PUBLIC HEALTH

Cigarette Puffs Vary With Type of Smoker

TO DETERMINE the amount of tobacco a person inhales, researchers should consider the type of puffer he is as well as the number of cigarettes he smokes, a biochemist told the Southwest regional meeting of the American Chemical Society in Houston.

Two people may smoke the same number but one may puff rapidly while the other is a slow puffer, said Arthur L. Gross of the Southwest Research Institute, San Antonio.

Mr. Gross, with Dr. Judith Eisenbeiss, also from the Institute, reported a new test on humans that can measure the amount of smoking a person is doing regardless of the number of cigarettes.

The test is based on the detection of a cyanide compound in urine. In earlier work the two researchers had shown that the presence in urine of a few billionths of an ounce of acetonitrile, formed when tobacco is burned, is proof that the person has smoked recently. Also the amount of acetonitrile is an indication of how much tobacco has been consumed.

• Science News Letter, 84:409 Dec. 28, 1963

Nature Note

See Front Cover

➤ OF ALL nature's feathered folk, many consider the sober-faced penguin who lives at the southern end of the world the most interesting.

Apart from man, the penguin is the only creature in the world to go about habitually in an upright position.

This erect habit, coupled with the shortness of their legs, compels them to a very short-strided waddling, often hopping, gait, making them look comical to human eyes. However, the penguins are never seen laughing at each other. In fact, they are about the most sober, humorless birds in the world.

Their affairs are conducted with the utmost seriousness, and in their formal black and white dress, as seen on this week's front cover, they strongly resemble some Old World town councillors. The photo was taken during the U.S. Navy's Operation Deep Freeze in the Antarctic.

Originally from a line of feathered and flying ancestors, the penguin has become almost exclusively a swimmer today.

The wings have become flippers, paddles and almost fins. In the water, they propel the penguin along, while on land they are used for fighting and sometimes walking.

The penguins breed in immense rookeries in Antarctica and the young are cared for by the community as a whole. A recent expedition to the Antarctic uncovered a community burial ground—the bottom of an icy, cold lake where the chilly water preserved the bodies in perfect condition.

• Science News Letter, 84:409 Dec. 28, 1963

