• *Report on Fats and Oils*

Edible Tallow

SOME YEARS AGO as it became more apparent that domestic use of tallow in soap would decline, packers engaged in a broad research program to chase up new uses for tallow. Better rendering techniques were one result, and these methods produced a much improved, edible beef fat that lacked only one thing, a market. At roughly the same time shortening manufacturers were in the process of perfecting ways of improving the characteristics of lard as economics dictated that a blended animal/vegetable shortening should be marketed. When the lard breakthrough was made, the next step, to edible tallow, was not difficult. Usage expanded rapidly.

Today there are numerous shortenings on the market that contain considerable edible tallow, and some are composed entirely of it. The full tallow shortenings are sold mostly on strong price-appeal. Many other shortenings contain moderate amounts of edible tallow with an apparent tendency to cluster around 25% of the total fat (of those that contain it at all). Factory people like to work with edible tallow. It poses few handling problems, once they are used to it, although it is a bit tricky at first. Hydrogenation problems and expense are a shade less than with other items although deodorization time and loss are a shade higher. Satisfactory stability is easier to obtain than with lard, and texture problems are considerably less than with lard.

The suitability of edible tallow is not the same in all shortening applications however. It probably works best for deep-fat frying and as a general-purpose "family" shortening. It is unsuitable for some commercial applications, notably bread and soda cracker manufacturing. In these latter uses it appears that its solidity over a considerable temperature range tends to make for uneven dispersion in large batches. Census Bureau figures indicate that upwards of eight million pounds a year of edible tallow are consumed in margarine. I suspect that a considerable portion of this is experimental although that sounds like too much experimental oil. Most manufacturers who have tried margarine mixes with fair percentages of edible tallow have been disappointed with results.

Inherent problems seem to be presented. The plastic range of tallow requires the addition of so much "soft" oil that a considerable portion of the economic advantage is lost. This is particularly true when lard and edible tallow are about the same price. In addition, consumer reaction is unimpressive. Taste panels seem to be able to detect samples with edible tallow, especially when used, say, on hot rolls. These two problems probably preclude widespread usage in margarine in the foreseeable future.

The price movements of edible tallow are closely, but not wholly, related to those of lard. As pointed out above, although the two are similar, lard is more flexible and probably always should command a small premium. In recent years there has been a strong tendency for edible tallow prices to gain on lard. In 1959 they were so close in price for such a long period that it appeared to many observers that from then on the two would be as inseparable as Siamese twins. This has not turned out to be the case. A slight increase in cattle slaughter this year plus a slight decrease in hog slaughter caused a mild but persistent tendency for tallow to lose ground. This served to underline the above-noted greater flexibility possessed by lard.

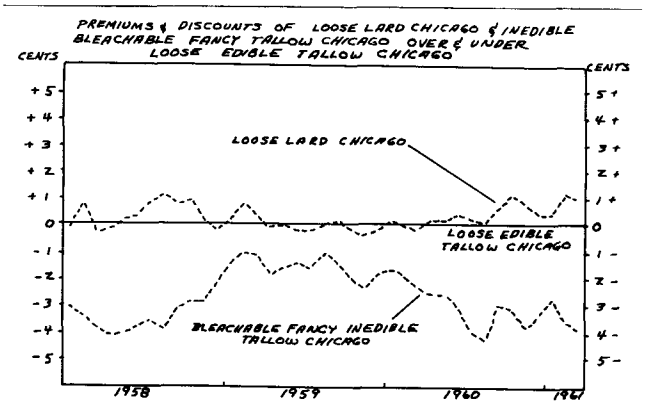

FIG. 1.

The current (early March) discount of 1¼¢ under lard however may be too large. The edible tallow price also has to be related to the price of fancy inedible as both are much the same item. Edible production costs more as it requires special handling. An exact cost is impossible to estimate. It depends, for instance, on the age and type of equipment available and the plant labor-supply. It may also depend on how long the plant has been opened; an old plant is likely to have entrenched union work rules, which means that a larger crew is required for this task than in a newer plant. A 1 to 2½¢-a-pound range over inedible is probably a reasonable guess. As the spread passes over 2½¢ above edible, production is likely to increase. As it dips below 1¢, edible production is likely to be cut.

In recent months there has been a noticeable pick-up in exports. Overseas buyers may be getting the message that edible tallow is a reasonable substitute for lard, especially when the discount is attractive. One place that the message is not getting through is in the Food for Peace administration, which currently is involved in buying considerable quantities of shortening for overseas donations. The specifications call for 20% cottonseed oil and 80% soybean oil. Their shortening costs would be a lot less. There is no reason to suppose, as yet, that donations will go to areas where animal fat is taboo.

In years to come, as newer plants are built, edible tallow is likely to become of increasing importance in the domestic fat picture. Unlike lard, it has no direct consumer market. This means that it will compete with lard for that all-important shortening demand. Currently cattle on farms and cattle on feed are at a very high level. This means edible tallow production will be moving up.

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• *A.O.C.S. Commentary*

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filmed record of the entire manuscript collection of the famed Vatican Library.

Washington University, incorporated as a seminary in 1853, has grown to international fame, and in recent years has become noted for its contributions to research in the field of atomic energy. Under the leadership of its past chancellor, Arthur Holley Compton, a Nobel prize-winning physicist who was a key leader among the atomic scientists, the university gained acceptance as the "M.I.T. of the Midwest."

ST. LOUIS is the home of the National Baseball League's Cardinals, champion Hawks of professional basketball, and the national champions in soccer. It is a brewing center, home of Anheuser-Busch and other well-known local and national breweries.

Ralston Purina is headquartered here at the world-famed Checkerboard Square. The research laboratories of Purina are true show places, as is the Ralston Experimental Farm, 50 miles to the west of the city.

St. Louis is famous for its zoo with the daily animal shows, which rival any commercial professional circus exhibitions. The city prides itself on the Veiled Prophet parade and its social activities; the busy river-front with its boat traffic is another very interesting point. The St. Louis city parks are show places well known throughout the country.

St. Louis is an ideal convention city; in close proximity to the convention hotel are many and diversified shopping and fashion centers. Theatres, night clubs, and restaurants present excellent entertainment.

The St. Louis convention will give its visitor-guest-delegate what he asks for: new ideas for more effective operation, fine accommodations, and the best of divertissement.

E. L. METCALF, general chairman