

## Persistently Eating Non-food items

This advice is suitable for children with or without the medical diagnosis of PICA

(PICA is a medical condition: The persistent eating of typically non edible items that do not provide any nutritional value, can occur in mental health conditions, learning disability, and autism.) Research into the causes, assessment and effective strategies for PICA is very limited. So finding solutions are still trial and error and person specific.

Whilst some objects pass through the body without harm the risks of eating or chewing on non-foods can potentially be life threatening. Risks include vomiting, constipation, gut infections/ blockages, internal damage, choking, poisoning. Parental and teacher anxieties and concerns relating to these behaviours are therefore understandably high.

The impact on daily family/ school life can be significant and can include the **constant need for environmental risk assessment** and adaptations (locking favoured non-food items away, removing wallpaper/foam cushions/ changing mattress type/cleaning streets outside home) to **limiting activity participation** (limiting independent play through constant monitoring, influencing play and toy choices) and **social impact** (not allowing child to have play dates, or go to park/play outside). Safety concerns in school environments lead to the requirement of high levels of adult supervision.

Any number or range of non-foods may be eaten:

Sand and small stones/gravel, mud, dirt, sticks, leaves

Chalk, talc,

Shampoo, hand cream, sun cream

Cigarette butts, foam, paper,

Wires; nails, coins, car wheels cold metal objects

Dog faeces; own faeces

Identifying **what** items are specifically eaten can help with analysing possible reasons and of trialling support strategies.

**Eating of non-food items can have several reasons including behavioural, sensory and dietary.**

### Dietary

Pica can be associated with Vitamin/ mineral deficiencies – doctors and dieticians will want to rule this out. For example iron and zinc deficiencies. If your child is iron deficient, taking iron supplements can reduce the child's desire or need to eat non-foods.

Copper/zinc ratio imbalances have also been reported to alter eating patterns.

## **Behavioural**

Hunger, emotional stress or environmental demands may lead to an increase in the behaviour – so identify **when** the behaviour occurs and any triggers to help understand a possible reason **why** for the behaviour is helpful.

Understanding how adults respond to a child's eating of non-foods and child's reaction to this can also provide vital understanding of any social attention or reward driven behaviours. Or if the behaviour is in an attempt to avoid a situation. This will usually not be consciously undertaken but is more likely an automatic behaviour having achieved a desirable outcome in the past

Specific advice from educational or clinical psychologists or behavioural specialists may need to be sought.

## **Sensory**

As occupational therapists we specifically consider any sensory element to the behaviour by considering if there are more generalised sensory likes or dislikes (taste/texture/visual/smell in particular), what your child's typical eating preferences are, what other oral motor likes/dislikes are apparent.

If pica is motivated by sensory feedback such as the smell, colour, taste or texture of the object, then giving a safe alternative that provides similar oral motor satisfaction without being harmful is one strategy to try.

## **Pica Box**

A pica box is a box with different compartments. Each compartment contains a food which is safe to eat or chew and resembles the non-food items being eaten. Having analysed the non-foods your child chooses, replace it with a food item or food mix of similar taste texture, shape or colour. Acceptable non-food items such as chewing aids can be included in the box also.

See examples below.

<b><i>Food Item mix more than one type</i></b>	<b><i>Similar textured/ looking non food</i></b>
- Grapenuts	Sand/grit
- Marshmallows /candy floss	Foam/matress content
- Refreshers/palmer violets/ lovehearts Swizzles double lollys, fizzers	Chalk/talc
- Seeds – pumpkin, sesame, pop corn, Cheerios, Breadsticks , Pretzels crumbled up	Sand/grit
- Raisins /currents	Mud /dirt
- Dried fruits	
- Ground up digestive biscuits and cornflakes	Gravel
- Crumbled chocolate cake	
- Figs (cut up)	
- Twigglets / chilli crisps	Sticks or strong tasting non foods such as cigarette ends

- Celery
- Baby spinach/ lettuce /crisps

Hair  
leaves

\*please be cautious with allergies.



