Worcestershire Acute Hospitals NHS Trust

Supervised Feed Guideline for Children

Key Document code:	WAHT-TP-053	
Key Documents Owner:	Dr Tom Dawson	Consultant Paediatrician and Paediatric Allergy Lead, Paediatrics
Approved by:	Paediatric Quality Improvement meeting/ MSC	
Date of Approval:	9th February 2024	
Date of review: This is the most current document and should be used until a revised version is in place	9th February 2027	

Key Amendments

Date	Amendment	Approved by
March 2021	New document	Paediatric QIM/MSC
9th Feb 24	Document reviewed with no changes	Paediatric guideline review day

Introduction

A supervised feed is a much shorter and quicker introduction to a food whilst still under the observations of the Allergy Team in a hospital environment. A dose of food is given to the patient over a 30 minute period followed by one hour observation. A supervised feed is for children who are not expected to react and have negative skin prick tests (SPT) or blood tests. Food component and specific IgE testing should also be performed where possible and also be interpreted as negative.

This guideline is for use by the following staff groups :

This guideline is only for use by the Allergy Team at Worcester Acute Hospitals and should be read in conjunction with the Oral Food Challenge Guideline reference number: WHAT-TP-053 http://www.treatmentpathways.worcsacute.nhs.uk/paediatrics-information-portal/

Patient Population

The following inclusion and exclusion criteria will be used to determine the patient population suitable for supervised feeds:

Inclusion Criteria

- Never reacted to challenged allergen or unconvincing reaction history or inconsistent reaction history (i.e. previously tolerated)
- Negative SpIgE <0.35kUA/L and negative component tests <0.35kUA/L if undertaken
  And/or
- A negative SPT - This is allergen dependant and must be discussed with Dr Dawson or Dr Watson (Allergy Consultants)

Exclusion Criteria

- Anaphylaxis to any food/drug/venom
- Previous, convincing reaction to food(s) proposed
- Children under age 5 who are on >200micrograms/day of beclomethasone or equivalent
- Children over age 5 who are on >400micrograms/day of beclomethasone or equivalent
- Children who are unlikely or unable to eat the necessary quantity of food.

Safety

Type 1 allergic reactions are unpredictable and still possible. This guideline should be read in conjunction with the oral food challenge guideline which outlines the identification of allergic reactions and management of reactions page 11, http://www.treatmentpathways.worcsacute.nhs.uk/paediatrics-information-portal/ .

Each supervised feed should still be conducted in a bed space within the Children's Clinic at Worcester Royal Hospital with the emergency treatment prescribed on a drug chart and emergency equipment available. IM adrenaline or Adrenaline Auto Injector device (AAI) and cetirizine should be prescribed according to **Table 1** and should be readily available (page 8 of oral food challenge guideline).

The supervised feed procedure may only be performed by qualified nursing or medical staff. These individuals should work regularly alongside a Paediatric Consultant who is actively involved in allergy management. A paediatrician or specialty paediatric registrar needs to be informed that a supervised feed is in progress, should medical review be required.

Latex free gloves and an apron should be worn by the nurse who is giving the food to the child to prevent cross contamination, and maintain high standards of infection control.

Table 1 – Emergency Medication

Cetirizine[1]	<2 year old	250microgramgs/kg orally
	2-6 years old	2.5 - 5mg orally
	6 -11 years old	5mg- 10mg orally
	12 + years	10mg -20mg orally
Adrenaline[1] 1mg/ml [1:1000] IM	<6 months	100 – 150micrograms (0.1-0.15ml) IM
	6 months – 6 years	150micrograms(0.15ml) IM
	6-12 years	300micrograms (0.3ml) IM
	Adult and child > 12 years	500micrograms (0.5ml) IM
Salbutamol[2]	<5 years	2.5mg Nebulised
	5 -11 years	2.5mg - 5mg Nebulised
	12-17years	5mg Nebulised

* IM - intramuscular

1 Resuscitation Council UK (2021)
2 British National Formulary for Children (2021)

Supervised feed process

Assessment:

Each child will be assessed on admission to Children's clinic to ensure that they are physically well enough to have a supervised feed. The admitting nurse also needs to ensure that the child has not reacted to the allergen since listing for a supervised feed. The physical assessment will include standard observations. It will also include chest auscultation and Peak Expiratory Flow if over 7 years old and asthmatic, and an assessment of their skin.

