Cooperative Extension - - - - University of California

No. 38 February 1990

Progress In Poultry

"THROUGH RESEARCH"

EGG PRICING AT THE FARM, WHOLESALE AND RETAIL LEVELS - 1989

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In 1986, Progress in Poultry summarized a study of egg prices collected in 26 states during the month of February. Data was collected by Extension Specialists in each state and represented a sample of 189 supermarkets. This study was repeated in July of 1986 with an additional 192 stores in essentially the same states.

In November of 1989 the California Egg Commission asked us to repeat these earlier studies to update our findings. Twenty-seven states consented to participate and provided data from 195 different supermarkets for the week of November 6, 1989.

METHODOLOGY

The objective of the study was to compare consumer prices for table eggs from a sample of supermarkets in different regions of the country. All states were asked to participate with 27 states choosing to do so. Each cooperator was asked to sample 4 to 6 stores during the week of November 6-10. Each brand, size and grade combination was listed. A notation was made if prices represented a sales price.

In addition, an attempt was made to determine the price the store paid for their eggs delivered to the store and the comparable farm price for unprocessed eggs for the same week. This part of the study proved to be the most difficult because of the reluctance on the part of some buyers and sellers to share this information. Some states also had difficulty in determining the farm price. We also questioned some of the results and left them out of the study with appropriate footnotes.

The country was divided into three regions for the first two studies and into four regions for the current study. The region identified as Central was almost totally represented, the Northeast was next and the Southeast and West were the poorest represented.

RESULTS

The average price for Large Grade A or AA eggs was $1.13 per dozen compared to 80 to 85 cents in the 1986 studies. In 1989, 17 of the 27 states averaged more than $1.00 per dozen Large eggs compared to only 1 state in the February 1986 study.

Table 1 lists the average store price for each size in one dozen cartons with regional averages.

Table 1. Retail non-sale prices ($ per dozen) - week of November 6, 1989
A or AA eggs in one dozen cartons

REGION	STATE	WHITE JUMBO	WHITE X-LG	WHITE LARGE	WHITE MEDIUM	WHITE SMALL	BROWN LARGE
		SIZE/TYPE					
West (2)	AR	1.158	1.147	1.118	0.993	0.695	1.257
	CA	1.855	1.785	1.666	1.541	1.530	1.958
	AVERAGE	1.506	1.466	1.392	1.267	1.113	1.607
CENTRAL (10)	AR	1.000	0.887	0.873	0.757	0.635	—
	IA	1.057	0.945	0.917	0.831	0.635	—
	KS	1.103	1.078	0.992	0.942	0.740	1.118
	LA	1.118	1.052	0.973	0.904	—	1.103
	MN	1.000	0.955	0.925	0.835	—	—
	MO	1.183	1.129	1.073	0.940	0.840	1.215
	NE	1.005	0.920	0.900	0.803	0.650	—
	SD	1.190	1.087	1.038	0.947	—	—
	OK	1.133	1.087	1.053	0.943	0.695	1.228
	TX	1.218	1.158	1.117	1.015	0.790	1.290
	AVERAGE	1.101	1.030	0.986	0.892	0.712	1.191
N. EAST (11)	CT	1.543	1.435	1.320	1.205	—	1.430
	DE	1.455	1.345	1.238	1.118	0.750	1.490
	KY	1.086	1.040	0.972	0.834	0.563	1.128
	MI	1.157	1.108	1.038	0.943	—	1.360
	NH	—	—	1.163	—	—	1.320
	NY	1.413	1.330	1.236	1.116	—	1.397
	OH	1.206	1.125	1.074	0.923	0.930	1.253
	PA	1.115	0.998	0.920	0.884	0.590	1.116
	RI	—	—	1.195	—	—	1.232
	WV	1.277	1.195	1.123	1.005	—	1.263
	WI	1.105	1.016	0.968	0.894	0.430	—
	AVERAGE	1.262	1.177	1.113	0.991	0.673	1.299
S. EAST (4)	FL	1.148	1.078	1.057	1.000	0.870	1.210
	GA	1.110	1.073	0.994	0.922	0.793	1.087
	MS	1.095	1.054	1.021	0.931	0.690	1.086
	NC	1.158	1.118	1.073	0.998	0.910	1.203
	AVERAGE	1.128	1.080	1.036	0.963	0.816	1.147
	STORES						
West	(23)	1.506	1.466	1.392	1.267	1.113	1.607
Central	(50)	1.101	1.030	0.986	0.892	0.712	1.191
N. East	(58)	1.262	1.177	1.113	0.991	0.673	1.299
S. East	(64)	1.128	1.080	1.036	0.963	0.816	1.147
REGIONAL AVERAGE		1.249	1.188	1.132	1.028	0.828	1.311

