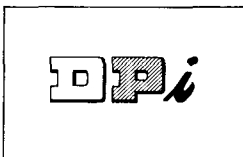


*We just like to help*

We go all out to help anyone who buys vitamin A for margarine or whatever.



**DISTILLATION PRODUCTS INDUSTRIES**  
*is a division of*  
**EASTMAN KODAK COMPANY**

*And we're especially fond of people who buy our fine Myvax® Vitamin A*



**John P. Harris (1917)**, president of the American Oil Chemists' Society in 1933 and treasurer 1945-47, has been selected to receive the Fuller Award for 1960 by the Illinois Section of the American Water Works Association. The honor is given "for his help and advice to water plant operators on methods of producing a better product, and for his continued efforts toward the advancement of knowledge among Illinois Water Works men through his active association with such groups as the Illinois Operators Short Course, the Northern Illinois Water Works Works Institute, the Illinois Operators Conference, the West Shore Water Producers

Association, and the Illinois Section of the A.W.W.A., of which he was chairman in 1946." The award will be presented in Miami, Fla., this spring.

but at that time the price of coco oil was only  $1\frac{1}{2}\text{¢}$  higher than tallow and there was little incentive to carry on the research program. I wish we had continued to work on the problem because the difference in price now is about  $13\text{¢}$ , and it would be nice to knock off 2 to 6 carbon atoms from stearic acid to satisfy our lauric, myristic, and palmitic acid requirements.

**P**ASSING on to new products, we should see new series of fat chemicals develop, say those based on phosphorous or silicon, in the same manner as the nitrogen derivatives. Peroxides, aldehydes, ketones, and a host of others will find utility.

We must remember however that a substantial portion of our chemicals can be produced or replaced by other chemistry from other starting materials. This is a greater threat in the next decade than in the past. We have Ziegler chemistry whereby  $\text{CH}_2$  groups can be strung together by first putting them on tri-alkyl aluminum, then by hydrolyzing to the corresponding alcohol. A plant is being built to make a reported 50,000,000 lbs. per year of medium-chain length alcohol, principally lauryl alcohol. The "oxy" process, alkylation techniques, etc., are constantly being perfected, and many compounds, even though they differ from fat chemicals in that the carbon chains are usually branched, are being produced in ever-increasing numbers. Many of these chemicals perform the same functions as our straight-chain variety now, and competition from them will become even more intense in the future.

Actually the possibility of the petro-chemical boys running us out of business is rather remote. As they go farther afield and drill deeper wells for their raw material, all we need to do for ours is eat more sirloin steaks. Supplies of vegetable and animal fats should be ample in the foreseeable future, and it is reasonable to assume that, as long as this condition exists, prices will remain moderate. It is not logical for anyone to go to the trouble of hooking up 16 or 18 C atoms in a straight chain and wind up with a 3 or 4¢ crude fatty acid. We have an excellent, cheap, and pure raw material, and the possibilities for making useful chemicals are many.

As I prepared the outline for this paper, I could not help recalling a similar talk with the same title which I gave about 20 years ago at a spring meeting of the American Oil Chemists' Society in New Orleans. It was during that meeting that Ed Bailey and I became very well acquainted. We both allowed that while nature synthesized fats superbly for her purpose, they just were not right for ours, and we both vowed that we intended to do something about it. We have, I believe, come part of the way toward reaching our goal, and I am sorry Ed is not with us now to share in our achievements. If he were here, I am sure he would join me in saying, "Good, but now let's get back into our respective laboratories and plants tomorrow and get some more work done."