

Los Angeles Times

AID TO ELDERLY

**Clay Added
to Diet May
Fortify Bones**

BY GEORGE GETZE

Times Science Writer

Common, ordinary, muddy clay may be just the diet supplement needed by millions of old people to keep their bones from getting brittle and breaking, according to a USC biochemist.

Dr. Benjamin Ershoff said clay may also be used some day to keep spacemen healthy and alert during long, weightless trips to other planets.

He says clays have been found to be very useful in promoting growth and preventing disease in the bones of test animals.

Primitive Custom

He noticed that the eating of clay has been observed in many primitive peoples in all parts of the world since ancient times, especially in parts of the world where there have been found to be deficiencies of iron, calcium and other minerals in the soil.

The Manned Spacecraft Center paid for Dr. Ershoff's clay study after American and Russian doctors had found signs that the body loses large amounts of calcium from the bones under conditions of weightlessness. This weakens the whole system and makes kidney stones more likely to develop during long flights.

Not Full Answer

Dr. Ershoff said he discovered that adding calcium itself to the diet is not the answer to this problem.

For instance, when a small amount of clay was added to the diet of laboratory animals their body weight increased and bone disease and weakness was avoided. But when calcium alone was given, little if any benefit resulted.

"That obviously means that clay contains something, or some things, besides calcium that promotes or

improves the body's ability to use calcium and form bone material," Dr. Ershoff said.

Unknown Factor

What the something is, and how it works, is not yet known.

Dr. Ershoff said he will do additional research to find the answers, and to find out if clay is as efficient in human bodies as it is in animal bodies.

Studies are also needed under weightless conditions, such as that to which orbiting astronauts are subjected, where there is a marked increase in the loss of calcium.

Clay as a diet supplement is an interesting subject to researchers since clay contains a balance of almost every mineral in varying amounts and proportions, and the way the body handles calcium, magnesium, sodium and the other elements is of important concern to space program officials.