## Protected from beginning to end ... thanks to



Crackers

Potati

Chips

Any fat-containing food product is better protected against rancidity from the time you make it until your consumers eat it because Sústane BHA has the greatest carry-through of any antioxidant.

Cooking, baking, deep frying ... no matter what your processing method, Sústane BHA-protected shortening insures just-made flavor to your finished food product or prepared mixes far longer.

Because Sústane BHA is thermally stable and does not react with carbohydrates, it protects fats against rancidity after mixing with other product ingredients and after processing, even at high temperatures.

Sústane antioxidants come in several convenient, economical forms for maximum time, labor and money savings. We will be glad to recommend the Sústane formula best suited to your product.

New and Exclusive! Sústane BHA is the only antioxidant that comes to you in the vacuum-sealed, tamper- and weather-proof, bright yellow can.



Problem Corner . .

January 7, 1958

Question I am interested in obtaining data on the fat content of various meats as well as poultry and fish. In addition, I am interested in data on the melting and smoking points for edible fats such as tallow, lard, and the major vegetable shortenings.

FROM NEW YORK

Answer

The best source of information for the kind of data you request is in the Agricultural Handbook No. 8, Composition of Foods: Raw, Processed, Prepared. It is published by the United States Department of Agriculture (1950) and is available from the Superintendent of Documents, United States Government Printing Office.

The data you request regarding the melting and smoking points of various edible fats are not specifically available. The smoke points of fats and shortenings vary with the free fatty acid content and with the content of various additives, such as emulsifiers. Well processed lards, tallows, oils, etc., with no additives and extremely low free fatty acid content smoke at about  $425^{\circ}-450^{\circ}$ F. The factors mentioned above tend to lower the values below this figure.

The melting points of lard range from  $33^{\circ}-46^{\circ}$ C. and of tallow from  $40^{\circ}-48^{\circ}$ C. These values vary with composition, and this changes with the diet of animals and with the carcass location of the fats used in production.

The melting points of shortenings vary with the composition. These variables are so complex because of the blending of fats with differing characteristics that any generalization is quite untenable. Properly the melting and smoke point of any edible cooking fat or shortening is only that which is determined experimentally on each individual sample.

L. R. DUGAN American Meat Institute Foundation, Chicago, Ill.

## Fette · Seifen · Anstrichmittel

Editor: Prof. Dr. H. P. Kaufmann

is the leading scientific journal in the field of fats and fat products as well as their associated products in Germany. It is the organ of Der Deutschen Gesellschaft fur Fettwissenschaft (DGF).

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