

Earth-Eating Is Common Among People In Many Parts Of World

WASHINGTON — Some people eat earth — and not just in times of famine or because they're crazy. In some societies, it's normal human behavior.

"We think how horrible, how revolting, but there's no stigma. It's a nearly universal cross-cultural phenomenon, an accepted fact of life," says geographer John M. Hunter of Michigan State University, who has studied eartheating, known as geophagy, over the past 20 years, primarily in Africa and Central America.

What earth-eaters consume mostly are fine white clays such as kaolin — not gritty, organic dirt. The clays are often shaped like eggs, disks, or wafer-thin tablets, baked in the sun or smoked over a fire, and sold in outdoor markets.

Why people eat earth is rooted in religious beliefs, cultural traditions, medicinal practices, and physiological needs.

Clay may be eaten to reduce hookworm-caused abdominal pain, ease hunger pangs, soothe heartburn and nausea, control diarrhea, or simply satisfy a craving. To discerning palates, some soil has a pleasingly sour, lemony taste.

But the most common manifestation of geophagy, Hunter says, is during pregnancy, so much so that he calls clays used for eating "pregnancy clays."

In India, for example, elaborate, baked clay figurines are given as bridal gifts, to be broken and eaten during pregnancy.

In Africa, Hunter says, if a pregnant woman is "undernourished, exhausted from many pregnancies in a few years, has no doctor to see or pharmacy to go to, and no money for nutritional suprlements, she resorts to intuitive, pragmatic folk medicine."

Under these circumstances, he explains, "clays can definitely supply minerals to the fetus. They compare favorably with Western pharmaceutical supplements."

Hunter's judgment is based on laboratory tests at Michigan State that analyzed clay samples and simulated human digestion to determine what the body receives from clay. His work is supported in part by the National Geographic Society.

Depending on where clays originate, they can contain minerals such as iron, calcium, magnesium, potassium, phosphorous, zinc, copper, and manganese.

Geophagy is a harmless practice unless carried to excess, Hunter says. Heavy, habitual clay-eating can impede the body's absorption of minerals and block the colon.

But culturally rooted geophagy, he says, should not be confused with a psychiatric disorder, commonly called pica, that is manifested by chronic, compulsive eating of nonfoods such as gravel, chalk, paint chips, or dirt.

Geophagy — which can be traced back to ancient Greek and Roman times, when embossed redclay medallions were widely used as medicine — is still practiced in Africa, Asia, the Middle East, Central America, and the United States.

Hunter believes that Africans probably started eating clay to satisfy hunger pangs. A person would reach out for the nearest bit of clay, breaking off a piece of the fireplace, for example. "That smoked clay would be crispy and crunchy to eat," he says.

As the practice evolved, a favorite family clay pit would be found, and then one preferred by a group of families or a village. Eventually a peasant industry emerged, with clays sold in markets, sometimes hundreds of miles away.

Clays for trade are usually washed, mixed with water, kneaded, shaped, often decorated, and dried in the sun. Some are left in lump form. They all sell for pennies.

African slaves brought geo-

phagy to the southern United States. It is still practiced by some blacks, mostly during pregnancy, in Mississippi, Alabama, Georgia, and the Carolinas.

Even when some black women move to Northern cities, they are sent clays from the family clay mound, Hunter says. But others look down on the clay-eating habits of their mothers and grandmothers and consume less-nutritious laundry starch instead.

In Central America, clay-eating is associated with the worship of the Black Christ at Esquipulas in eastern Guatemala. Once a sacred Indian site known for its healing

muds and hot springs, it became a Christian shrine after the Spanish Conquest. A 5-foot-high image of Christ on the cross, carved in 1595, became known as the Black Christ because its brown woods resembled the copper-colored skin of the Indians.

More than a million people a year, most from Central America, now visit the shrine, says geographer Robert N. Thomas of Michigan State. Small, glistening white clay tablets — embossed with the image of Christ and known as "pan del Senor" (bread of the Lord) — are sold to the pilgrims. The bis-

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- 1. a long eared nibbler the tree a partndge is in furniture to sit on
- 2. a porker a kind of fruit a small stick
- **3.** an antiered animal a long sharp weapon you throw 365 days
- **4.** a kind of dog a scribbled drawing something found in chicken soup
- **5.** a young sheep a sweet potato the "uncle" of the US
- **6.** a large white bear a kind of tooth a type of skate
- 7. a milk giver a farmer s tool a senous promise you make
- **8.** a female deer one of five on your foot great sadness
- **9.** a dam maker a high temperature a person who makes cloth
- **10.** a long skinny animal a kind of engine a small red dot on your face

COLOR TINGO

1. BLACK 6. PEACH
2. RED 7. GREEN
3. YELLOW 8. LT BROWN
4. BLUE 9. LT BLUE
5. BROWN 10. LT GREEN

CALENDAR: A CALENDAR LOOKS VERY SIMPLE, BUT IT TOOK MANY CENTURIES TO WORK OUT OUR WAY OF KEEPING TRACK OF TIME. PROBABLY THE FIRST WAY OF KEEPING TRACK OF TIME WAS TO COUNT THE DAYS BY SUNS, THEN CAME THE SUNDIALS, AN EARLY DEVICE FOR TELL-ING TIME.

