

The Mayonnaise Industry of the United States

Address Before Fourth Annual Convention of The Mayonnaise Products Manufacturers Association of America

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THE production of mayonnaise and related products is such a new development as a commercial enterprise in this country that the Bureau of the Census in taking the Census of Manufactures previous to 1927, never separated these products from "Sauces, salad dressings, etc." Those directly interested in the industry, and those which supplied the manufacturers with the necessary raw ingredients and containers were aware of the fact that the industry was growing, but none of these interests had any definite idea of the size of the business or the rate at which it was developing. The Census figures for 1927 show a production of mayonnaise of a value of slightly over 27 million dollars, cooked dressings just under \$700,000, and "other raw dressings" of about six and a half million dollars. Those figures are more inclusive than the ones presented here, as replies from all but the small producers are compulsory. In the absence of previous figures, nothing can be deduced from them as to the growth of the industry. With the desire to obtain some definite facts in this connection, the Mayonnaise Products Manufacturers Association of America called on the Bureau of Foreign and Domestic Commerce to assist them in the collection of such data as would tell something of the story of the development.

After a number of conferences with officials of the Association, a form of questionnaire was drawn up and submitted to a list of about 725 firms and individuals whose names were obtained from the Association and from other sources. The business mortality among the smaller organizations is apparently great, for of the questionnaires sent out, 167 were returned with the notation that the addressees were out of business, had moved, or could not be located for other reasons. Some 200 replies were received and of these, 148 contained more or less information that could be used in making the final tabulations. It will be noted that there still remains quite a large number of questionnaires which are unaccounted for. These are attributed to those who were too small to think it made any difference

whether they reported or not, and those who for various and sundry reasons did not care to reply. This latter class is undoubtedly large, but in view of the fact that such a survey had never been attempted before, and many of the men in the industry had not had a chance to learn what might be gained from a knowledge of the true facts regarding their own business, the failure to obtain more replies was not astonishing nor discouraging. It might be mentioned at this time that the Department of Commerce appreciates greatly the assistance rendered by the various trade papers which gave so much valuable publicity to the proposed collection of information from the producers.

For those who may be interested, there is included a copy of the questionnaire used. Compilations were made at the date submitted without any attempt to distinguish between the various types of mayonnaise referred to. In order to use many of the replies it was necessary to make a number of assumptions. These were based either on averages taken from completed replies, or from statements obtained from trade and other sources. The conversion factors referred to are: a weight of 7.4 pounds per gallon for both mayonnaise and salad dressing; a value of \$2.26 per gallon of mayonnaise, light or heavy; and \$2.66 per gallon of salad dressing and sandwich spread. Some questions may be raised over these figures, but it is not believed that their use has resulted in any considerable inaccuracies, partially as they must be reasonably correct, and partially because they were used rather infrequently.

The mayonnaise industry has been one of recent and rapid growth. Many of the larger operators were, only a few years ago, very small, and small manufacturers have been continuously growing larger. These rapid changes have made it impossible to obtain records of many firms over a period of years. As will be seen from the following table, only five operators gave figures for nine years, although twenty-three were able to furnish such information for five years. The growth of the

CONFIDENTIAL
Mayonnaise and Salad Dressing
Production Census

- Do you manufacture a heavy or a free flowing type of mayonnaise?
Heavy..... Free Flowing.....
- Please give production figures on mayonnaise and kindred products, such as salad dressings for as many years as possible.

IF YOU CANNOT GIVE ALL THE FOLLOWING—GIVE WHAT YOU CAN
MAYONNAISE

	Invoice Value	Volume Pounds or gallons
1920
1921
1922
1923
1924
1925
1926
1927
1928

SALAD DRESSING, ETC.

	Invoice Value	Volume Pounds or gallons
1920
1921
1922
1923
1924
1925
1926
1927
1928

- What proportion of your output is packed in the following size containers? Please estimate if exact figures are not available.

3 oz.....%	Pint
3½ ".....%	Quart
9 ".....%	Gallon
11 ".....%

Other sizes, giving volume:

..... oz.%
..... "
..... "

- What proportion of your output is mayonnaise?
Sandwich spread or relish%
Thousand Island or other dressing

(Estimate, if exact figures are not available.)

