

ANTHROPOLOGY

Excessive Gum-Chewing May Cause Bony Growths on Jaw

WATCH OUT, you gum-chewing sisters!

If you pursue your soothing masticatory addiction with excessive assiduity you may become liable to mandibular hyperostoses.

Translated into English, that means if you keep up your cud-chewing too long, you may get bony growths on your jaw.

At any rate, that's what Dr. Ales Hrdlicka, Smithsonian Institution's veteran anthropologist, says can happen. Dr. Hrdlicka has been making a study of about 5,000 lower jawbones from the Institution's vast collection of ancient and modern skulls, and finds bony outgrowths from the inner jaw surfaces fairly frequent, and widespread in both space and time. Some of these growths are tuberculate ("lumpy"), others are ridges. They are almost like bony tumors, except that the bone appears to be strong and perfectly healthy.

First suggestion, that these growths represent an evolutionary "throwback", is set aside because ancient human and pre-human skulls do not show them. They are not found on Neandertal jaws or on the jaws of fossil or existing great apes. They appear only on jawbones of modern man, and are slightly more frequent in men than women.

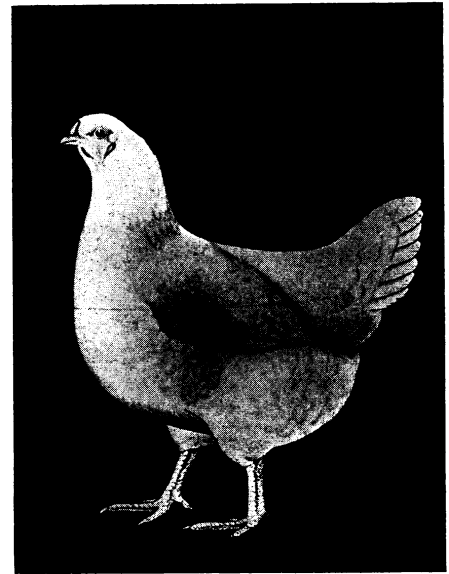
Most plausible explanation is that the growths are responses to muscular pull on the bones, due to chewing hard on tough, resistant foods. Especially significant, Dr. Hrdlicka feels, is their relatively high frequency among the Eskimos. Also, they were more common on the jaws of early Norse settlers in Iceland and Greenland than they were in the Scandinavian homeland.

Asked about possibilities of results

from the modern habit of gum-chewing, Dr. Hrdlicka stated, "That question may not be as frivolous as it sounds. True, gum isn't tough, and it requires very little exertion to chew it. But the advanced gum addict chews and chews and chews, hours on end sometimes, so that the sum total of exertion on the part of the jaw muscles may easily amount to as much as a smaller number of harder bites on a tougher substance.

"Of course, since these bony growths I have been studying all appear on the inner jaw surface, there isn't any direct danger of their spoiling a girl's face for her. However, constant exercise of the muscles outside of the jaw can give a lumpy appearance, especially when the gum-chewer develops the rather common habit of doing all of her chewing on one side."

Science News Letter, August 3, 1940



MME. CHANTECLER

The classic fowl immortalized in Rostand's masterpiece was Brother Wilfrid's inspiration in naming the poultry breed he originated. This, of course, is a portrait of Madame Chantecler.

GENETICS

New Breed of Poultry "Made to Order" by Monk

CHANTECLER is the name of a breed of poultry especially adapted for Canadian conditions. The story of its origination is an interesting chapter in the history of genetics as applied to everyday farmyard problems, going back for more than thirty years.

The breed was literally made to order. There was a definite picture of what the future fowl should be like, long before the first chick of the new variety pipped its shell. The breed must be hardy, to withstand Canadian winters. It must be plump, for meat, and a prolific egg producer. It must be fine-boned and white, for attractive appearance.

Starting in 1908, Dark Cornish and White Leghorn were crossed, for the first female ancestor, and Rhode Island Red with White Wyandotte, for the first male. A couple of years later, White Plymouth Rock was added to the strain, and still later further infusions of White Wyandotte and White Plymouth Rock were introduced. By careful application of Mendelian principles, the breed was

made to conform exactly to specifications.

The Chantecler breed was brought to perfection by Brother Wilfrid, a Trappist monk, at the Oka Agricultural Institute. There is a mild note of irony about this. Hens, as is well known, are among the most conversational of all animals. Trappists, it is equally well known, save themselves no end of trouble by not conversing at all. Perhaps Brother Wilfrid sees the joke. He isn't saying.

Science News Letter, August 3, 1940

CHEMISTRY

New Acid Dispenser Useful in Laboratory

A NEW acid dispenser will prove of great use in chemical laboratories. It is made of glass and attached by a plastic adapter to a standard 5-pint screw cap acid bottle. Squeezing a rubber bulb charges a graduated cylinder above. Then any desired quantity of acid may be accurately drawn off by opening a stopcock.

Science News Letter, August 3, 1940

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