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Antibiotics in Ancient Bone: Tetracycline: The Pulse of the Planet daily radio program offers free legal online mp3 downloads, exploring the world of sound in nature, culture and science, with audio adventures, world music, extraordinary sound portraits, science diaries, and nature ring-tones; an amazing sonic experience.

Antibiotics in Ancient Bone: Tetracycline

Scientists have discovered traces of tetracycline in preserved human bones from Sudan that date back more than 2,000 years.

Did ancient civilizations drink beer because of its health benefits? I'm Jim Metzner, and this is the Pulse of the Planet. Scientists have discovered traces of tetracycline in preserved human bones from Sudan that date back more than 2,000 years. Tetracycline works as an antibacterial medication, and researchers have discovered that it's produced by a bacteria called streptomycetes, which has been linked to the production of bread and beer in ancient populations. Consuming the bread and drinking the beer would have helped keep people safe from a variety of disorders, ranging from acne to urinary tract infections. George Armelagos of Emory University has spent a significant amount of time studying those ancient human bones.

"The fact that we didn't find any indication of infection in the bone is an indication that the tetracycline may have been having some effect. What's really interesting is that many of the bacteria leave signatures on bone so that you can tell if there was an infection that was throughout the blood system that was infecting a large number of bone. What happens is that the outer area of bone changes. The bacteria will get in there, toxins will get in there, cause some of the bone to die. New bone is formed and it gives a very roughened appearance - very easy to determine in ancient populations. Did they know that they had discovered tetracycline? Well, obviously they didn't know it was tetracycline, but I think that they knew that it made them feel better. The alcohol probably had some positive effect, and actually tetracycline works very rapidly, so they may have realized that what they had was making them feel good."

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