Any child who is using their salbutamol (reliever) inhaler more frequently than normal in the two weeks prior to the supervised feed should discuss this with the overseeing medical practitioner. Steroid preventer inhalers and steroid nasal sprays should not be stopped prior to a challenge.

Antihistamines (short and long acting antihistamines) should be stopped 5 days prior to a supervised feed. If antihistamines have been taken within this time frame then the supervised feed will be rescheduled.

Their admission assessment will be documented on an inpatient history sheet.

Consent:

Written parent or parental responsibility consent needs to be obtained prior to the start of the supervised feed. Each family will have received written information (WHAT-PI-0960) on the supervised feed process and the risks and benefits of having one. The information leaflet should have been given either at their clinic appointment or with their appointment letter.

Checklist:

The admission checklist will be completed prior to commencing the supervised feed. See Appendix 1.

Dosing of foods:

Families are responsible for providing the required amount of food for the challenge. The amount required for each supervised feed will be decided by the Allergy Team. The most common foods required for a supervised feed are found in Table 2. In general, the portion will either be the top dose of an oral food challenge to that food, or an appropriate portion size decided between the allergy team and parents. The portion may be adjusted according to the child's age and ability to consume. Instructions on what to bring in will be sent parents with their appointment letter.

The nurse conducting the supervised feed will divide the food into 3 incremental portions and give them at 10 minute intervals over 30 minutes. The child must remain at their bed space for the remaining 1 hour after the final dose has been consumed. The Supervised Feed observation chart (Appendix 3) will be completed.

Table 2 Supervised feed doses examples

Food	Total Dose (divided up in 3 portions)
Cow's Milk	200mls or 80mls +16g skimmed milk powder
Soya Milk	250ml
Egg	1 large egg made into omelette, hard boiled or well scrambled
Cake (baked egg)	1 home baked fairy cake – Allergy team to provide recipe
Peanut	18g (either whole nuts, ground or jar of 100% smooth peanut butter)
Single tree nut	Between 20-30g depending on nut (either whole nuts, ground or jar of 100% smooth nut butter)
Puffed peanut snack	20-50g (approximately 1-2 pack depending on age)
Fruits	100g

Families are welcome to bring in additional food, separately, to eat with the tested food but they can only be mixed together once the portions have been weighed out.

Recognising and Managing Reactions

The PRACTALL guidelines for stopping an oral food challenge should be used if there is a sign of an allergic reaction (Sampson *et al* 2012), along with clinical judgement. If a reaction is suspected, the supervised feed will be stopped immediately and child reviewed with a full set of observations, chest auscultation and skin assessment. The child should be treated accordingly. See Food Challenge Guideline page 10 -11 and Appendix C.
http://www.treatmentpathways.worcsacute.nhs.uk/paediatrics-information-portal/

If the child receives cetirizine for mild/moderate reactions then they will need to be observed for minimum 2 hours following administration, and until symptoms have resolved.

If adrenaline has been administered for severe reactions then the child must be observed for 4-6 hours and where possible transferred to Riverbank ward for observation and discharge. If adrenaline has been given the child must be immediately reviewed by a paediatrician. Administration of IM adrenaline must not be delayed if anaphylaxis suspected.

Discharge

Children will only be discharged if the supervising nurse is satisfied that there are no signs of allergic reactions. Observations and chest auscultation must be documented 1 hour following consumption of the required volume of food.

If the supervised feed is negative (i.e. no sign of any allergic symptoms) then the child should reintroduce the food into their diet on a regular basis.

If the child is unable to consume the food in the required 30 minutes period then the family should be advised how to proceed regarding the food. Further opportunities for further supervised feeds will be discussed at a follow up appointment either by telephone or face to face. These supervised feeds will be outcomed as 'inconclusive'.

If the supervised feed is positive (i.e. reacted) then an allergy action plan must be completed and parents counselled in the avoidance, identification and management identification of allergic reactions.

All parents need to be aware of delayed reactions and how to manage them. In rare cases some children may react 4-7 hours after ingestion. All parents will be discharged with either the positive or negative discharge information leaflet which outlines management of delayed reactions. Found here: http://www.treatmentpathways.worcsacute.nhs.uk/paediatrics-information-portal/

All patients having completed a supervised feed will have 24 hour open access to Riverbank ward.

With all patients admitted to a bed in Children's clinic, a GP letter must always be completed. See Appendix 2 for the Discharge Checklist.

