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Feeding Strategies for Hybrid Turkeys

How does my feeding program compare to Hybrid's?

Feeding livestock has always been a major factor in animal husbandry and raising turkeys is no exception. Turkey nutrition is critically important because feed costs represent approximately two thirds of the total cost to raise a bird. Feeding turkeys is also critical because nutrient intake is linked to the welfare and performance of the animal and therefore it has a direct impact upon the profitability of producing animals for food.

Many feeding strategies have been proposed and evaluated over the years. Articles have been published on feeding turkeys to achieve their genetic potential. More has been written about profitability and the cost effective use of feed ingredients and subsequent feed efficiency (see Hybrid Info Sheet: Alternative Strategies to Manage Feed Cost). In addition, more articles have been written about feeding birds to optimize breast meat yield (Hybrid Info Sheet: Feeding for Breast Meat Yield in Turkeys). And while each program has its own merits, the proper implementation of a specific program determines its success or failure.

Feeding Strategy

Whatever the specific feeding strategy, there is still one underlying concept that must be addressed when designing a feeding program for turkeys. When diets are formulated, the management team must decide which approach to take regarding what segment of the population will be targeted. For example, in most feeding programs the nutrient guidelines are specific for the "average" bird in the flock. Feeding with this in mind will provide a "middle of the road" type program that should allow most birds within a flock to perform to standard while superlative individuals will be allowed to express exceptional traits. On the other hand, if nutrients are deficient then only those individuals with the best appetite or those with exceptional genetic potential will perform near expected goals leaving the rest of the flock to lag behind. This approach is rarely cost efficient and usually reduces the uniformity and body weight gain within a commercial flock.

Hybrid Turkeys has published a recommended feeding program for each of its genetic strains of turkeys. This information is available online at www.hybridturkeys.com. Although

there can be much discussion regarding the interpretation of these nutritional guidelines and their proper use in practical feed formulation, it is important to understand that Hybrid stock have been selected for many generations based upon these nutrient guidelines. Therefore, it seems logical that Hybrid turkeys should be provided with the recommended nutrients published by the breeding company.

Nutrient Intake

As commercial feeding programs are developed, it is important to remember that the finest feed formulas are useless without considering feed intake. The formulation and implementation of each feeding schedule must account for the feed intake of every turkey as it consumes nutrients for maintenance and production. When the amount of feed nutrient consumed is limited for any reason, turkeys cannot obtain enough nutrients for maintenance and maximum growth requirements. Therefore, it becomes essential to the welfare and productivity of each animal that good quality feed with adequate nutrient density is available that allows even those animals with a lower social status to have free and

unrestricted access to nutrients in amounts that meet both maintenance and production requirements.

Evaluating sub-optimum performance in healthy flocks often requires that the access to feed be considered. Feed availability, feeder space, bird density, water intake, ambient temperature, and flock health are all factors that influence appetite in turkey flocks. When birds are expected to achieve published standards for weight gain and feed conversion, but nutrient intake is restricted, can the overall performance of the flock in question be hindered? What about flocks that include individuals that exhibit problems with fitness, leg strength or immunity? Can nutrient restriction play a role in contributing to the underachievers in the flock? The answer in each case is obviously, yes.

Comparing your Feeding Program

The question often asked is “How does my feeding program compare to Hybrid’s recommendations?” Associated with almost every organization is a nutritionist with the training and expertise to provide routine summaries of the nutrient intake documented for turkey flocks. Evaluations can be as simple or as detailed as necessary depending upon the information required and the sophistication of the software available. Whatever the format, this comparison should only be required once or twice annually just to confirm that birds under your care are

consuming the nutrients necessary to perform optimally in your system. Always ensure that correct nutrient values of ingredients are utilized when formulating diets and that these values are supported in every crop year by a reliable quality assurance program.

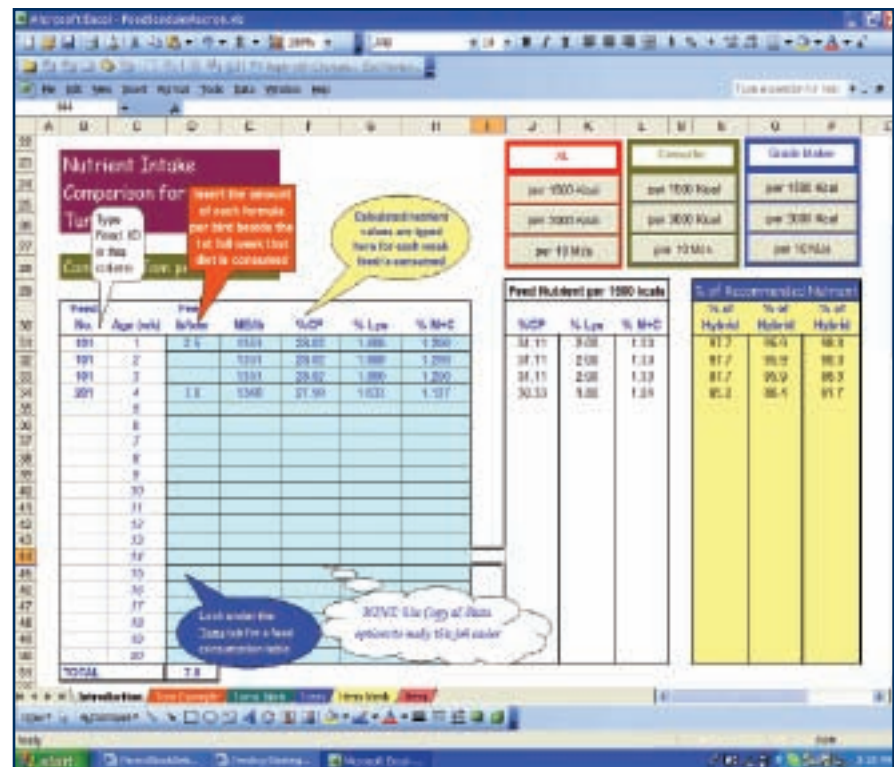
One very simple process for comparing a feeding program to the Hybrid feeding recommendations involves the use of a mathematical spreadsheet such as Excel. The following description utilizes such a spreadsheet and a template entitled “Feed Schedule 2007” can be accessed at www.hybridturkeys.com/library_nutrition.html. Copy, then Save this spreadsheet to your computer and simply fill in the blanks to generate the graphs that show how your feeding schedule

fulfills the bird’s requirements for certain nutrients.

