The Margarine Industry of Europe

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R ECENT mergers, acquisitions by the European margarine trust, and intensive merchandising campaigns throughout Europe to increase the popularity of margarine and expand the consumer markets for the product, have accentuated interest in this industry abroad.

This article, therefore, as it embraces all of the leading margarine producing countries of Europe, is offered to fill a want and supply a service of information of particular interest to manufacturers of margarine and producers of other fats for food purposes in the United States.

TACHE consumption of margarine is steadily on the gain in the United States. From a volume of only 145,228,000 pounds (colored and uncolored combined) for the whole country in 1913, production had risen to 281,082,000 pounds in the first normal post-war year 1921. Last year our total production was 294,609,000 pounds and represented the largest per capita consumption on record save for the war years (1917-1919 inclusive). This brief foreword is supplied to enable the reader to make his own comparisons between the United States and the different European countries in regard to production, consumption, etc.

The trend of consumer preference toward margarine manufactured from vegetable fats, a mixture of animal and vegetable and hardened fish and whale oils is most apparent in each of the European countries where a study of the industry was undertaken. As a general proposition, statistics in the different countries make no separation of the product in accordance with its composition but the increasing consumption of vegetable fats is very conclusively shown by investigations conducted and from the ingredient schedules which in certain instances were found to be recorded in much the same manner as here in the United States.

The development of the margarine industry in Europe is reflected by the figures given in the following table. The past year has witnessed the merger of the two largest European producers. This new combine has since acquired control of numerous smaller and independent churners with the resultant economies in manufacturing and distribution costs arising from centralization of production and sales activities. All of this may be viewed as promotive of an even greater expansion of margarine production in the future despite the rapid growth of the industry in recent years.

A series of tables has been prepared and these will be found on the following pages, setting forth in as detailed a manner as possible such facts as could be assembled pointing to consumption trends. A separate section has been assigned to each country.

A brief statement at this juncture concerning the usual composition of European margarine should be in order. Vegetable oils or fats comprise a much more numerous category than those of animal origins. Hard vegetable oils such as coconut and palm kernel and soft oils including peanut oil, soya bean, cottonseed, sesame and sunflower and the more inexpensive grades of linseed oil are used together with comparatively small quantities of several of the lesser known vegetable oils. Animal fats employed embrace premierjus (oleo stock), oleo oil and stearine, edible tallow and neutral lard each playing its part in the ingredient schedules of the European industry. Hydrogenated fish and whale oils are also available since refining and deodorizing processes remove all odor and characteristic taste. The oils commonly utilized include sardine, pilchard, herring and cod oils.

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PRODUCTION OF MARGARINE IN EUROPE

FEBRUARY.	. 1930

(Thousands of pounds omitted) 1913 1920 1924 1925 1926 1927 1928 Pounds Pounds Pounds Pounds Country Pounds Pounds Pounds (2) 97,554 84,739 ¹ 358,400 ¹ 448,000 United Kingdom ¹ 188,160 (2) (2) (2) 95,429 93,854 (2) 3 111,540 60,226 51,784 94,376 72,001 94,430 Norway (2) ⁶ 122,796 Sweden 65,476 90,711 157,960 152,680 ¹ 168,300 Denmark (2)140,440 153,120 (2) (2) * 21,826 (Ź) * 18,519 (2) (2)* 15,432 Finland ¹ 496,035 959,001 705,472 771,610 992,070 992,070 Germany _____ ° 218,859 288,312 51,700 339,830 194,937 291,078 296,263 (2) Netherlands 89,100 ⁵ 26.400 50,600 59,400 61,600 79,200 Belgium (2)(2) (Ź) (2) $\binom{2}{(2)}$ $\binom{(2)}{(2)}$ (2) (2) $\binom{2}{(2)}$ France (2)(2) Spain Estimate but closely approximate. Production statistics for this year not available. 3. Preliminary.

4.

Unofficial. Statistics for 1914. Statistics for 1921.

Note: Values have been omitted because of the impossibility of securing such data for the majority of the countries.

Great Britain

THE growing scarcity and rising cost of animal fats led to the steady substitution of vegetable oils in the years immediately preceding the Great War. During the war period this transition was greatly accelerated by the acute scarcity of animal fats and a consumer preference coincident with the improvement in manufacturing processes. Prior to the war animal fat margarine led in popularity in the ratio of seven to three. These proportions are now reversed but the ascendancy of vegetable oils as the principal fat component of margarine is threatened by the introduction into the edible field of hardened whale and fish oils which are relatively cheaper in cost than vegetable Especially does this hold true with fats. respect to the lower priced brands of margarines but inasmuch as margarine churners are not required by law as in the United States to make returns to the government on the nature and quantity of the various ingredients entering into their product, such information cannot be furnished.

Margarine is employed very largely as a butter substitute for table use but to an increasing extent is entering into cooking such as frying and as a shortening in baking. In Great Britain the industry is dominated and controlled by the Margarine Union since its recent merger with Lever Brothers, which does not become fully effective until January 1, 1930.

It might be stated, too, that margarine in Europe is beginning to supplant lard to an increasing extent especially in those countries where it is the common household custom to use lard in place of butter as a spread for bread.

