

Parent's experiences  
of Children with Food  
Allergies: A  
Qualitative  
Systematic Review

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# Key Term Definitions

- **Food allergy:** an adverse reaction to food involving an immunological mechanism
- **Food hypersensitivity:** reproducible, objective symptoms with delayed onset after eating a particular food
- **Atopy:** the tendency to develop allergic disease

# Introduction

Food allergy (FA) prevalence has been increasing and is now a global health concern (Osborn and Sinn, 2012; Prescott et al, 2013; Dhondalay et al, 2018). In the UK FA admissions during 1990-2004 have risen in children from 16 to 107 per million (Gupta et al, 2007)

FA directly affect patients and families by decreasing quality of life; due to anxieties of adverse reactions and increased vulnerability of children to social-ostracism (Dhondalay et al, 2018) in addition to food restriction that could affect nutritional status. proof

Factors significantly associated with FA include eczema, rhinitis, maternal atopy, **age of weaning** and **lack of breastmilk in an infant diet**(Grimshaw et al, 2016) all of which add to healthcare costs, public health issues with potential to pass on genetic predispositions to future generations (Bagchi, Lau and Bagchi, 2010).

A recent study by Cortes A, Castillo A, Sciaraffia A (2018) found **significant associations** between **children's allergic symptoms** and **mothers psychological state** anxiety and depression, family budget and social interactions did not show any significance.

# Data gaps

- A global survey found that **more than half** of the countries **did not have any data** on food allergy prevalence. Of those countries that did **only 10% had accurate** data based on 'gold standard' oral food challenges (OFC) (Prescott et al, 2013).
- The survey included clinicians in general paediatrics, neonatology, gastroenterology, paediatric allergy, nutrition and dietetics and epidemiology.

