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NEW TANNING PROCESS IMPROVES WASHABILITY OF SHEEPSKINS

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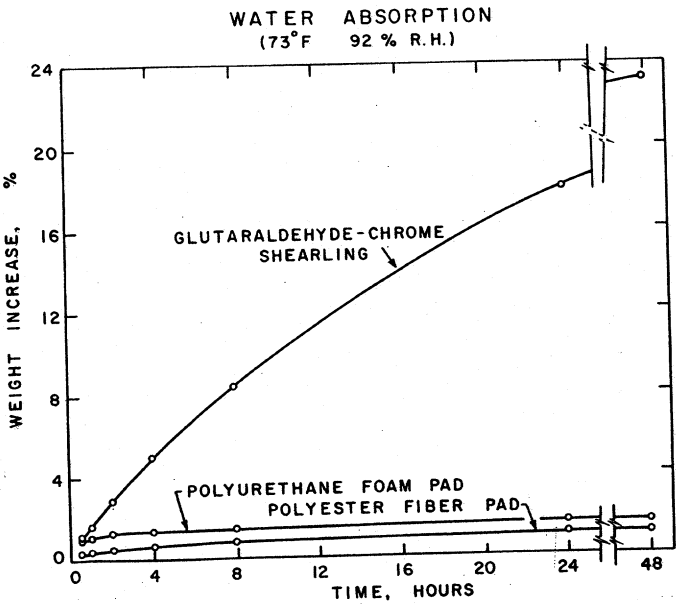
Editor's Note:
The ability of sheepskins to prevent bedsores, particularly in elderly patients, is widely recognized. Now as a result of a new process for tanning, washing should no longer present a problem. Here is a special report on the development.

Wool and leather have the ability to absorb a large amount of water. This property of natural fibers led, long ago, to the use of shearlings (sheepskins with the wool trimmed but not removed) as hospital bed pads. The absorption and transmission of perspiration by the wool and leather are desirable for the prevention and treatment of decubitus ulcers.

The use of shearing bed pads has been limited by the tendency of the leather to shrink and become firm unless washed very carefully. We have found that the ease of washing is improved by using glutaraldehyde in the tannage.

Shearlings tanned by this new process can be laundered in an automatic washing machine using a mild soap or detergent at a moderate temperature, followed by a disinfectant in the last rinse water. Such shearlings have continued to be serviceable after as many as 15 to 18 washings in tests conducted by Philadelphia hospitals.



Accordingly, glutaraldehyde-chrome-tanned shearlings were evaluated in this experiment. A study was made of the rate and amount of water absorption of glutaraldehyde-chrome-tanned shearlings and two man-made products.

Two-inch square pieces were suspended in closed containers at a relative humidity of 92 per cent and a constant temperature of 73° ± 1°F. These were weighed at intervals. The percent gain in weight due to absorption of moisture was plotted against time.

The graph shows that shearlings began to absorb water rapidly and continued to do so during the 48-hour period of the test. The synthetic materials absorbed only a small amount of water during the first 24 hours and none during the last 24 hours.

These data lend support to the current belief that shearlings are superior to the hydrophobic materials for the prevention and cure of bedsores as well as for the comfort and well-being of the patient.