- What proportion of your output is sold under:
Your own brand%
Buyer's labels%
Unlabelled

- What proportion of your output is sold:
a. Direct to consumer%
b. Direct to retailer%
c. Through wholesale grocers%
d. Through chain stores%
e. In other ways (name)

- When is your peak season or which months do you consider the best?
.....

Company

Address

TABLE I.
Mayonnaise Production Trends (Dollars)

Number of concerns	1920	1921	1922	1923	1924	1925	1926	1927	1927
5	90,995	146,930	286,152	381,025	401,565	496,905	368,957	436,320	469,642
23	—	—	—	—	4,663,818	6,382,383	6,876,128	8,221,588	9,933,016
57	—	—	—	—	—	—	8,549,587	10,833,753	13,816,269
70	—	—	—	—	—	—	—	11,028,841	14,140,558

Salad Dressing Production Trends (Dollars)

Number of concerns	1920	1921	1922	1923	1924	1925	1926	1927	1927
17	—	—	—	—	1,572,160	1,762,163	1,952,868	1,950,529	2,193,523
43	—	—	—	—	—	—	2,802,428	2,879,282	3,275,094
54	—	—	—	—	—	—	—	3,046,338	3,530,229

industry is very well shown by this tabulation. The rate of growth for the five long time operations is almost the same as for the larger number of firms, manufacturing on a bigger scale for five years.

The same facts are shown in a different way in the next chart. The narrow line shows the changes which took place from year to year, and the broad line shows the average

rate of growth for both mayonnaise and salad dressings. The trend line is designed to eliminate the effect of variations in the output which take place from year to year, and to picture what is to be expected in the future if no unusual conditions arise. Attention is called to the fact that the growth of the industry is coincident with the increased use of fresh vegetables in the general dietary of the people

of this country and the tendency to turn over to the factory many of the operations which were previously part of the usual kitchen practices.

GROWTH OF SALAD DRESSING AND MAYONNAISE INDUSTRY

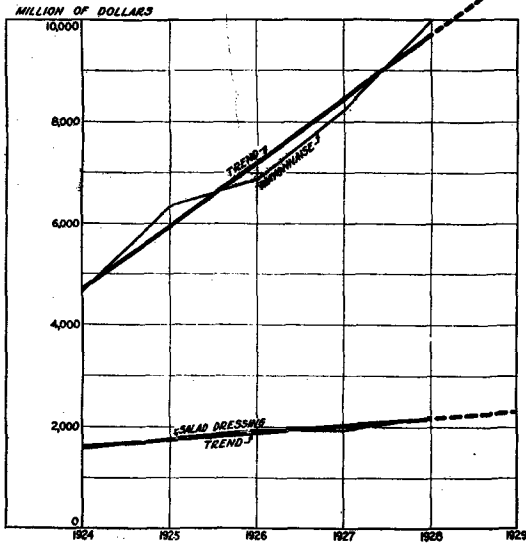


Fig. 1. Growth Chart

One of the questions in the questionnaire asked for the naming of the months which were most active. Replies indicated that the summer months were generally regarded as the most important in all parts of the country, but when considered geographically, there was noted a trend for the busy months to occur earlier in the season in the south and far west than in the northern and central parts of the country. The relative importance of the months appears in the next table. A total of 103 replies to this question were received. June and July each received 70 votes, the highest, and November was lowest with only 5. The distinctively poorer showing of the fall and winter months is outstanding. In view of the rapid increase of the consumption of fresh vegetables during this period it would appear that some judicious advertising during this time should be productive of valuable results. This could be done as part of a campaign of institutional advertising or by individuals who are so placed that they can collect the benefits of such a procedure.

TABLE II.

Peak Months in Mayonnaise Industry

June 70	March 22
July 70	October 17
May 66	February 8
August 55	December 7
April 42	January 6
September 40	November 5

Container Sizes

LIKE many other industries which use small containers, during the course of the year, a considerable number of sizes have come into use. Every investigation into this question has shown the same facts, and the absence of any very good reasons for the practices. Excluding the five gallon size, reports indicate that 21 different sizes of containers are used for mayonnaise, salad dressing and sandwich spreads. Of these, six, namely, the gallon, quart, pint, half pint, three and one half ounce and the three ounce sizes are used for over 85 per cent of the total amount reported sold by the 113 organizations which answered this question. The need for standardization and simplification of sizes is self evident.

