

Eggs

Fragile business a family affair

By Patricia Mack, Tempo writer

HOWELL — Emmanuel Puglisi may have solved the eternal question of which comes first — the chicken or the egg. They both do — at least they do at the E. Puglisi and Sons Egg Production Center on Easy Street.

Great care is given to his layers, all 90,000 of them and the more than 45,000 eggs they produce each day, but there are innumerable variables in this highly mechanized and large scale operation.

The modern commercial egg farm's need for a controlled environment makes no allowance for the homey but unproductive techniques of the past.

Hens don't roost on comfy nests of hay disturbed only by a smiling farmwife who gathers eggs in her basket at morning and dusk.

At Puglisi's, 60,000 producing layers, all white leghorns, considered the best egg producing hens for their size and bodyweight, are housed, four to a basket, in five rows three deckers deep that run the length of the 500 foot warehouse.

Temperature, feed and light are carefully controlled. Huge fans circulate air in the windowless building.

The eggs roll from the baskets onto a conveyor belt stretching from the nest to the main floor of the production building 800 feet away.

Another conveyor belt brings nutritionally balanced fresh food to the hens, and fresh water is provided on demand by a unique fountain at each basket which fills with water every time a hen pecks the red button in the center of the tiny cup.

All of this is carefully monitored on closed circuit television.

In the breeder house, another 30,000 layers — 1 day to 20 weeks old — are growing to replace hens which have passed their prime laying stages.

The young birds are kept in the dark to retard their growth so that they don't begin laying eggs which are too small to have commercial value.

Old hens will be sold to food processing companies to be used in products like chicken soup.

Although egg production takes place year around with each hen producing about 240 eggs a year, many factors control the sizes and numbers of eggs laid, Puglisi said.

Production levels are affected by weather, temperature, feed, ages of hens and laying cycles. Hens tend to lay big eggs then smaller eggs before laying bigger eggs again.

Easter always brings an increase in egg sales, according to Puglisi, who has been in the egg business for the past 30 years, but then the post-Easter period always brings a decline.

"I guess people just get tired of eggs," Puglisi said.

All of the eggs sold are "perfect" Puglisi said, a result of the controlled environment which creates the kind of uniformity required for commercial success. And, none of the eggs have ever been touched by human hands.

When the eggs reach the production building, they are washed and sanitized by machine. As they travel along the belt, workers look over the eggs for any obvious cracks or imperfections. Any that have noticeable faults are removed.

Then the eggs pass into the candling booth where a strong light from under the belt allows another worker to see other imperfections.

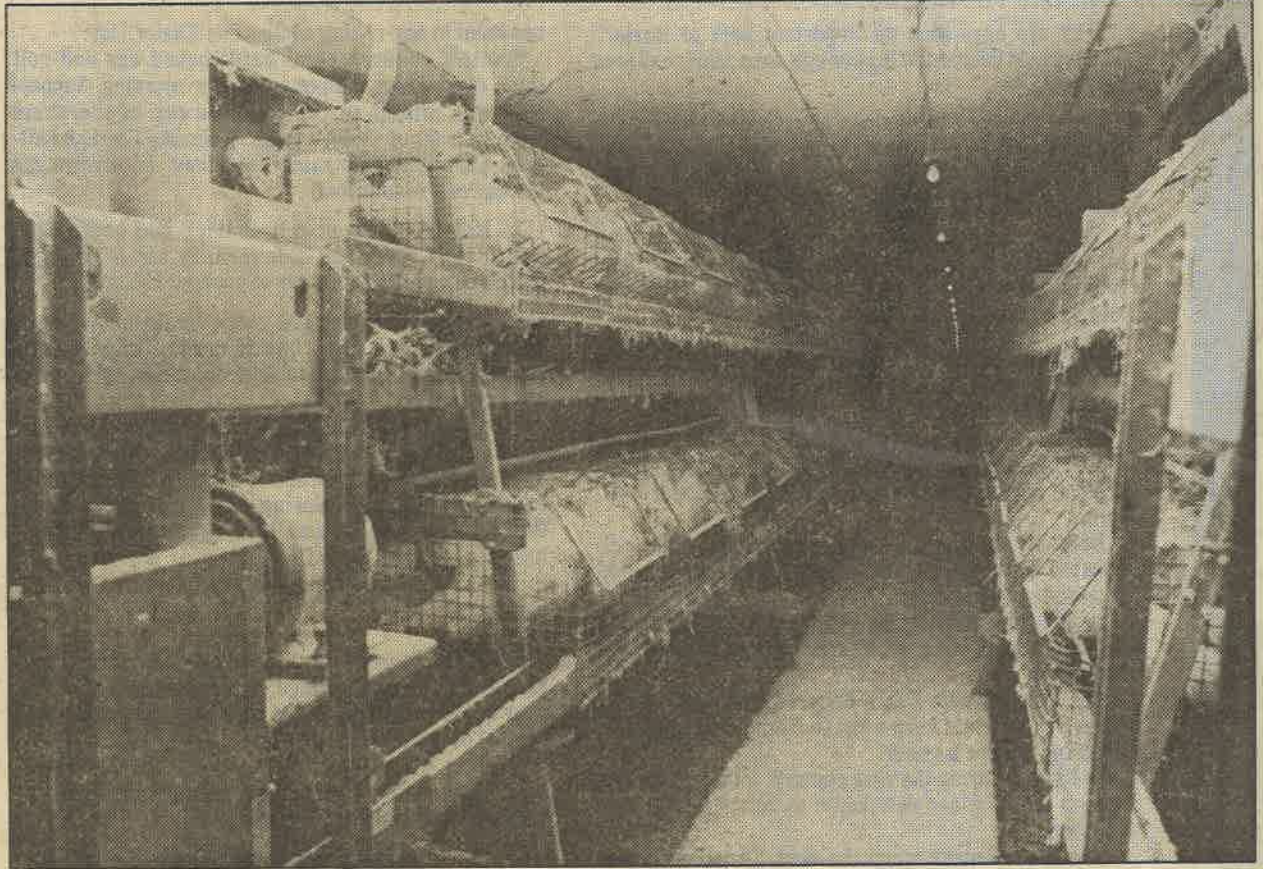
The eggs that pass out of the booth are then sorted by machine according to size — jumbo, extra large, large, medium and pullet.