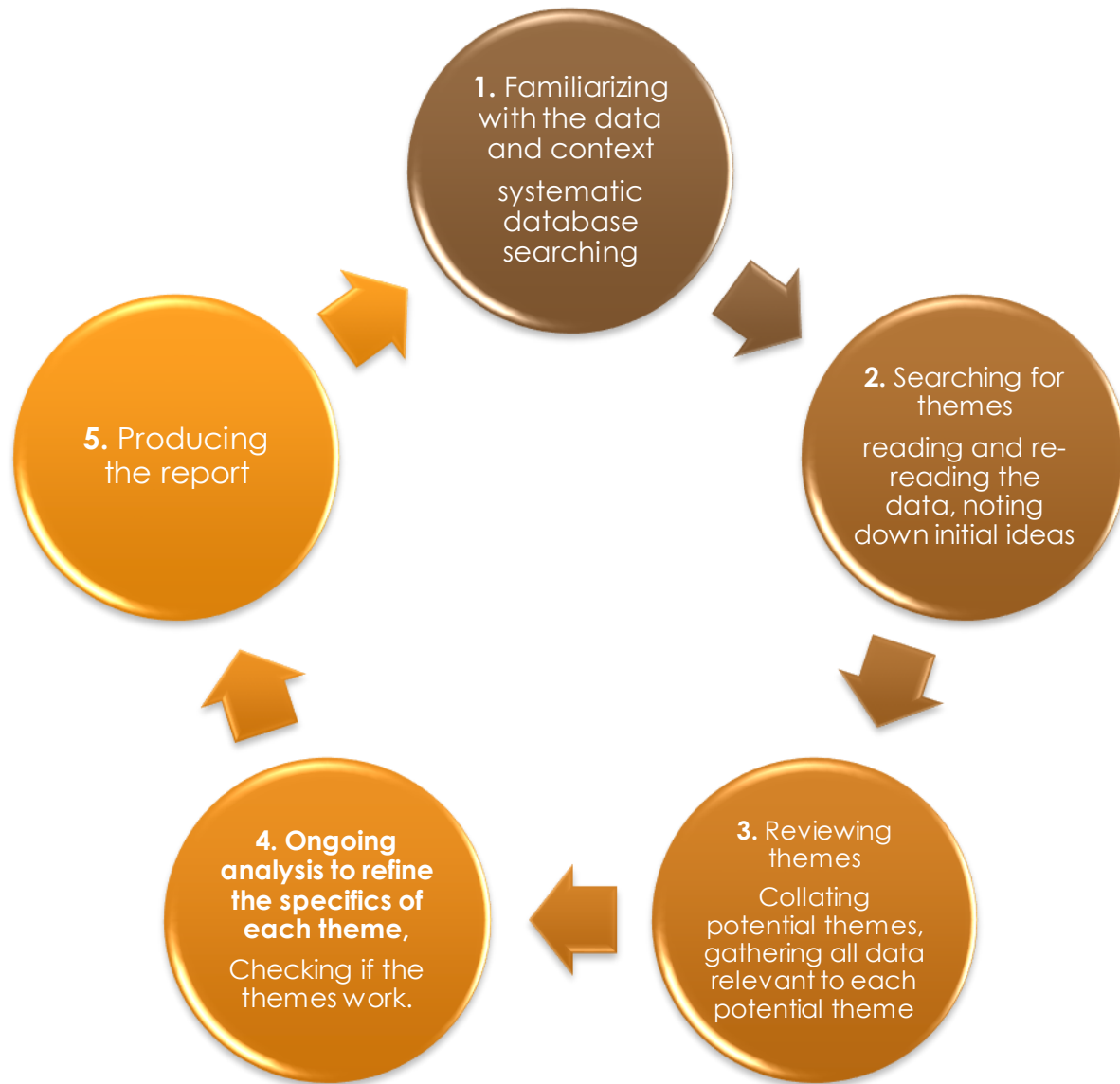
# Research Aim

- To discover what impact food atopy is having on parents and caregivers, to understand ways that support can be better provided within the public health domain.

## Objectives

- To understand what, if any effects healthcare professionals' advice has on parent's decision making for food allergy care?
- To explore if parents are consciously applying food practices specific to reducing their infants food sensitization and what these practices are Include detail to indicate how current literature has established this.

