

# NOW YOU CAN CONTROL EGG SIZE TO IMPROVE PROFITS



## PROGRAMS FOR PROFITS

### Why control egg size.

Eggs are sold in the U.S. in a unique combination of very specific minimum egg weight classifications, but with a wide weight range within each class for which the same price per dozen is paid. Further, there is a strong consumer demand for eggs in the "Large" classification — a demand that does not match well the hen's biological capacity of producing that single egg size.

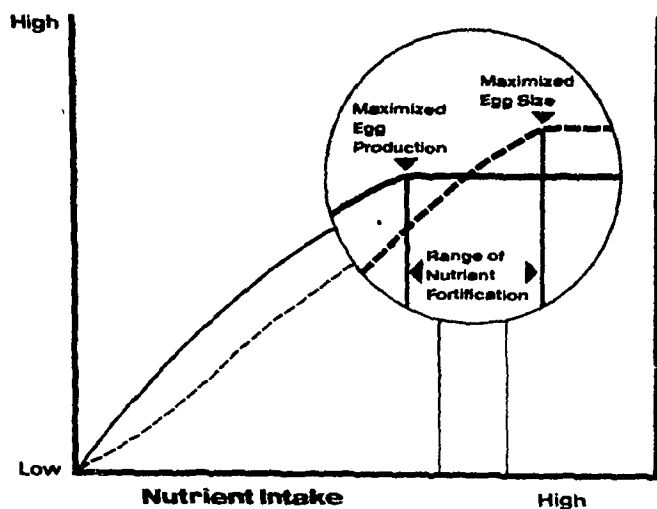
Even when hens are producing mostly eggs in the Large classification, you could be selling up to 13% more product by weight (the range from 24-27 ounces per dozen) and not receiving a cent more.

To maximize profits it is necessary to move eggs out of the Small and Medium classification to the Large size. Further, Extra Large and Jumbo classes should be avoided because of additional feed costs and egg breakage. Only if a large premium for the larger classes is paid (a rare situation) should these egg sizes intentionally be produced. Generally, minimizing egg weights to just over 24 ounces is most profitable.

### How maximizing production while controlling size is possible.

Purina nutritionists have found the nutrient needs of hens are higher for maximum egg weight than for maximum egg production. Shifts in fortification can be made that will increase or decrease egg weights 1/2 lb./case while maximizing egg production.

Production rates increase until sufficient amino acids are consumed to allow hens to reach their maximum genetic egg production capacity. However, egg size continues to increase with further amino acid intakes until the genetic capacity



potential for maximum egg weight is finally achieved. This nutritional concept allows you to modify egg size, while maximizing production rates.

### Nutritional accuracy

To regulate egg size without reducing production rates there must be very accurate ration formulation.

Accurate nutrient standards for today's high-producing hens must be set. The usable nutrients in ingredients must also be determined.

Some nutrients in all feed ingredients remain undigested and/or unavailable to the bird. The quantity of usable nutrients depends upon the ingredient, processing methods and other factors. Obviously, it is critical to accurately know the amount of usable nutrients there are in any feedstuff.

To increase the accuracy of Purina's knowledge of biological availability, new techniques were implemented. These new techniques, developed by Canadian researchers, were refined by Purina Research. These new procedures developed during the past five years give True Metabolizable Energy (TME) and True Amino Acid Availability (TAAA) values.

True metabolizable energy system is an important breakthrough for ration formulation. It is the best indicator of the energy that is truly usable by the pullet or hen. It is a very rapid system which permitted Purina to reevaluate every feedstuff used in Accu-Line rations. This means that Purina energy values accurately reflect the usable energy in the ingredients Purina uses to manufacture Accu-Line rations.

Other feed companies continue to formulate rations using published tables for various feed ingredients. These may not accurately reflect current values.

Purina places great emphasis on accurate energy values. Energy is used in all body functions and egg production. It also governs how much hens will eat. When energy requirements are met, birds will stop eating — whether or not they have consumed enough amino acids, minerals and vitamins for maximum performance.

Having accurate energy values is the foundation of precise ration formulation. If the actual energy value is different from the theoretical energy value used in formulation, one of two things will happen:

1. Performance will be reduced because of underfortification of amino acids, vitamins and minerals.
2. Added costs result from an excess amount of these same nutrients that were added to balance an incorrect energy level.

True available amino acid values are equally important. The more accurate Purina knowledge of the usable amino acids in the feed ingredients, the more accurately they can be balanced to the usable energy in the feed.

As a result of these new values, Purina Accu-Line Laying rations can be made from the most efficient combination of ingredients available. The rations accurately supply the hen's daily nutritional needs at the best value possible to Purina customers.

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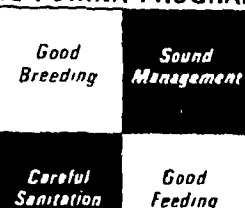
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