

PUBLIC HEALTH

Retail Cotton Not Sterile

Living microorganisms found in 14.2% of samples of "sterile" cotton bought in Los Angeles stores. More stringent control program advocated.

► **STERILE ABSORBENT** cotton sold in retail stores is not always sterile. The present control program of the U. S. Food and Drug Administration is "not adequate to assure the consumer of the sterility of each package of market cotton."

This charge is brought by two medical scientists in a report to the *Journal of the American Medical Association* (Aug. 9). They are Dr. John H. Silliker of the University of Rochester, N. Y., School of Medicine and Dentistry, and Dr. Eugene P. Hess of Los Angeles City College, Calif. Their report is based on studies made while both were associated with the University of Southern California.

They bought samples of "sterile" market cotton at retail stores in various parts of Los Angeles. Usually a single four-ounce roll of a nationally prominent brand was bought from each retailer, without mention of the survey.

In their tests of this cotton, they found 12 out of 85 rolls, or 14.2%, were contaminated and had in them microorganisms capable of living.

"These findings," they state, "indicate that there should be a more stringent control program on the part of both the producers and the Food and Drug Administration in the case of 'sterile' market cotton."

Because organisms capable of life were found at all different levels in the roll of

cotton, they say there is need for a rigorous investigation into the insulation and protection against heat given to bacterial life at the center of cotton, gauze or even a hospital surgical pack.

"The consumer's guarantee of sterility in products labelled 'sterile' lies chiefly with the producer," Drs. Silliker and Hess state. "In the case of 'sterile' market cotton, the control program of the Food and Drug Administration in the Los Angeles area at least, consists of taking random samples at periodic intervals. These are sent to the Federal Drug Administration in Washington, D. C., for sterility testing. Results of these investigations are not available. In view of this, it was decided to make a survey of 'sterile' market cotton to determine whether the present control program is adequate to insure sterility in all packages of cotton."

Deputy Food and Drug Administrator George P. Larrick told *SCIENCE SERVICE* that although he has not yet seen the Silliker-Hess report, he will make a thorough investigation of the situation and will start by going to see the two scientists.

Since an improvement in the cotton sterilizing process some years ago, so many hundreds of samples have been sterile that the Food and Drug Administration has cut down on the number of samples tested.

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MEDICINE

Treatment of Asthma

► **THE PATIENT** with chronic asthma has a rough enough time without being told that he has an incurable disease he must learn to live with, in the opinion of at least one doctor.

"Nothing could be farther from the truth," this physician, Dr. H. Bernard Tillman of Springfield, Mass., declares in a report in the *New England Journal of Medicine* (July 31).

The patient with long-standing asthma who has developed advanced emphysema, bronchitis and bronchiectasis has irreversible anatomic changes from which the outlook is poor. But Dr. Tillman thinks that this state of affairs can be prevented by proper management.

Treatment, according to his suggestions, is in two phases. The patient gasping for breath in an acute attack of asthma must of course be given treatment that will promptly relieve his air hunger. Commonly used medicines for this are ephedrine, epineph-

rine, also called adrenalin, and aminophylline; in emergencies, cortisone or ACTH.

But these medicines which relieve symptoms do not give lasting relief. Many asthmatics have had the discouraging experience of being treated with one after another of such symptom-relieving medicines, only to find that each in turn loses its effect.

After the acute attack is over, and sometimes the patient in the acute attack is best cared for in a hospital, the patient should go back to his doctor for a thorough examination and tests to determine the cause of the asthma.

Important at this point is a careful history. The doctor needs to know whether the attacks come more often in summer or winter, whether the asthma is worse outdoors or indoors, in dry weather or damp weather. Symptoms outdoors, especially in dry weather, suggest pollens as a cause. If damp weather makes the asthma worse, molds may be the cause.

Careful examination is needed, also, to see whether there is any focus of infection in teeth, sinuses or elsewhere that may be causing the trouble. When the cause has been discovered, treatment can be planned to stop the asthma.

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BIOLOGY

Quest for Whale Hair Completes Collection

► **THERE ARE** now whale hairs, about 30 of them, in the world famous hair collection of Dr. Leon A. Hausman, Rutgers University biologist and authority on hair.

Two months ago Dr. Hausman broadcast an appeal for whale hairs while being interviewed by Watson Davis, director of *SCIENCE SERVICE*, on his regular *Adventures in Science* program over the CBS Radio Network. He had thousands of different kinds of hair, but none from whales. (See *SNL*, July 12, p. 21.)

D. H. Bates of Portland, Ore., answered the call for the rare hairs by telling the British Columbia Packers, Ltd. of Whaling Station, Coal Harbour, B. C., of the need.

To Dr. Hausman at Rutgers were sent 10 hairs from each of a 63-foot blue whale, a 44-foot humpback whale and a 58-foot finback whale. The donor told Dr. Hausman that these are about all the hairs there are on a whale, situated directly on the point of the nose.

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MEDICINE

Pounds of Liver Daily Raise White Blood Cells

► **SOME MEDICAL** students at the University of Cincinnati each ate one and one-half pounds of raw calves' liver daily for four weeks as part of a scientific study.

As a result, the number of one kind of white blood cells, called eosinophils, increased in their blood to far above normal and stayed at that high level for two and a half to three years. The students remained well and free from disease during all that time.

The experiment was reported by Dr. R. C. Muehrcke of Cincinnati General Hospital at a conference on eosinophils held at the Jackson Laboratory, Bar Harbor, Me.

The eosinophil cell in the blood is one of the mysteries medical scientists are currently trying to solve. Only a small percentage of white blood cells is made up of eosinophils, but these small-sized, small-numbered cells are believed implicated in leukemia, asthma, eczema, arthritis, anemia, and even perhaps, mental disease and cancer. Some diseases cause an increase and others a decrease. The number of them is believed to indicate activity of the pituitary and adrenal glands.

In the liver study Dr. Muehrcke also found that cooked, pureed and raw beef liver, and 35 different liver extracts did not cause any increase in numbers of eosinophils.

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