A worker walks up and down along the rows of sorted eggs, all with small ends down to keep yolks centered, placing cartons on top of each dozen. A machine will invert the cartons and place them on a pallet to be stored until they are taken to market.

There are not many operations like Puglisi's in the state. Most of the 100 or so egg farmers sell their eggs to a broker who then packages the eggs before selling them to shops and markets.

Puglisi does it all, selling directly to restaurants, food companies and supermarket chains.

Learning to do it all is how he managed to survive during the hard times in the '60s, he said, when stiff competition from Southern egg farmers reduced the numbers of egg farmers from more than 5,000.



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Protein versus cholesterol: the great egg o

Eggs have taken a terrible beating since scientists discovered cholesterol in the fatty deposits in arterial walls.

Scientists speculated that diets rich in cholesterol and animal fats caused atherosclerosis, a form of arteriosclerosis.

Despite the recent studies which have cast doubt on the diet-blood-cholesterol connection, many nutritionists, physicians and public health officials continue to urge people to eat fewer eggs and to substitute fish and poultry for red meat.

The Intersociety Commission for Heart Disease Resources, the American Heart Association and the Senate Select Committee on Nutrition and Human Needs have all made such recommendations in the belief that dietary changes would lower the risk of developing atherosclerotic heart disease for most people.

"Our position remains unchanged because none of the data supports claims that cholesterol doesn't contribute to cardio-vascular disease and heart attacks," said a spokesman for the Center for Science in the Public Interest.

However, a Texas A&M University study tested recommendations for restricted cholesterol consumption.

In the study 29 men ranging in age from 31 to 61 were assigned one of four diets, based on the consumption of red meat, with and without eggs and fish or poultry, with and without eggs.

"One of the real tragedies of the egg-cholesterol controversy is that people in low income groups may be missing out on a good economical way to give their families high quality protein," said Mary Anne Guender, food information specialist for the N.J. Department of Agriculture.

Guender contends that at 79 cents a dozen (or 50 cents a pound) eggs are the least expensive protein in the market with the possible exception of soy beans.

Eggs are also a good source of vitamin A, the B vitamins — thiamine, riboflavin and niacin — Vitamin D and minerals. They contain 45 nutrients beneficial to health yet are only 80 calories each.

The freshest eggs available are purchased directly from the egg farmers. Eggs on supermarket shelves could be as fresh as one

up well around a firm, high yolk.

The grade A egg has a slightly larger air cell and albumin which is not quite as thick as that in the AA eggs. In B and C grade eggs the white is thinner and the yolk flattened.