Germany

THE largest consumer of margarine in point of volume is Germany and the industry is self sustaining as evidenced by the unimportant exports and imports of this country. Margarine of foreign origin is excluded by a duty of 20 marks per 100 kilos (\$.0217 per lb.). In the past about 60% of the German production was manufactured in the Rhine Provinces, chiefly the cities of Cleve and Goch with other plants at Emmerich, Duisburg, Neuss, Krefeld and Cologne in the same province. It is probable that such a large fraction of the industry was localized in this province because of excellent transportation facilities afforded with the port of Rotterdam for the import of raw materials and the advantage of being nearby industrial centers. The close proximity to dairy districts may likewise be reckoned as a factor influencing the establishment of such a large number of plants.

As in the case of Great Britain and most of the other European countries of which more will be said in following sections, the Margarine Union has acquired many of the factories formerly independent. This has made the lot of the remaining producers a rather unhappy one as they find it increasingly difficult to compete with the combine which has closed many of the smaller plants it has taken over in order to concentrate production and curtail overhead making possible in this way the introduction of latest The approved manufacturing methods. ramifications of the Margarine Union are many and embrace in addition to churneries, soap factories, oil seed crushing mills and refineries, hydrogenation plants and sources

of raw material. In short every step in the chain of production from the raw material to the finished product can be dictated by the Union. Incidentally it might be added that oilseeds are admitted into Germany free of duty while animal fats are taxed (neutral lard and oleo oil \$.0065 per lb. and premier jus \$.0076 per lb.).

TABLE II GREAT BRITAIN*

	(Thous	ands of	pounds	omitted)	
	、		F	Net Pe	er Capita
				for Cor	sumption
Year	Production	Exports	Imports	Consumption	Lbs.
1913	188,160 1		170,049	3 58,209	7.76
1924	358,400 1	_	147,319	495,719	11.77
1925	2		155,331		
1926	2		149,347	a Million and a	
1927	2	_	133,745		
1928	448,000 1		123,512	571.512	13.28
SFT 1	T D T at	1	1	1 181-1	

* Including England, Scotland and Wa'es. Note: Exports from United Kinedom have always been negligible and have therefore been disregarded in the fore

going tabulation.

TABLE III

GERMANY (Thousands of pounds omitted)

	,		Net Per Capita			
				for Cons	umption	
Year	Production	Exports	Imports	Consumption	Lbs.	
1913	495,035 1		´ —		7.93	
1922	992,070 ¹				15.87	
1923	661.380 ¹				10.36	
1924	705,472 ¹				11.02	
1925	771.610 ³	-			12.35	
1926	959.001 ¹				15.43	
1927	992,070 ¹	1.993	273.		15,87	
1928	992.070 ¹	3,181	234.		15.87	
- T 1	1					

Includes artificial butter. Estimate but closely approximate.

TABLE IV

Denmark (Thousands of pounds omitted)

					er Capita
				for Con	nsumption
Year	Production	Exports	Imports	Consumption	Lbs.
1921	122,795		·		35.27
1922	123,237	_		-	34.61
1923	143,294				43.55
1924	152,999				43.65
1925	154,763				44.09
1926	153,440		******		44.09
1927	158,290		_		45.19
1928	168.300 ¹				—

Note: Exports and imports omitted because insignificant.

Sweden

A NOTHER country where the manufacture of margarine is essentially a domestic industry is Sweden. Fourteen factories were in operation in 1927 which in comparison with many of the European countries is indicative of a high per unit output. The industry is growing fast, several of the fourteen factories mentioned having been operating but a few years and while per capita consumption data are lacking for the past four years, it is approximately correct to state that per capita consumption has more than doubled in this short time and may be expected to increase still further.

The Margarine Union now controls four of the Swedish margarine factories three of them numbered among the largest in Sweden and one of which manufactures nothing but vegetable margarine. However, although all of the remaining thirteen plants manufacture both animal and vegetable fat products not more than 5 to 10% is the former article at the present time and there are no mixed type products produced except for a vegetable margarine into which is churned either whale oil or butter. Coconut oil, peanut oil and highly refined soya bean oil, listed in the order of their importance are the vegetable oils employed to the greatest extent. American refined cottonseed oil has not been able to compete with these oils and consequently the importation of it has been much reduced of late years.

France

THE lack of production statistics and consumption data make it impossible to do more than hazard an estimate of the probable development of margarine manufacturing in France. A conservative estimate would place production at the present time around 66 million pounds. The vegetable fat product and mixed vegetable and animal types alone are manufactured, but this statement originates with unofficial sources and may not be entirely accurate. The Margarine Union is a dominating factor in the French industry and practically controls it.

Exports of margarine in 1926 were 12,667,-190 pounds; in 1927, 16,967,042 and last year, 15,262,445 pounds. The strictly vegetable fat product represented 60% of all exports in 1926 and was a slightly higher percentage or 63% last year. France imported in 1920, 71/4 million pounds of margarine largely from the Netherlands and to a far lesser extent from Belgium. Imports in 1920 were one hundred fold greater than during 1913 but were over $2\frac{1}{2}$ times again as large in 1924 and still greater or very nearly 25 million pounds in 1927. In this last year the excess of imports over exports was therefore about 10 million pounds.

Per capita consumption in 1913 was only .88 pound and it had increased to but 1.54 in 1924. France has the lowest consumption per capita of all the European countries possessing a margarine industry of any prominence. Vegetable margarine to which cream has been added is finding increasing favor with the consuming public because it resembles natural butter the more closely in taste. On the other hand manufacturers of pastry, pies, biscuits, etc. show a preference for the mixed vegetable and animal fat article.

(To be continued)