TOTAL: 27 STATES AND 195 STORES

Brown eggs were marketed in 54% of the stores with the West and the Northeast having the highest percentage of stores selling brown eggs. Most stores sell only 1 size of brown eggs with the exception of the Northeast where most stores in Connecticut, New Hampshire and Rhode Island displayed all sizes.

Table 2 lists the retail prices for brown eggs in these three states with a comparison of Large White egg prices. Note the standard difference of 10 cents per dozen in favor of the brown eggs. Brown eggs in other regions appear to command a larger premium. For example, in California, Large Brown eggs are priced almost 30 cents per dozen over Large White eggs.

Table 2. New England brown egg prices compared to Large White eggs (non-sale) - $ per dozen

	No. of Stores	Brown Eggs Jumbo	Ex Lg	Large	Medium	Small	White Large
CT	4	1.72	1.62	1.43	1.29	--	1.32
NH	4	1.58	1.44	1.32	1.06	--	1.16
RI	5	1.52	1.34	1.23	1.06	--	1.20
Avg/Total	13	1.61	1.47	1.33	1.14	--	1.23

Two cooperators sampled different regions within their states to determine if differences in price by region existed. Table 3 lists the results by region within California and Mississippi. In general, the Riverside area of California appeared to be significantly higher than the other two regions, but, the various regions within Mississippi appeared to be very similar.

Table 3. Retail egg price variations within states (non-sale) - $ per dozen

State/city	White Eggs Jumbo	Ex Lg	Large	Medium	Small	Brown Large
CALIFORNIA						
Riverside	2.07	1.95	1.74	1.55	1.53	2.16
Modesto	1.64	1.64	1.57	1.49	--	1.75
San Francisco	1.75	1.70	1.65	1.56	--	1.76
MISSISSIPPI						
Jackson/Clinton	1.08	1.03	1.03	0.94	0.67	1.19
Cleveland/ Greenville	1.10	1.01	1.02	0.95	--	1.08
Meridian	1.07	1.07	1.03	0.97	0.78	1.10
Columbus	1.03	1.02	1.00	0.93	--	1.10
"North"	1.14	1.08	1.05	0.94	0.72	--
"Northeast"	1.08	1.03	0.97	0.89	0.64	1.04
Biloxi	1.19	1.09	1.04	0.98	0.74	1.15

Farm, wholesale and retail prices are listed in Table 4. Several states were omitted because of questionable data. This results in differences in the number of states in the various columns and this results in averages that fail to total. Overall results indicate an 18.0 cents per dozen mark-up between the farm price and the store and an additional 19.4 cents mark-up in the store. The Central states appear to have the lowest total spread while California has the highest.

The farm/store mark-up represents the costs of processing, cartons and transportation. The store/retail mark-up represents the costs of the retailer.

Table 4. Farm, wholesale, and retail prices by state, week of November 6, 1989, large white eggs (non-sale)

Region		Farm Price	Store Delivery Price	Retail Price	Mark-up: Farm to Store	Mark-up: Store to Retail	Mark-up: Farm to Retail
		(cents/dozen)			(cents/dozen)		
West	AZ	N/A	–	111.8	–	–	–
	CA	76.3	97.3	166.7	21.0	69.4	90.4
	Avg	76.3	97.3	139.2	21.0	69.4	90.4
Central	AR	*	*	87.3	–	–	–
	IA	67.5	84.0	91.7	16.5	7.7	24.2
	KS	65.0	83.0	99.2	18.0	16.2	34.2
	LA	69.0	83.5	97.3	14.5	13.8	28.3
	MN	N/A	–	92.5	–	–	–
	MO	67.0	87.5	107.3	20.5	19.8	40.3
	NE	N/A	–	90.0	–	–	–
	SD	62.0	86.0	103.8	24.0	17.8	41.8
	OK	68.0	84.0	105.3	16.0	21.3	37.3
	TX	68.0	*	111.7	–	–	43.7
	Avg	66.6	84.7	98.6	18.3	16.1	35.7
N. East	CT	69.0	89.0	132.0	20.0	43.0	63.0
	DE	67.5	88.0	123.8	20.5	35.8	56.3
	KY	68.0	87.0	97.2	19.0	10.2	29.2
	MI	72.0	87.0	103.8	15.0	16.8	31.8
	NH	73.0	93.0	116.3	20.0	23.3	43.3
	NY	71.0	86.0	123.6	15.0	37.6	52.6
	OH	67.5	86.0	107.4	18.5	21.4	39.9
	PA	67.0	83.0	92.0	16.0	9.0	25.0
	RI	N/A	–	119.5	–	–	–
	WV	N/A	–	112.3	–	–	–
	WI	N/A	–	96.8	–	–	–
	AVG	69.4	87.4	111.3	18.0	24.6	42.6
S. East	FL	68.0	*	105.7	–	–	37.7
	GA	*	83.5	99.4	–	15.9	–
	MS	N/A	83.0	102.1	–	19.1	–
	NC	66.0	84.0	107.3	18.0	23.3	41.3
	Avg	67.0	83.5	103.6	18.0	19.4	39.5