A U.S. Department of Agriculture quality control program allows egg cartons to bear its shield providing the carton indicates the packing date and in some instances an expiration date.

For instance, if 096 is imprinted, the consumer knows that the eggs were packed on the 96th day of the year.

The expiration day cannot exceed 30 days from date of packing, but some buyers prefer an expiration day of not more than 14 to 28 days, according to Herbert Schmidt, assistant chief in the N.J. bureau of commodity inspection and grading.

To guard against loss of egg quality at home, the experts offer these tips:

—Never allow a cold egg to sweat, and then put it back into the refrigerator. The surface of the egg has thousands of tiny pores which can be invaded by waterborne bacteria.

—Bring just-purchased eggs home quickly so that they can be refrigerated. Don't let a cold egg sit in a warm car.

—Take from the refrigerator only as many eggs as needed. Don't let a whole carton of eggs sit out at room temperature.

—Store leftover whites in a tightly covered container in the refrigerator. They may be

Foodstuff

to three days old, but in most instances, they are a little older than that.

"It's hard to buy a bad egg in New Jersey," said John Bezpa, poultry specialist at Rutgers' Cook College.

The process of getting eggs to market is very efficient, although there are instances when poor handling of eggs can cause a loss of quality, he said.

Fresh eggs have dense albumin which

Flexible work hours producing positive employee attitudes

By BOB CULLINANE
News Tribune staff writer

Flextime, a concept which allows the office worker to exert greater control over the time he spends at the workplace, has been put into practice by many area industries with positive results.

The system, which is most easily implemented in the office environment, varies from the historical nine-to-five work-day schedule by permitting an employee or block of employees to determine the hour at which they start work and, subsequently, when the work-day is complete.

The only requirements are that the employee be present at the job site a certain number of hours per day and that part of his day cover the "core hours" or the time the company designates for all employees to be present.

"It's (flextime) been successful for us," said Rich Dombrowiecki, associate manager of communications at Prudential in Edison. "We've had no real complaints about it from our employees yet."

The Prudential Eastern Home Office building on Route 287 in Edison has employed a flexible working hour program for six years, according to Dombrowiecki. Employees can start as early as seven or as late as nine in the morning and leave work between three and five p.m. with the program. Prudential's core hours are from nine to three.

Unofficial fringe benefit

"The switch (to flextime) has had no real effect on our business," Dombrowiecki said. "It was instituted primarily for the employee. It might be called an unofficial fringe benefit."

Dombrowiecki said the net change in current working hours over the old system is slight. "Before the flexible program, we worked an eight to four day," he said. "Now, most of our employees arrive here between seven-fifteen and eight (a.m.), so there's no real change."

Doug Benner, manager of employment

the morale of the nearly 1,500 employees at the utility's headquarters.

Majority is satisfied

"The great majority of our employees are satisfied with the flextime system we've set up here," Benner said. "It has also reaped some side benefits for the company and the city (Newark)."

Benner explained PSE&G's system is based on a core time of 9:30 a.m. to 3:30 p.m. The earliest an employee can report to work is 7 a.m. and the latest leaving time is 6 p.m.

"We recently moved into a new building and flextime was considered when planning the move," Benner said. "We found many benefits to transportation methods, all the way from the trains to the building elevators. We don't have the great load of employees all reporting to work at the same time and thus all the pressures on transportation equipment are somewhat eased."

As far as the new working hours' effects on the company's balance sheet, Benner said that while it is difficult to measure the change in performance, a comprehensive attitude study showed the system met with positive comments from the employees.

'Society is changing'

"It (flextime) better fits the employees' personal motives," Benner added. "A working mother, for example, would be able to see the kids off to school and still be able to make it to work on time. Society is changing and this is one way we can change with it."

Benner said PSE&G has made a minor change in its flextime program since its initiation in 1979. "We found many employees wanted to leave work earlier on Fridays, especially in the summer," he said. "We made alterations in the program in some departments which allow the worker to stay more hours Monday through Thursday and then leave earlier on Friday."

Egg farm adapted to changing times

By PATRICIA MACK
News Tribune staff writer

HOWELL — Back in 1950, Emmanuel Puglisi ran one of more than 5,000 commercial egg farms that thrived in New Jersey. Today, E. Puglisi and Sons Egg Production Center on Easy Street is one of less than 100 such enterprises that still exist.

The ancient and rotting hen houses that dot the Monmouth County landscape give witness to the decline of this once mammoth industry.

On Easy Street alone there were five egg farms. Only Puglisi survived.

