

MEDICINE

Link Smoking, Bronchitis

► CIGARETTE SMOKING was found to be the major factor in the prevalence of chronic bronchitis among a group of 1,317 men surveyed in the Detroit area.

Results of the survey, made by interviewing, pulmonary function tests, and chest X-rays, are published in *The American Review of Respiratory Diseases*, July, 1962, journal of the American Thoracic Society. The authors are Drs. Geoffrey L. Brinkman and E. Osborne Coates Jr., of the Henry Ford Hospital, Detroit, Mich. The study was aided by a grant from the National Tuberculosis Association.

Four groups of men whose ages ranged from 45 to 65 were included in the study. Group 1 had no industrial exposure (175 persons); group 2 had industrial but no silica exposure (598 men); group 3 had silica exposure for less than 20 years (404 men); group 4 had silica exposure for more than 20 years and X-ray films of the men (140) showed silicosis.

The highest prevalence of bronchitis was found in group 1—men in non-industrial occupations among whom the prevalence was from 25% to 42.5%, increasing with

TECHNOLOGY

Chemical Timing Device For Use as Parking Meter

► AN INEXPENSIVE chemical timing device—in the form of a colored card a motorist could apply to the inside of his windshield when parking in city controlled parking spaces—may some day eliminate expensive parking meters.

The idea for the new timer, which he describes as a “kind of parking stamp,” was conceived by a Chicagoan, Felix D. Kolben.

The timer stamp is a chemically coated dark green card encased in transparent plastic with a tiny pin hole at one end covered with a short strip of adhesive. To start the “meter” a motorist would simply peel off the adhesive and let air into the card. With an “hour” stamp, the dark green card, in an hour's time plus or minus a few minutes, would turn a pale yellow, almost white.

Mr. Kolben suggests that his timer stamp can save local governments much of the high costs they now bear for meter purchase and installation, maintenance and coin collection.

Using the timer stamp parking plan, local officials would need only to post signs designating an area as a parking zone and cite the parking rate for that particular zone.

He also believes his timer device would be welcomed by change-short motorists as a replacement for parking meters. By keeping a supply of the timer stamps in his car, the motorist would avoid the sometimes fruitless search for small change now necessary each time he pulls into a conventionally controlled parking space.

Mr. Kolben believes the device could have many applications; in the home and in numerous industrial operations.

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age until 60 years. The second-highest prevalence was in the silicotic group, all of whom were at least 50 years of age.

While the amount of chronic bronchitis in the nonindustrial group seems to suggest that “a clean environment was more harmful than the usual dirtier atmosphere associated with work in industry,” the authors point out that two other factors must be considered. First, the nonindustrial group had a greater proportion of smokers “who thereby create their own highly polluted atmosphere, the effects of which may outweigh any ill effects resulting from exposure to industrial dusts.” Second, the nonindustrial group may have had a greater awareness of cough and sputum “and consequently the difference noticed in the prevalence may be more apparent than real.”

While there was no appreciable difference in the amount of bronchitis in the non-smoker and the light smoker, there was a marked increase in prevalence in both the moderate and heavy smoker, according to the authors.

“Between the nonsmoker and the heavy smoker,” they state, “there was a significant difference at all age levels, the observed difference being at least three times the standard error.

“While increasing age results in a slight increase in the prevalence of bronchitis, age is not as important a factor as cigarette smoking.”

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FOOD TECHNOLOGY

Powdered Butter That Will Not Melt Developed

► POWDERED BUTTER has been developed. It is a spray-dried product with the same fat content as butter, 82%. It also contains 15% milk protein and a proportion of added minerals.

Powdered butter cannot be turned into normal butter merely by adding water. It can, however, be used with advantage for many purposes such as in ice cream, cake mixes, white sauce and frying batter, because of the ease with which it can be mixed with other ingredients.

In its favor is the significant protein content. Butter contains virtually no protein.

Important is the fact that it does not melt in hot weather. This should make it popular in tropical climates.

Because the spray-drying process costs more than churning, powdered butter will not be cheaper than normal butter. But it contains a wholesome inexpensive protein and is more convenient for some purposes.

Whether powdered butter becomes an important food will depend on economic factors and effective promotion.

The development was by the Dairy Research Section of the Federal Government's Council for Scientific and Industrial Research Organisation's laboratories, Melbourne, Australia.

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Do You Know?

In professional *baseball*, the batted ball may travel at 100 to 120 miles per hour, a fast pitch at 90 to 100, and the bat can be swung at speeds up to 115 miles per hour.

U.S. plant quarantine inspectors intercept a *plant pest* every 20 minutes.

Solar *energy* reaches the earth's surface near the equator at a rate of one-sixth horsepower per square foot.

The *cockroach* is suspected to be a transmitter of infectious hepatitis.

A new variety of *fish* has been developed by crossbreeding ocean salmon and freshwater trout.

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