Regional averages are for states reporting and, therefore, may not total.
N/A = data not available
* = questionable data left out

Table 5 summarizes the mark-ups by region in cents per dozen and in percentages. The farm share of the retail dollar is also listed.

Table 5. Regional summary of farm, wholesale, and retail prices by state, week of November 6, 1989, Large White eggs (non-sale)

	Average Prices			Mark-up		
Region	Farm Price	Store Delivery Price	Retail Price	Farm to Store	Store to Retail	Farm to Retail
		(cents/dozen)			(cents/dozen)	
West	76.3	97.3	139.2	21.0	69.4	90.4
Central	66.6	84.7	98.6	18.3	16.1	35.7
N. East	69.4	87.4	111.3	18.0	24.6	42.6
S. East	67.0	83.5	103.6	18.0	19.4	39.5
Regional Average	69.8	88.2	113.2	18.8	32.4	52.1

Percentage Mark-Up

	Farm to Store	Store to Retail	Farm to Retail	Farm/ Retail
West	27.5	71.3	118.5	45.8
Central	27.5	19.0	53.6	65.1
N. East	25.9	28.1	62.4	62.0
S. East	26.9	23.2	59.0	64.7
Regional Average	27.0	35.4	73.1	57.6

Note: Mark-ups are calculated for states reporting retail <u>and</u> farm or wholesale prices. The average prices listed in Table 5 will not yield the mark-ups shown because different states are represented in the two sets of numbers. Refer to Table 4.

The regional store-related prices are distorted by the very high mark-ups shown for the West (California). Without the West, the store to retail mark-up would be about 23% and the farm to retail mark-up would be about 58%. On the average, the California producer is getting only 46% of the retail price while producers in other parts of the country are getting about 64%. This reflects the very high retail mark-ups in California.

Table 6 illustrates the farm, wholesale and retail prices for Large Brown eggs for three New England states. The farm share of the retail dollar is also listed.

Table 6. Farm, wholesale and retail prices by state - week of * November 6, 1989, Large Brown eggs (non-sale)

	Average Prices			Mark-up		
State	Farm Price	Store Delivery Price	Retail Price	Farm to Store	Store to Retail	Farm to Retail
	(cents/dozen)			(cents/dozen)		
CT	81.0	106.0	143.0	25.0	37.0	62.0
NH	83.0	103.0	132.0	20.0	29.0	49.0
RI	85.0	103.0	123.0	18.0	20.0	33.0
Avg.	83.0	104.0	132.7	21.0	28.7	49.7

Percentage Mark-up

	Farm to Store	Store to Retail	Farm to Retail	Farm/ Retail
CT	30.9	34.9	76.5	56.6
NH	24.1	28.2	59.0	62.9
RI	21.2	19.4	44.7	69.1
Avg.	25.4	27.5	60.1	62.9

* All states reported prices at each level of the market.

Stores vary considerably in the number of egg products sold. The average supermarket handled 6.4 products (different sizes, package types, brands) with a range from 2 to 13 products. The West appears to have a wider assortment of products (8) compared to other regions (6+). Twenty-six percent of the stores in the West had 10 or more products.

Ten percent of the stores had eggs on sale (these were not included in the average egg prices). Thirty-four percent of the stores sold eggs in containers of 30 or more eggs. This was a particularly popular way of selling eggs in the Southeast. Only 24% of the stores sold 5 sizes of white eggs.