"We never would have made it if we didn't learn to do everything ourselves," said Puglisi, whose egg business is considered one of the best examples of modern production standards in the state.

"It was a struggle," he recalled, "but I loved the farm and I wanted to stay on it, my family wanted to stay on it."

So Puglisi, a World War II veteran whose work experience included four years in the furniture business in Greenwich Village, N.Y., before moving to Monmouth County in 1950, learned to do the carpentry, electrical and construction work needed on his place.

He also learned direct marketing to stores, restaurants and markets, and attended agricultural extension service classes to learn the latest and best production techniques.

All of these skills were necessary to survive the complex economic conditions that affected poultry farming in the '60s.

There were many factors that contributed to the demise of egg farms, most significant among them competition from farmers in southern states such as Georgia and South Carolina who adopted aggressive techniques to market their eggs.

"They were willing and able to sell their eggs cheaper," said Milton Strauss, marketing representative in poultry production promotion for the New Jersey Department of Agriculture.

As the markets were lost, land speculators bought up many of the farms that were located in areas targeted for development. Some farmers who didn't sell their property converted chicken coops to dog kennels, or stables. Others simply allowed the farms to languish.

In the peak production years of the mid-50s, there were over 15 million egg-laying hens. Today that number is down to 1.1 million birds which produce 20 million dozen eggs each year.

Even at that number, egg sales in the state, which is estimated to gross over \$17 million a year, meets only 20 percent of those consumed. Fully 80 percent of the eggs used in New Jersey are imported, according to Strauss.

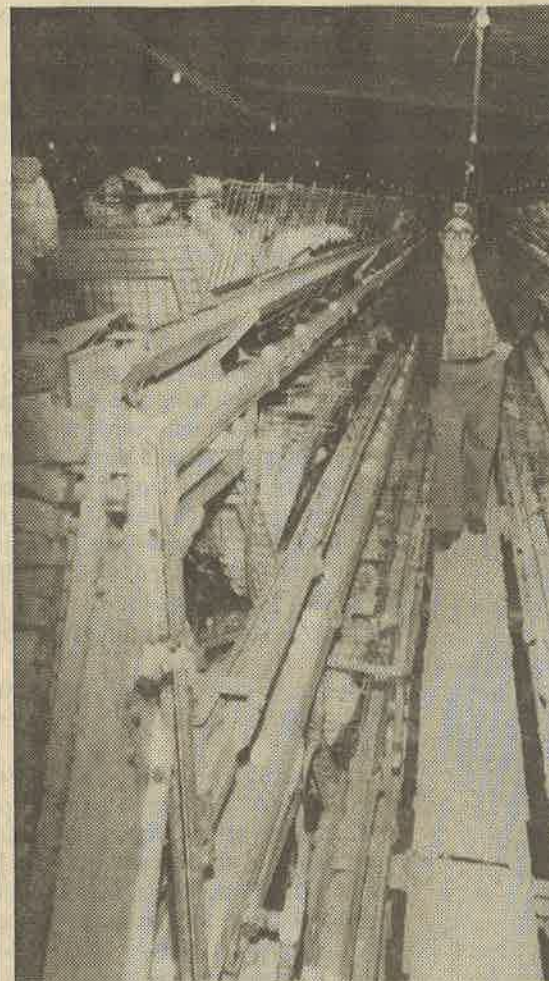
Monmouth County is fourth among the five leading counties for hens and pullets of laying age.

Modern egg farmers like Puglisi have mechanized their operations, increased the size of their flocks and found profitable markets for by-products.

Chicken manure from Puglisi's 90 thousand hens is sold to grain farmers who prefer it to other types of fertilizer for its high nitrate content. Birds past peak laying stages are sold to food processing companies for use in canned food products like chicken soup.

In spite of Puglisi's success, economic conditions of the '70s continue to be a challenge, Puglisi said. Feed costs have doubled in the past 10 years and energy costs on the highly mechanized farm have soared.

Nonetheless, Puglisi's Egg Production Center is expanding. A 48,000 square foot addition which will house the business office, equipment and provide additional storage space is currently under construction.



Emmanuel Puglisi, above, stands in aisle of 500-foot long vented structure housing hens which are monitored on closed-circuit television. Eggs are carried via a conveyor belt from the hen house to the production line, right, where they are cleaned, sorted and packed by machines for the market. Puglisi's egg production center on Easy Street in Howell can process 25,000 eggs an hour.

TNT staff photos by George Molnar