# Methodology

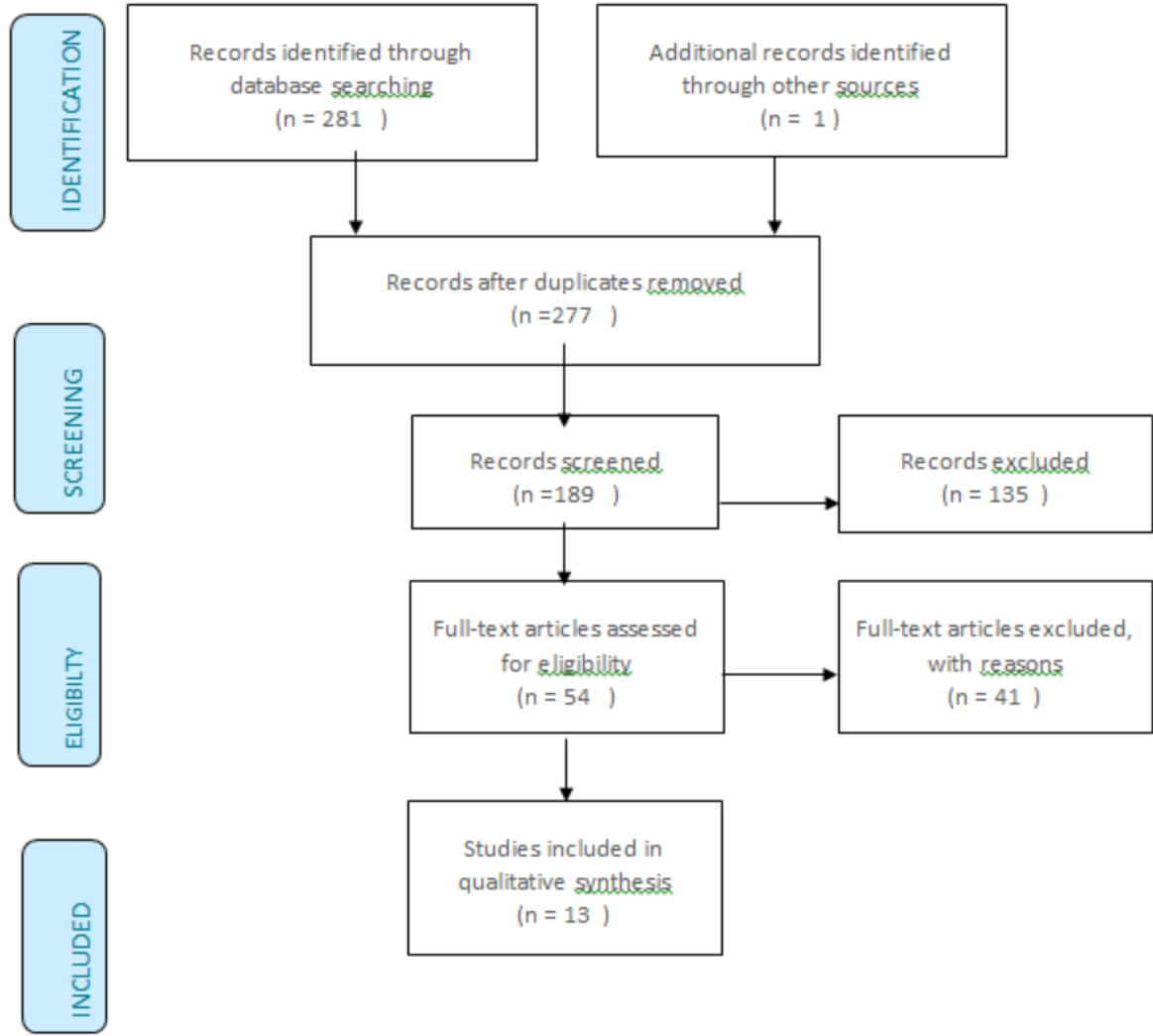




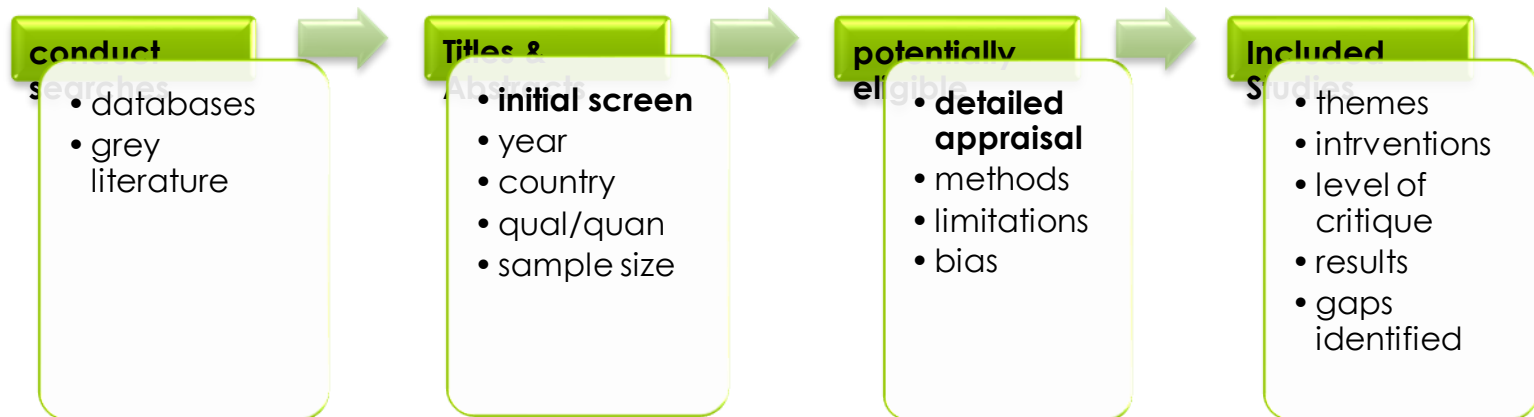
# Search terms

Group 1	Group 2	Group 3
<ul style="list-style-type: none"><li>• <b>Quality of life</b></li></ul> <p>OR</p> <ul style="list-style-type: none"><li>• <b>Experience</b></li><li>• <b>AND</b></li><li>• <b>Perspective</b></li><li>• <b>OR</b></li></ul> <p><b>Impact</b></p>	<ul style="list-style-type: none"><li>• Food allergy</li><li>• OR</li><li>• Food allergies</li><li>• AND</li><li>• Allergens</li><li>• AND</li><li>• Atopic</li><li>• Atopy</li><li>• OR</li></ul> <p>Food restriction</p> <ul style="list-style-type: none"><li>• Diet</li><li>• Weaning</li></ul>	<ul style="list-style-type: none"><li>• Parents</li><li>• AND/OR</li><li>• Caregivers</li><li>• OR</li><li>• Families</li><li>• AND</li><li>• Infant</li><li>• Child</li><li>• Children</li></ul>

### PRISMA 2009 Flow Diagram



# Study Screening



Method	Number of Studies	Type Used
Interviews	7	Semi-structured Unstructured Topic guided
Focus groups	2	X4 focus groups on 2 different occasions X10 focus groups in total for one study. Split by age of child >9 years
QoL Scales/ Questionnaire	4	PedsQL/FIM of PedsQL WHOQOLBREF SCAS STAI X1 Custom questionnaire



*“It was more or less obvious to me that I should breastfeed my child, even if that meant living on macaroni” – Primary source quote Alanne, et al. (2014)*

*“The mother’s general perception was that the more extreme the elimination diet was, the more beneficial it was for the infant, even if too demanding for the mother” – Secondary researcher interpreted quote Arvola, et al. (2000)*

Overall mothers demonstrate high levels of **motivation**, **acceptance** and **sacrifice** to reduce the extent of atopic reaction in their children.

# Inadequate Healthcare Provisions

- Parent's poor experience of healthcare negatively affects their trust and relationships with health professionals providing food allergy care.
- Even when first degree relatives experience food atopy they have reported more appropriate healthcare support.
- Where 'Gold Standard' double blinded placebo controlled food challenges were conducted mothers reported positive perceptions to the intervention and reported lactation elimination diets necessary for their child's diagnosis.

# Support

- Mothers felt a lack of understanding from school staff regarding allergy severity
