

SYMPOSIUM ON SOAP BACTERIOSTATS

conducted by the American Oil Chemists' Society

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INTRODUCTION

There has been a remarkable growth in the use of antibacterial agents in toilet soaps during the past 15 years. In that time, sales of these products have grown from less than 10% to almost 50% of the \$300-million-a-year, toilet-soap market in the United States.

Initially antibacterial soaps were introduced and promoted primarily because of their effective deodorancy performance. Bacteriostats inhibit the growth of bacteria which cause the formation of perspiration odor. While effective deodorant action is still the prime function of these soaps today, interest in these products has expanded to their application in the field of medicine and public health. Bacteriostatic soaps are widely used in hospitals to aid in the control of cross-infection, and there are good indications that the regular use of antibacterial soaps offers some protection against various infections. Considerable valid statistical information has been accumulated by workers in the field, showing that some antibacterial soaps have a beneficial effect and aid in the management of secondary skin infections, cuts and scratches, diaper rash, and acne vulgaris.

The number of chemicals which have been found useful as bacteriostats in toilet soaps is surprisingly limited. Hexachlorophene, the first really effective and safe soap germicide, was introduced in the late '40's and continues to maintain a leading position. It is widely employed in surgical scrubs and in a large number of antibacterial products intended for medical use. The only important other materials which have been added since that time are the brominated salicylanilides and the halogenated carbanalides. These germicides are often used in synergistic combinations, where total bacteriostatic activity of the mixture exceeds the sum of the activity of the individual components. Undoubtedly new materials with a wider spectrum of activity will become available in the future and find their way into toilet soaps.

During the past five years, considerable progress has been made in the techniques of testing and evaluating soap bacteriostats. The difficulties in getting meaningful and reproducible results for such properties as degerming, adsorption or deodorancy, and the interpretation and correlation of the data have been a definite drawback in present methodology and have sometimes resulted in conflicting claims.

It was the purpose of the Symposium at the 40th Fall Meeting of the American Oil Chemists' Society in Philadelphia to review these developments and explore various new methodologies currently employed in the scientific investigation of bacteriostatic cleansing agents. Some of the work now being done and current thoughts on the soap germicide field are presented in the following papers.

ERIC JUNGERMANN

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