Understanding Pica

The word "pica" comes from the Latin word for magpie, a bird known for its indiscriminate appetite. Pica is defined as an abnormal craving for non-food substances such as dirt, paint, or clay.

"People with developmental disabilities, including autism, often exhibit pica behaviour, as do children between the ages of 2 and 3," explains Meredith Garrity, Ph.D., clinical director of May Institute’s school for children with autism in Arlington, USA. "Children younger than 2 often put non-food items in their mouths, but that behaviour is not considered unusual. It is estimated that as many as 25 to 30 percent of children develop Pica. Individuals with brain injury or epilepsy and women who are pregnant may also develop those as well."

Some of the non-food items that people with pica crave and consume include:

- dirt
- clay
- paint chips
- plaster
- brick etc
- chalk
- corn-starch
- laundry starch
- baking soda
- coffee grounds
- cigarette ashes
- burnt match heads
- cigarette ends/butts
- faeces
- ice
- glue
- hair
- buttons
- paper
- sand
- toothpaste

Although some of these items are harmless, some, such as lead-based paint chips, are dangerous and can cause lead poisoning. Children with Pica may be at risk for other serious health problems including:

- bowel problems (from consuming indigestible substances like hair)
- dental injury (from eating hard items like buttons)
- intestinal obstruction or perforation (from eating objects that could get lodged in the intestines)
- parasitic infections (from eating dirt or faeces)

"If your child has been eating non-edible items for more than a month, they should be evaluated to determine a cause for this behaviour," Garrity advises.

Among the possible causes for pica are: anaemia, nutritional deficiencies, developmental disabilities, sensory stimulation, lack of ability to discriminate between edible and non-edible items, anxiety, and other mental health conditions such as obsessive-compulsive disorder (OCD) and schizophrenia.

Some evidence supports the hypothesis that Pica behaviours may develop in response to dietary deficiencies. For example, some pregnant women with pica have stopped eating non-food items after being treated for iron deficiency anaemia. People with Pica who don’t have a nutritional deficiency may respond well to the substitution of edible and/or sensory stimulating alternatives to non-edible items.
Teachers at May Institute’s school for children with autism and other developmental disabilities in Arlington, Mass., developed and implemented a successful intervention for a 5-year-old boy with autism who had a history of pica behaviour. Each time the boy displayed Pica behaviour, a teacher interrupted the behaviour and prompted him to throw the object away. This intervention was repeated ten times following each Pica incident. Described as "contingent practice," this intervention was effective in reducing, and essentially eliminating Pica in this case. But there is no ‘one’ answer or solution, and this may not work for others!

"Ensuring the safety of the individual with Pica is paramount," advises Garrity. "I recommend that you consult with both medical and mental health professionals for appropriate assessment and treatment. Pica may be determined by multiple factors, and these professionals will consider your child's individual history when designing an effective intervention strategy."

Why Do Some People Eat Non-food Items?

The specific causes of pica are unknown, but certain conditions and situations can increase a person's risk:

- **nutritional deficiencies**, such as iron or zinc, that may trigger specific cravings (however, the nonfood items craved usually don't supply the minerals lacking in the person's body)
- **dieting** — people who diet may attempt to ease hunger by eating non-food substances to get a feeling of fullness
- malnutrition, especially in underdeveloped countries, where people with pica most commonly eat soil or clay
- **cultural factors** — in families, religions, or groups in which eating non-food substances is a learned practice
- **parental neglect, lack of supervision, or food deprivation** — often seen in children living in poverty
- **developmental problems**, such as autism, other developmental disabilities, or brain abnormalities
- **mental health conditions**, such as obsessive-compulsive disorder (OCD) and schizophrenia
- **pregnancy**, but it's been suggested that Pica during pregnancy occurs more frequently in women who exhibited similar practices during their childhood or before pregnancy or who have a history of pica in their family

Eating earth substances such as clay or dirt is a form of Pica known as Geophagia, which can cause iron deficiency. One theory to explain pica is that in some cultures, eating clay or dirt may help relieve nausea (and therefore, morning sickness), control diarrhoea, increase salivation, remove toxins, and alter odour or taste perception.

Some people claim to enjoy the taste and texture of dirt or clay, and eat it as part of a daily habit (much like smoking is a daily routine for others). And some psychological theories explain pica as a behavioural response to stress or an indication that the individual has an oral fixation (is comforted by having things in his or her mouth).

Another explanation is that Pica is a cultural feature of certain religious rituals, folk medicine, and magical beliefs. For example, some people in various cultures believe that eating dirt will help them incorporate magical spirits into their bodies.

None of these theories, though, explains every form of Pica. A doctor must treat each case individually to try to understand what's causing the condition.