Contact details

- Children's Clinic, Worcestershire Royal Hospital, 01905 733957
- Phoebe Moulsdale, Children's and Young People Allergy Nurse Specialist, 01905 760733

References:

British National Formulary for Children (2021) Salbutamol. Pharmaceutical Press. Hampshire. https://bnfc.nice.org.uk/drug/salbutamol.html accessed 29th November 2021

Resuscitation Council UK (2021) Emergency treatment of anaphylaxis. Guideline for healthcare professionals. Resuscitation Council UK. London

Sampson, H, A., Gerth van Wijk, R., Bindslev-Jensen, C. et al (2012) Standardizing double-blind, placebo-controlled oral food challenges: American Academy of Allergy, Asthma and

Immunology-European Academy of Allergy and Clinical Immunology PRACTALL consensus report. *Journal of Allergy and Clinical Immunology Practice*. Vol 130. number 6

Appendix 1 -SUPERVISED FEED ADMISSION CHECKLIST

ID label:

Or

Child's Name:.....DOB:.....NHS Number.:.....

Hospital Number:……

Checklist prior to starting supervised feed on the day

1. Child has not accidentally been exposed to the food since listing & booking appointment No ❑ Yes ❑

If yes and reacted – reassessment of allergy and consider hospital based Oral Food Challenge in 12 months. DO NOT PROCEED WITH SUPERVISED FEED
If yes and not reacted – reassessment and discuss with member of the allergy team.

2. Ensure that recent SPT/Specific IgE results have been checked and are negative before a challenge. No ❑ Yes ❑

Only tick (✓) the box if the answer is Yes

3. The test food is available and ready with appropriate amount ❑
4. No oral antihistamine has been taken by the patient in the past 5 days and no use of salbutamol inhaler above normal plan in last 2 days ❑
5. There is written documentation for the requirement of a supervised feed ❑
6. The emergency medication box is available and in date. ❑
7. Correct emergency medication doses for patient prescribed on drug chart ❑
8. The patient has been assessed by the Nurse/Doctor and is physically fit for the supervised feed ❑
9. Written parental/guardian consent or young person consent has been obtained. ❑
10. Baseline observations recorded and documented including chest auscultation ❑
11. Bedside emergency equipment checked and name band on ❑

Comments:

Signed: _____

Print Name: _____

Designation: _____ **Date:** _____

Appendix 2- SUPERVISED FEED DISCHARGE CHECKLIST

ID label:

Or

Child's Name:.....DOB:.....NHS Number.:.....

Hospital Number:……

This document to be used in conjunction with the supervised feed guideline

Only tick (✓) the box if the answer is Yes

1. 1 hour post supervised feed observations (including chest auscultation) have been recorded and within normal ranges or no deviation from baseline prior to discharge ❑
2. The patient must only be discharged if they are symptom free or all adverse reactions have resolved ❑
3. Ensure that results are reported to the patient's consultant ❑
4. Ensure a management plan for other food allergies has been agreed and updated. N/A ❑ ❑
5. A GP letter is completed and sent electronically or sent by post ❑
6. Parent are aware of delayed reactions and how to manage them ❑
7. Parents are aware how to introduce the food into the child's diet if the result of the supervised feed is **negative** N/A ❑ ❑
8. Parents are aware how to avoid the food and other lifestyle implications if the supervised feed is **positive** N/A ❑ ❑
9. The written information 'discharge advice following a negative/positive oral food challenge or supervised feed' has been given to parents ❑
10. If the child or young person carries an Adrenaline Auto Injector for other food allergies then training must be given. N/A ❑ ❑
11. Parents are aware of follow up plans in allergy clinic or discharge from service ❑

Comments:

Signed: _____

Print Name: _____

Designation: _____ **Date:** _____

Appendix 3- Supervised Feed Observation Chart

ID LABEL	Date:		Weight:	Skin Prick Test results prior to supervised feed:	
	Adrenaline Dose			SpIgE Blood result:	Others:
	Cetirizine Dose				
Total _____ to be given_____	Time	**Use PRACTALL scoring system. Record observations on PEWS chart Details of Reactions/Comments/Action taken**			Signature
Dose 1- Dose 2- Dose 3 -					
Food consumed	Yes/ No				
Observations 1 hour following consumption					

Result of challenge: Negative/Positive		Stop time		Treatment	
Discharge Advice					
Follow up details:					
Sign, Print and Date					

