

## Pica: What is it and what can you do to help?

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# PICA

### Introduction

It is not unusual for somebody on the autism spectrum to have additional diagnoses related to other conditions. One such example of this is Pica. A review by Matson and his colleagues (2013) reports the prevalence of Pica to be between 4 and 26%, however there are significant numbers of cases that are not reported and so it is likely that the actual prevalence of Pica is higher.

This help sheet aims to provide you with information about Pica; what it is, why some people with autism have a diagnosis of Pica, the risks associated with Pica, and outlines some of the support strategies that can be used.

### What is Pica?

Pica is a serious eating disorder, which can be life threatening if left unmanaged. Pica refers to eating or mouthing inedible and inappropriate items such as; clothing, faeces, dirt, metal and stones.

Pica is much more common in those with developmental and behavioural disorders, in particular autism compared to the general population. The prevalence of Pica in autism is estimated to be between 0.3% - 25.8% (Ali, 2001; Ashworth et al., 2009).

### Why do people have Pica?

Listed below are some of the known reasons that people engage in Pica.

#### Medical Reasons

- Iron deficiency
- Zinc deficiency
- Anaemia
- Relieve pain and discomfort
- Reduce anxiety or stress

#### Dietary Explanations

- To lose weight (non-nutritional items eaten to feel full)

#### Sensory Function

- Enjoy texture or taste of the item

#### Behavioural Purpose

- Seeking attention
- Avoiding a task
- Continuing an infant mouthing behaviour
- Relieving stress or anxiety
- Not understanding the difference between edible and inedible items

## What are the signs and symptoms?

Many people with developmental disabilities and/or autism may explore items orally, so how do you know whether they are engaging in Pica? Families and carers should be vigilant for any of the following signs and symptoms. If any of these are identified or observed, you should seek medical support.

- witnessing them eat a food that is not edible such as stones or metal
- Stomach upset and/or pain
- Blood in stool
- Bowel problems (constipation or diarrhoea)

Other serious symptoms of Pica occur as a result of ingesting toxic and poisonous items such as:

- Household cleaning products
- Toxic plants in the garden
- Animal poisons left around the house or garden

There can be more serious symptoms which occur as a result of eating something toxic or poisonous and the bacteria from these non-food items, such as:

- Intestinal blockage
- Injuries to teeth
- Infections
- Lead poisoning (Paint chips containing lead)

Any evidence that the person you support is ingesting non-food items should be discussed with their GP.

## How is Pica diagnosed?

Pica can only be formally diagnosed by a doctor. If you notice any behaviours related to Pica it is important to keep a diary of; the types of items that are being consumed, quantity, and times the behaviour occurs. This information is important to understand patterns of behaviour and the risk associated.

In the UK, the ICD-11 is used to guide practitioners on diagnosing Pica. The ICD-11 characterises Pica as “the regular consumption of non-nutritive substances, such as non-food objects and materials (e.g., clay, soil, chalk, plaster, plastic, metal and paper) or raw food ingredients (e.g., large quantities of salt or corn flour) that is persistent or severe enough to require clinical attention in an individual who has reached a developmental age at which they would be expected to distinguish between edible and non-edible substances (approximately 2 years). The behaviour causes damage to health, impairment in functioning, or significant risk due to the frequency, amount or nature of the substances or objects ingested.” (World Health Organization, 2018).

It is possible your doctor may conduct further tests such as a blood test to rule out other possibilities such as anaemia, iron or zinc deficiency.

Ensure that they are seen by a doctor when these behaviours start for an accurate diagnosis and also to avoid misdiagnosing. This is also important if the individual begins to display any more signs and symptoms or they get worse as they could have caused damage internally or have a coexisting deficiency like anaemia.

## How do we assess the level of risk associated with Pica?

A diagnosis of Pica suggests that there are additional risks that need to be considered. The risk of ingesting harmful substances and the consequences associated with that are significantly increased.

The information below describes a way of assessing the level of risk associated with Pica proposed by Sturmey and Williams (2016):

### Level of Risk: Undetermined

**Definition:** This is when there could be a diagnosis of Pica if the individual would continue to ingest non-food items however there is no current danger currently.

### Level of Risk: Serious

**Definition:** The individual has passed a foreign object, such as stones, in their stool, spitting it out or even choking on the object one time.

### Level of Risk: Dangerous

**Definition:** There has been more than one episode of passing foreign objects through stool, spitting it out or choking.

### Level of Risk: Highly Dangerous

**Definition:** This would include having more than one episode of passing foreign objects AND needing surgery due to ingesting foreign objects on one occasion.

### Level of Risk: Life-Threatening

**Definition:** If the individual has needed more than one surgery due to ingesting foreign objects.

## What can you do to help?

The environment plays an important role in reducing the risks associated with Pica and should be considered alongside individual strategies.

## Environmental Strategies

When considering environmental strategies it is important not to restrict the person's environment but instead carry out an assessment of the environment to highlight areas of risk. In order to provide a safer environment the below check list adapted from Sturmey and Williams (2016) can help families and carers to manage environmental risks.

## Questions - Yes or No

1. Is the floor clear of items?
2. Do any toys/games/activities have loose pieces?
3. Do any toys/games/activities have small pieces that ingestion could happen?
4. Are pens, paper, paper clips within reach or unattended?
5. Are there any cupboards or closets that are unlocked?
6. Is there a rubbish bin?

7. Are you always present?
8. Any torn clothing?
9. Are any cleaning items within reach?
10. Any other items in reach?

Areas on the checklist identified as 'yes' pose a possible risk for those known to engage in Pica. It's therefore important to minimise the risks that have been identified. For example; if there's a rubbish bin, choose one with a closed lid not an open waste basket as the individual cannot see what is inside and are less likely to engage in Pica behaviour. A study by Schmidt et al. (2017) found that when inedible objects are removed from the environment, then the individual can be supported to find more appropriate, alternative behaviours.

## Individual Strategies

There are also a number of individual strategies that can be used to support those engaging in Pica.

Firstly, individuals can complete a sorting activity where they identify edible and inedible items, this can be aided through using PECS (Picture Exchange Communication System). Through educating individuals about items they can differentiate between inedible and edible items.

Other techniques used to keep those engaging in Pica safe involve replacing the inedible items with edible items of a similar texture, smell and taste.

Generic techniques that could minimise Pica related behaviours include engaging the person in structured enjoyable activities in order to redirect focus from the consumption of inappropriate items.

## Where can you seek additional help?

If you have any concerns about the person you support then it is important to seek additional help, primarily through your GP. If you have access to other professionals such as a dysphagia trained speech and language therapist, occupational therapist or clinical psychologist, then you can always seek advice from them too.

It is important to seek help from a healthcare professional in order to formally assess the behaviour of concern and to gain access to appropriate support.

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