nationwide. It also provides breastfeeding factsheets and runs the Drugs in Breastmilk Information Service (see above). Support options are listed <u>here</u>.

<u>The NCT</u> A charity which trains peer supporters and breastfeeding counsellors, runs antenatal and postnatal classes and provides information on a range of maternity and parenting issues, including infant feeding. Support options are listed <u>here</u> and include the Baby Café network.

Lactation Consultants of Great Britain (LCGB) The professional organisation for International Board Certified Lactation Consultants (IBCLCs). IBCLCs use their specialist skills within the NHS including in service lead roles, infant feeding clinical education, and many deliver specialist services supporting mothers and babies with complex feeding situations. There are also IBCLCs working in private practice. The LCGB site includes a <u>directory</u> of IBCLCS working across the UK in the NHS and in private practice, and a link to the <u>International Board of Lactation Consultant Examiners</u> (IBLCE) Registry where professional certification can be verified.

<u>Unicef UK Baby Friendly Initiative</u> The UK branch of the accreditation programme of Unicef/World Health Organisation, designed to support breastfeeding and parent infant relationships by working with public services to improve standards of care. The website provides resources include clinical tools, patient information leaflets and demonstration videos.

La Leche League GB (LLLGB) A charity providing breastfeeding support via telephone, online, and through a network of local support groups.

# Tongue-Tie Support

<u>Association of Tongue-Tie Practitioners</u> Includes a <u>directory</u> of practitioners who can assess for and divide tongue-tie. Use the drop-down menu on the map to locate NHS or private practitioners by region.

### Infant Milks and Bottle Feeding Information

First Steps Nutrition Trust: Infant Milks in the UK- A Simple Guide (scroll down to the blue report).

First Steps Nutrition Trust: How Much Milk is Needed and How to Make it up Safely

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First Steps Nutrition Trust: A simple guide to infant formula, follow on formula and other infant milks See page 17 for a table detailing volumes required by age for formula feeding.

NHS Website: How to Make up Baby Formula Step by step instructions

Food Standards Agency & Department of Health: Guidance for health professionals on safe preparation, storage and handling of powdered infant formula

UK Drugs in Lactation Advisory Service

### Early Nutrition Information

<u>GP Infant Feeding Network</u> A national network of Primary Care professionals and supportive colleagues advocating for improvements in infant feeding practice

<u>NHS Start4Life</u> The official NHS information service on healthy nutrition for pregnant women, new mothers and babies. Start4Life is informed by the latest research by the WHO and is aligned with NICE guidelines and Unicef's Baby Friendly Initiative.

**First Steps Nutrition Trust** Impartial evidence-based information on infant nutrition, including information about infant milks for healthcare providers and parents.

**Local Infant Feeding Information Board (LIFIB)** Multidisciplinary group of healthcare professionals based in the northwest of England which critically appraises information and research on infant feeding issues (eg colic, reflux and CMA), producing summaries for healthcare professionals.

### Cow's milk allergy

British Dietetic Association factsheets for infants with Cow's Milk Allergy and breast-feeding mothers to maintain calcium intake in a non-dairy diet. https://www.bda.uk.com/resource/children-with-cows-milk-allergy.html https://www.bda.uk.com/resource/calcium.html

<u>Allergy UK</u> provides information on management of allergy for parents and healthcare professionals. https://www.allergyuk.org/

<u>CMPA support</u>: support for cow's milk protein allergy including recipes and parent support. <u>https://cowsmilkproteinallergysupport.webs.com/</u>

Self-help support group <u>Cry-sis</u> for families with excessively crying or sleepless children, which has a website <u>www.cry-sis.org.uk</u> and run a national telephone helpline (0845 122 8669)

# Medicines information

https://www.medicinesforchildren.org.uk/medicines/omeprazole-for-gastro-oesophageal-refluxdisease-gord/

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