Monitoring

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	These are the 'key' parts of the process that we are relying on to manage risk. We may not be able to monitor every part of the process, but we MUST monitor the key elements, otherwise we won't know whether we are keeping patients, visitors and/or staff safe.	What are we going to do to make sure the key parts of the process we have identified are being followed? (Some techniques to consider are; audits, spot-checks, analysis of incident trends, monitoring of attendance at training.)	Be realistic. Set achievable frequencies. Use terms such as '10 times a year' instead of 'monthly'.	Who is responsible for the check? Is it listed in the 'duties' section of the Policy? Is it in the job description?	Who will receive the monitoring results? Where this is a committee the committee's specific responsibility for monitoring the process must be described within its terms of reference.	Use terms such as '10 times a year' instead of 'monthly'.
pages1-5	Review of every outcome of every supervised feed. Basic statistics of patients (eg age, food consumed, outcome) Where outcomes are 'positive', review of treatment, symptoms and clinical history	Review of every outcome. Estimate 5-10 patients will have a supervised feed each year	At the end of every year, December.	Allergy specialist nurse and consultant paediatricians	Discussed in multidisciplinary team meeting	Reporting will be in the first allergy MDT of the year

Contribution List

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;

NHS Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	✓	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	**Dr Tom Dawson**

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Phoebe Moulsdale	**CYP Allergy CNS**	**Phoebe.Moulsdale1@nhs.net**
	Tom Dawson	**Consultant Paediatrician**	**Tom.Dawson@nhs.net**
Date assessment completed	**19/08/2021**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title: Supervised Feed for Children Guideline**			
What is the aim, purpose and/or intended outcomes of this Activity?	To exclude food allergy in children who we suspect are not allergic to the given food			
Who will be affected by the development & implementation of this activity?	✓❑ ✓❑ ✓❑ ❑	Service User Patient Carers Visitors	✓❑ ❑ ❑ ❑	Staff Communities Other _____
Is this:	❑ Review of an existing activity ✓❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			

What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	Discussion in Allergy MDT meetings on the need for a supervised feed guideline and professional experience.
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Discussion in Allergy MDT meetings on the need for a supervised feed guideline
Summary of relevant findings	A supervised feed is a much quicker procedure than a full oral food challenge and therefore uses less hospital resources (staff, bed spaces) and patient's time. For families who have negative testing to purported allergen but reluctant to give food at home, this process will prevent food restrictions

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	**Potential positive impact**	**Potential neutral impact**	**Potential negative impact**	**Please explain your reasons for any potential positive, neutral or negative impact identified**
Age	x			Positive impact for younger children to widen their diet and remove allergy labels
Disability		x		The children and young people are required to eat the set volume of food in order to complete the challenge. They must meet the inclusion and exclusion criteria
Gender Reassignment		x		All children, regardless of gender reassignment can have a supervised feed if they meet the inclusion and exclusion criteria
Marriage & Civil Partnerships		x		Supervised feed not conducted over 16 years old
Pregnancy & Maternity		x		Supervised feed not conducted in Pregnant women as unclear risks
Race including Traveling Communities		x		All races and ethnic groups included if they meet allergy inclusion/exclusion criteria. Translators will be used where necessary
Religion & Belief		x		All religious groups included if they meet allergy inclusion/exclusion criteria
Sex		x		All genders included if they meet allergy inclusion/exclusion criteria

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sexual Orientation		x		All sexual orientations included if they meet allergy inclusion/exclusion criteria
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		x		Children under social care orders can still be included as long as the appropriate individual is able to provide legal informed consent.
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		x		We are trying to widen the diet and de-label food allergy. All socioeconomic groups included as long as they fulfil the inclusion and exclusion allergy criteria

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
		.		
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)				

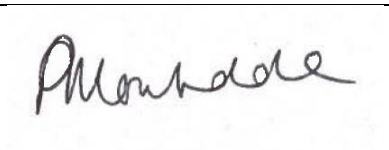
Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the

diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	
Date signed	19/08/2021
Comments:	
Signature of person the Leader Person for this activity	
Date signed	24/08/2021
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	**Yes/No**
1.	Does the implementation of this document require any additional Capital resources	
2.	Does the implementation of this document require additional revenue	
3.	Does the implementation of this document require additional manpower	
4.	Does the implementation of this document release any manpower costs through a change in practice	
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.