TABLE III.

Distribution of Mayonnaise by Sizes of Containers

Size of Container	Number of Concerns Using this size	Percent of total in each size
1½ oz.	1	0.173
3 "	25	3.950
3¼ "	4	0.600
3½ "	51	13.275
4 "	3	0.044
5 "	1	0.001
6 "	4	0.344
6½ "	1	0.401
7 "	1	0.003
7½ "	2	1.560
8 "	80	37.050
8¼ "	1	0.001
8½ "	4	9.520
9 "	17	1.122
11 "	5	0.194
12 "	2	0.160
16 "	91	19.245
32 "	81	5.980
42 "	1	0.010
64 "	3	0.051
128 "	94	6.300
5 gal.	1	0.017

Number of firms showing production by sizes -- 113

The quantity of mayonnaise sold under the labels of the manufacturer appears very large in comparison with the practices of some of the other foodstuff industries where such information is available. The survey showed that 96 per cent is sold in this way, nearly 4 per cent under buyers' labels, and less than 1/20 per cent unlabelled. The necessity of

establishing and maintaining high standards of quality for products so distributed is evidently greater than with products which are sold in such a way that the actual manufacturer is unknown to the buyer, for unsatisfactory quality is immediately credited to the producer.

TABLE IV.

<i>Distribution of Mayonnaise and Salad Dressings</i>		
Branding	Value \$	Percentage
Own labels	20,294,684	96.00
Buyers' labels	830,248	3.96
No labels	9,900	0.04
	21,134,832	100.00

Based on 123 reports

It is presumed that the foregoing part of this report is of general interest and that the most important section of the report is that which deals with the present conditions in the industry. Attention is called to the fact that in making the following tabulations, there has been no attempt to segregate the different products on any other grounds than the statements made in the questionnaires. There has been, as you all know, considerable difference of opinion as to what constitutes mayonnaise, and certain standards have been set up by the Food, Drug and Insecticide Administration of the Department of Agriculture. Leaving out of consideration entirely these questions, the facts as given in the questionnaires are shown in the next table. The preponderant position held by the heavy type of mayonnaise is most evident. As has been said before, the growth of this branch of the industry is faster than that of salad dressing. No information is available on which to base a similar comparison for the sandwich spread, but it is believed to be one of the rapidly growing items, and now takes second place in value to that of the heavy type mayonnaise. The incompleteness of the returns has already been commented on and attention called to the fact that these figures cannot be taken as a true measure of the size of the mayonnaise industry. There are known to be a very large number of manufacturers which are operating on a kitchen scale. Their individual output is always small, but the total beyond question is considerable. This condition is well known to all who have ever noticed the stocks on shelves of stores in the smaller communities. As a guess, it might be said that the total quantity of the products in which we are interested are made to an extent possibly double that given below.

TABLE V.

<i>Distribution of Mayonnaise and Salad Dressings</i>		
Channels	Value \$	Percentage
Direct to consumer ...	583,147	2.75
“ “ retailer	3,367,406	15.93
“ “ wholesaler ...	12,259,618	58.30
“ “ chain stores	2,040,790	9.66

TABLE V (Continued)

By other methods:		
Distributors ...	1,605,780	
Restaurants ...	32,033	
Drug stores & Restaurants	7,698	
Hotels and Restaurants	31,306	
Wagons	1,131,955	
Unmentioned..	13,656	2,822,428
		13.36
Total	21,103,398	100.00
Based on 122 reports		

How the Consumer is Reached.

THE replies to this part of the questionnaire were on the whole quite satisfactory, although there is some doubt as to the exact meaning of the statements made in a few cases. The doubtful replies are concerned with only about 10 per cent of the total amount, so that they do not greatly affect the final results.

The next table shows the different methods of distribution as reported to us. It appears that a rather small proportion of the total is sold through chain stores compared with the usual grocery lines. More than half of the products are handled by wholesale grocers. Under the heading of "By other methods" several statements were found which are of questionable interpretation. It would seem very possible that the goods shown under the headings of 'Distributors' and 'Wagons' may be sold, at least in part, directly to the consumer, or to the retail grocer. No means are at the disposal of the Department to decide on this point, but those who are more familiar with the trade can probably do so without difficulty.

