ACTION TO BE TAKEN

If you discover that your patient is using Calabash chalk, they should be dissuaded from doing so. If the patient is pregnant, standard advice regarding the treatment of morning sickness and nutrition should be given.

The UK Teratology Information Service (UKTIS) can be contacted by healthcare practitioners for further advice and guidance on exposure to lead and arsenic during pregnancy.

If you are able to establish where the product was purchased, you should contact the Environmental Health Officer at your local Council so that they can take the appropriate action.

TREATMENT OF MORNING SICKNESS

Normal morning sickness causes no harm to mother or baby and reassurance and psychological support may be the only action necessary. Other advice could include the avoidance of foods found to trigger nausea, taking small carbohydrate-containing meals at frequent intervals, as well as regularly drinking small amounts of water and taking frequent rest.

The use of medication to control the symptoms is not usually necessary, although in some cases this will be required. Both anti-histamines and prochlorperazine are normally considered to be safe to the foetus.

Clearly, if symptoms are severe or prolonged, there may be other causes; hyperemesis gravidarum occurs in only 1/1000 pregnancies and may require hospitalisation for fluid replacement, as well as scans to check for multiple pregnancy or hydatidiform mole.

Further information is available at the Food Standards Agency website:
www.food.gov.uk

The UK Teratology Information Service can be contacted on:
www.toxbase.org / www.uktis.org
tel. 0844 892 0909

Further information about lead and arsenic can be found on the Health Protection Agency website:
www.hpa.org.uk

(Please note: The functions of the Health Protection Agency transferred to Public Health England on 1 April 2013)
CHALKS AND CLAYS

Intentional and habitual ingestion of chalks, clays and soils is sometimes referred to as Geophagia. A variety of chalk and clay products are used (eaten) therapeutically in some African, Asian and Western communities.

A chalk product found commonly in use by pregnant women, in certain Asian and African communities, is **Calabash chalk** which is also known as Argile, La Craie, Mabele, Nzu or Shiley.

This chalk is most commonly used as an **antidote to morning sickness** and/or as a **nutritional supplement** during pregnancy. Similarly, a type of clay used during pregnancy for similar purposes is commonly called **Sikor or Shikor Mati**.

Calabash chalk comes in two main forms – either crude rock sourced directly from the ground, or a mixture that is compacted and fired into a solid.

Clays are also used (often in Western alternative remedies) as so-called ‘detox’ supplements. Examples of these clays include **Bentonite** or **Montmorillonite clay**.

The **Food Standards Agency (FSA)** has issued advice that these products should not be eaten, especially by pregnant and nursing mothers, due to the possibility of these products having adverse effects on health.

These chalk and clay products are not regulated products in the UK, therefore the ingredients cannot be monitored or controlled.

*Please note, the above does not constitute a definitive list of either chalks or clays in use.*

HEALTH CONCERNS

Whilst most UK medicines and dietary supplements are carefully manufactured and monitored under laboratory conditions, these products are crudely made and have often been found to contain relatively **high levels of heavy metals**.

In particular, recent tests on samples of Calabash chalk and a number of clay products have identified **elevated levels of lead (Pb) and/or occasionally arsenic (As)**, both of which are toxic to humans.

There is special concern regarding exposure during pregnancy and by nursing mothers, as **foetuses and growing children are more sensitive to heavy metal exposure than adults**.

The chronic or prolonged use of chalk and clay products has also been linked to **iron-deficiency anaemia** and it inhibiting the body’s ability to absorb zinc, both of which are essential nutrients for good health. These products can also cause intestinal blockage and digestive upset.

HEALTH EFFECTS OF LEAD

Lead is a poisonous heavy metal that builds up within soft tissues, bones and teeth, and can cause a wide range of health problems. These include but are not limited to:

- haematological effects such as anaemia
- neurological disturbances and headaches
- adverse effects on the reproductive system (in both genders)
- liver and kidney damage

Moreover, the effects of Pb on children have been shown to also include a reduced IQ and an increased risk of cognitive deficit, even with relatively low levels of prolonged exposure.

**Lead and pregnancy**

Adverse effects of Pb exposure during pregnancy have been identified. These include **impaired intrauterine growth, reduced birth weights and impaired neurodevelopment**.

The negative effects on a foetus or a growing child can be more marked as their growing bodies absorb Pb more readily, and do not have the same capacity to excrete chemicals as efficiently as an adult’s body.

It is advisable to keep exposure to lead and other heavy metals, such as arsenic, as low as practicably possible.

Evidence suggests that there is **no threshold (or safe level) of exposure to Pb** for a number of critical health effects, in particular with regards to developmental neurotoxicity.