- Mothers were seen as the primary caregiver of children and demonstrated increased knowledge of their child's condition compared to fathers.
- Fathers see mothers as more knowledgeable and are reluctant to participate in research



*“At that age you have total control of what goes into their mouth, they only eat what you hand them, so I wasn't frightened about the allergy at that time” –Primary quote (Rouf,et al., 2011)*

- *Studies looking at parents of older children express stronger concern for the child's quality of life.*
- *Fear and anxiety increased as parents lost more control*
- *Additional symptoms as a result of allergies impact the child's quality of life.*

*“I think we spend a good twenty minutes more than anybody else in the grocery shop because we read everything (on the labels), even on the things we think we know one hundred percent, we still have to read it because suddenly it has changed and can contain traces of nuts, and that’s the only lifeline we have, to read everything.”- Primary quote from a mother (Stjerna, et al., 2013)*

# Stress



# Breastfeeding

- Both studies included that looked at breastfeeding in relation to food allergy were conducted in Finland where breastfeeding is a cultural norm.
- Applying this context three mothers were more likely to be committed to breastfeed as a result of allergy diagnosis.
- Concurrent breastfeeding and appropriate weaning have been found to reduce the risk of infants developing allergies diseases.



Recommendations include infants receiving complementary foods at 6 months of **age in addition to breast milk**, initially 2-3 times a day between 6-8 months, increasing to 3-4 times daily between 9-11 months and 12-24 months with additional nutritious snacks offered 1-2 times per day, as desired.(WHO, 2018)

# Conclusion

- Mothers suffer significant psychological and emotional implications because of food allergies
- Health professionals need to adopt a more holistic approach to food allergies
- Supporting a parents resilience supports their ability to adequately support their child
- Prolonged breastfeeding through the weaning stages could reduce the FA prevalence
- a cultural change to see breastfeeding as a stronger commitment is needed among UK mothers



# Thank You

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