TABLE No. VI
Production by Products in 1928

	Dollars	Gallons	Percentage by volume
Mayonnaise, Heavy...	15,612,672	6,789,727	75.80
Mayonnaise, free flowing	303,062	159,580	1.79
Mayonnaise, semi flowing	643,285	75,575	0.84
Salad dressing	2,173,531	820,384	9.17
Sandwich spread	3,108,764	1,111,271	12.40
	\$21,841,314	8,956,537	100.00

Based on 126 Reports

Summary

THERE is every reason to believe that the growth of the industry will continue in the future as it has done in the past, assuming that the quality of the products is as well maintained as it has been. In general, the confidence of the buyer has been gained, and there is less and less tendency to go to the trouble to make the products which can be

(Turn to Page 33)

The Archer-Daniels-Midland Company, linseed oil producers, of Minneapolis, have acquired a substantial interest in the Werner G. Smith Company, large importers of china wood oil, of Cleveland, Ohio. The Directors of the Archer-Daniels-Midland company have voted to extend their stockholders the right to subscribe at thirty dollars per share for one new share of stock for each seven shares owned, the proceeds of this subscription to be used to acquire the interest in the Smith company.

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of Oil & Fat Industries, published monthly at New York, N. Y. for October 1, 1929. State of New York; County of New York.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Alan Porter Lee, who, having been duly sworn according to law, deposes and says that he is the Editor of the Oil and Fat Industries and the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, MacNair-Dorland Co., Inc., 136 Liberty St., N. Y. C.; Editor, Alan Porter Lee, 136 Liberty St., N. Y. C.; Managing Editor, none; Business Managers, Grant A. Dorland, 136 Liberty St., N. Y. C.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) MacNair-Dorland Company, Inc., 136 Liberty St., N. Y. C.; Grant A. Dorland, 136 Liberty St., N. Y. C.; Ira P. MacNair, 136 Liberty St., N. Y. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

[Signed] Alan Porter Lee.

Sworn to and subscribed before me this 30th day of September, 1929.

Al. J. Ruggiero, Notary Public, Kings Co., No. 509 Reg. No. 1182; Cert. filed in N. Y. Co., No. 309 Reg. No. 1R242; Commission expires March 30th, 1931. [SEAL.]

Mayonnaise Industry

(From page 18)

purchased of practically equal quality and comparable price. There is much yet to be learned regarding problems of distribution along the lines brought out in this report, and in similar ways. Much educational work must be done before all the manufacturers see the value of such investigations, and are ready to help themselves by helping others. The association, as representing the industry can do many of these things with the cooperation of the manufacturers, both members and non-members, and, now, as before, the Department of Commerce is glad to assist in any way compatible with its duties and abilities.

Distribution

“THE current talk that distribution people are old fogies and that their difficulties are due to their being sound asleep is unfounded,” said Gorton James, Editor of *The Business Week*, speaking at the meeting of Mayonnaise Products Manufacturers' Association at their annual convention at Atlantic City. He went on to say that conditions have changed faster than human institutions can be altered, and with changing conditions must come changed distribution methods. The proportion of families living in apartment houses has increased from 1/3 in 1922 to over 2/3 in 1929. Where there were approximately 35,000 chain store units in 1922, the number in 1929 is about 105,000.

Olive Oil Test

(From page 27)

iodine values all come within the limits of the U.S.P.² except the rapeseed and the 90% rapeseed mixture. Presumably the Thio Numbers, would indicate that olive oil above 4.50 and below 3.50 should be investigated to determine the purity of the oil. It has been found recently by another observer that olive oil gave a pink or red color, pecan oil and grape fruit seed oil a pale pink, cottonseed, sunflower, soya bean, linseed and china wood oils did not give a pink or red color with the above reagents. If sesame oil is present in the olive oil the red color will appear in the cold, and then there is no need for the thio number. When an olive oil contains oil of rosemary, it should be extracted with alcohol to remove the essential oil.

(*) The American Journal of Pharmacy 95, 684 (1923).

(2) The thio number of the olive oil used in the Rapeseed oil mixture.

(*) United States Pharmacopoeia (Tenth Revision).