You can use a social story to introduce the food box. For example – one that explains we need to put only foods or drinks in our mouths and the risks of not doing so, as appropriate for age.

Personalise the box e.g. with the child's own picture. If your child is using a picture exchange system – attach a picture/symbol to the box to support them to initiate asking for the box by giving you the picture card.

When your child starts to show signs that they are looking for a non-food. For example searching the environment, 'their typical scavenging behaviour,' or starts to engage in eating a non-food item, say something along the lines of "it looks like you need your food box". Use the same phrasing each time, and take him/her to her box to choose an item.

Oral motor 'calming or alerting / regulating programme' – for some children eating non-foods is part of a wider sensory picture, where oral motor sensory activities can have a regulating affect (see separate information leaflet).

If the child thinks that everything is edible, **Discrimination training** can help a child start to identify what is a food and what is not. This involves categorising and sorting items into food and non-foods which the Pica box also promotes. Visual charts could then be displayed to reinforce the two categories.

Further sources of information.

**Tips written by a teacher for dealing with PICA in a classroom:**

1. **Inform all visitors and staff that a student/s in your classroom have PICA** – it doesn't take long for students to find the non-edible goodies the visitors have brought in, or left around the room.
2. **Ensure all toxic or harmful liquids, powers, or substances are out of reach and locked away** – The toxic taste that most people would be put off by, will not necessarily deter students with PICA. Many medicines are designed to look or smell appealing, so extra care must be taken. All cupboards should be locked, including craft cupboards which are full of deliciously appealing non-foods.
3. **PICA watch** – Continue to watch for items that are easily torn, or made from materials that PICA students find appealing. So far my list includes, but is not limited to: foam balls, sponges, paper, small beads, marbles, bandaids, grass, moss, spiderwebs, dried paint on the windows, blutack, magazines, hair, baby wipes, soap, paint, uncooked rice, playdough, fruit peelings and cores, sand, bubbles, crayons, chalk and gravel.
4. **Laminate paper** – Paper does not survive in my classroom unless laminated. Even then, laminating only extends its lifespan by a month.
5. **Chewy tubes / toys** – A truly great invention. The nontoxic chewy toys come in different shapes and sizes. They can even be tied onto clothing, or worn as a bracelet or necklace.
6. **Provide edible alternatives** – Get creative and find edible alternatives during art and craft (edible paint, dyes) and messy play (instead of sand, beads and pebbles try breadcrumbs, cereal, and cooked spaghetti) Many students have an overwhelming desire to explore using their mouths (eating, chewing, liking, tasting). It is less stressful for the teacher, and more enjoyable for the students when they can explore the activity using their mouths.
7. **Enrich the environment in other ways** – give students experiences that are designed to stimulate their other senses: sensory walls, fidget toys, songs, music, Snoezelen rooms etc.
8. **PICA box** – redirect the student to a PICA box full of items they are allowed to eat, or chew on (popcorn, chewy tubes, raisins).
9. **Explicitly teach edible and non-edible items** – Sorting items into edible / non-edible categories can be made into a work station task.
10. **Use spray on plasters!!** – best invention ever! Once the wound has been cleaned, and stopped bleeding, apply a spray on plaster to keep out the dirt and germs.

Refer to Challenging Behaviour foundation information sheet (attached below) for examples of behavioural management strategies put in place if social attention, obtaining reward, situation avoidance or boredom are identified to be the drivers for the behaviour.

This leaflet also details differential reinforcement. Praise and reward for behaviours that are desirable because they are incompatible with being able to obtain non-foods. I.e. walking between classes with hands in pockets. Wearing mittens at playtime in cold weather.

<https://www.youtube.com/watch?v=ulra3N13vus> Pica Box

<https://www.youtube.com/watch?v=Syjlr4xqqz8> reference to copper /zinc deficiencies



Pica Info sheet.pdf