Table 7. Stores displaying various egg sizes and categories

Stores	23 West	50 Central	58 N. East	64 S. East	195 U.S.
	Percentage of Stores				
Jumbo White	96	78	62	72	73
Extra Large White	96	96	81	84	88
Large White	100	100	97	98	98
Medium White	91	96	78	97	90
Small White	22	28	26	34	29
No White	0	0	3	0	1
1 size	0	0	12	0	4
2 sizes	0	4	2	9	5
3 sizes	13	18	21	19	18
4 sizes	65	50	41	49	48
5 sizes	22	28	21	23	24
Brown	74	38	71	45	54
3 or more sizes	4	0	22	0	7
3 or less items	0	8	9	3	6
4 to 6	22	60	45	54	52
7 to 9	52	30	33	38	36
10 or more	26	2	3	5	6
Average Items	8.0	6.0	6.1	6.3	6.4
Eggs on sale	22	16	5	5	10
Bulk containers	17	22	31	52	34

A wide variety of sizes, packaging materials and products were available. The number of eggs per pack varied from 6 to 180. The multiple dozen packs were especially popular for selling the smaller sizes (medium and small). A variety of "good for your health" eggs were also found.

Different size of packs

6 eggs L & M
8 eggs L & M, also L Browns
18 eggs XL, L & M
20 eggs XL
30 eggs XL, L, M & S
2 dozen L
3 dozen L, M & S
5 dozen L
7.5 dozen M & S
5 dozen L
7-1/2 dozen M & S
15 dozen L

Special products and packaging

- Brown fertile eggs (all sizes)
- Vegetarian diet eggs
- Lowered cholesterol (L)
- B's
- Loose eggs sold by the egg or by the dozen
- See-through plastic cartons
- No cholesterol product (pint)

SUMMARY

Farm, wholesale and retail egg prices were analyzed by state and region in February and July of 1986 and in November, 1989. Regional differences were pointed out relative to absolute prices and the relationship of prices at different levels of the marketing system.

Table 8 summarizes some of the more significant findings noted in the separate studies.

Table 8. Summary of three studies

Item	February 1986	July 1986	November 1989
Egg Prices (retail)			
	cents per dozen		
Jumbo White	95.3	93.7	124.9
Extra Large White	89.4	85.7	118.8
Large White	84.9	80.6	113.2
Medium White	78.1	63.1	102.8
Small White	61.2	52.7	82.8
Large Brown	105.8	97.7	131.1
Farm Price Large	48.5	48.0	69.8
Wholesale Price Large	68.8	67.6	88.2
Retail Price Large	84.9	78.6	121.2
Farm/store spread (Large eggs)	20.1	19.6	18.8
Store/retail spread (Large eggs)	16.8	11.8	32.4
Farm/retail spread (Large eggs)	36.3	31.4	52.1
	% mark-up		
Farm/store mark-up	41.9	40.7	27.0
Store/retail mark-up	23.4	17.4	35.4
Farm/retail mark-up	57.1	60.5	73.1

Table 8. (continued)

Products	February 1986	July 1986	November 1989
Percentage of stores selling:			
Jumbo White	64	67	73
Extra Large White	92	91	88
Large White	94	96	98
Medium White	87	90	90
Small White	31	27	29
Large Brown	48	46	54
5 sizes (white)	24	25	24
3 or more sizes of browns	6	4	7
10 or more products	7	6	6
Eggs on sale	16	17	10
Bulk containers(30 or more eggs)	17	19	34
Average no. of products	5.7	6.0	6.4

Retail egg prices in 1989 were up more than 30 cents per dozen over 1986 prices. This, in itself, was a major factor for percentage differences which were observed in the two different time periods. The store to retail spread and the farm to retail spreads were up significantly even without the California data which accentuated the change. The California 90.4 cent spread between farm and retail price represented a 118.5% mark-up in price. The 69.4 cent spread between wholesale and retail represents a 71.3% mark-up.

The prices reported in this study should not be interpreted to be precise averages for the states in question but should be considered as samples of trends which are taking place in the U.S. egg industry.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the assistance of the cooperators in the various states. Without their help, the study could not have been accomplished. Special thanks go to the California Egg Commission and Mr. Robert Pierre for suggesting and facilitating this update.

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February, 1990

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