The Excel Spreadsheet Format

Using the links provided at www.hybridturkeys.com, an Excel spreadsheet is available that already contains the current Hybrid recommendations for growth rate and feed consumption by week of age using the Hybrid recommended feeding program.

All supporting information can also be found within the files at the web site. The data entry screen in the spread sheet will look like the one pictured here.



Using the template provided requires a few simple assumptions. This format compares nutrient intake weekly for toms or hens. If your feeding schedule is listed in pounds (kg) per bird, then that schedule should be converted to weeks of age using a consumption chart or the one provided. It is also necessary to standardize feeding programs based upon the energy of each diet. Depending upon your location you may choose to adjust Metabolizable Energy (ME) in Kcal/lb, or for Kcal/kg, or even MJ/kg. Once your unit of measure is selected, comparing Hybrid recommendations to your feeds should proceed smoothly. The attached spreadsheets will adjust diets to 1500Kcal/lb, or to 3000 Kcal/kg, or to 10 MJ/kg depending upon the format chosen.

Entering your Data

Follow the instructions within the Feeding Schedule spreadsheet to enter the energy level (ME) for your diets, the % Crude Protein, % Lysine, and % Methionine + Cystine. An example schedule is also included under the EXAMPLE Tab if you would like to see a completed sheet. Fill in your feeding schedule by week and the amount of feed for each diet. Include the nutrient levels for each week of age then scroll down within that sheet to view graphic comparisons between the current feeding program and Hybrid recommendations.

Interpreting Results

Feeding philosophies are as varied as the geographic regions where turkeys are grown around the world. Formulation constraints are influenced by ingredient availability, ingredient pricing, and various other factors. Experience teaches us that there are many successful approaches to reaching expected results with the Hybrid turkey.

Nutrient intake comparisons in the Feeding Schedule spreadsheet are shown in tabular format, with linear graphs and with bar charts (Figure 1). For satisfactory growth rates and feed conversion it has been very important that Hybrid flocks receive feeds that provide nutrient intakes at or above the printed recommendations. An error margin of about 5% can be allowed in most cases to account for estimates within the simple format of the spreadsheet. Feeding turkeys for optimum breast meat yield will require additional levels of lysine and other amino acids. Your nutritionist can provide details on this with respect to your geographic location.

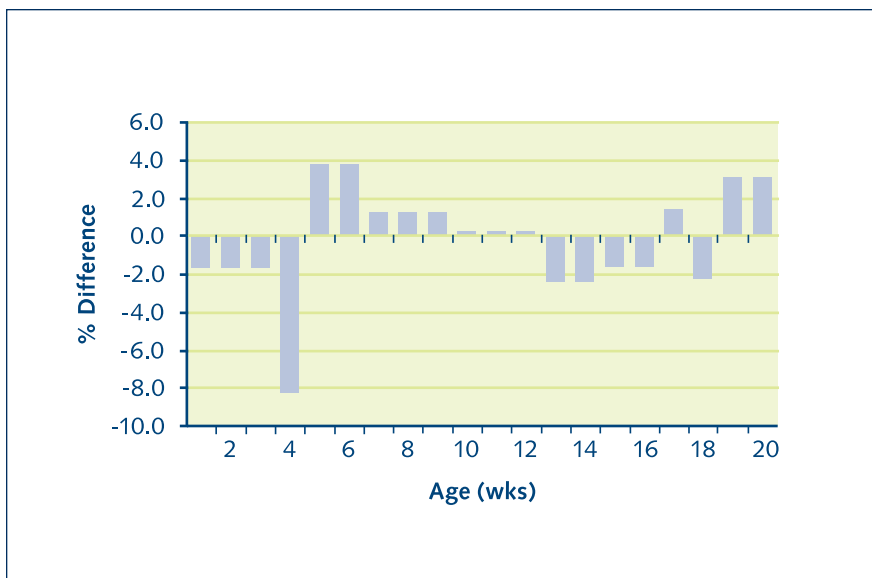


Figure 1
Difference to Hybrid Tom % M + Cys

Making Adjustments to the Feeding Program

In many cases, discrepancies between Hybrid recommendations and the existing feeding program have been easily remedied by slight adjustments to the feeding schedule. If the nutrient intake is greater than desired during a given week, this can be adjusted by reducing the amount of that diet fed per bird or by feeding the subsequent diet earlier. On the other hand, if the lysine intake is lower than that required it may be simpler to increase the amount of that diet fed within the program than to reformulate that diet or to insert another feed into the schedule.

Wholesale adjustments to feeding schedules are seldom recommended and should be evaluated before implementation. It may be prudent to try new schedules or adjustments to the current programs on three to five test flocks to evaluate desired results and document benefits. Changes to the existing feeding schedule usually represent an additional expense or sometimes a cost savings. Calculating the financial implications of proposed changes can be done easily by comparing feed costs between the different schedules and estimating the cost or savings per bird. Management decisions can then be supported by expected returns on investment and measured objectively based upon flock performance and financial settlements (see Hybrid Info Sheet: The Value of Feed Conversion).

Consistent Performance

The goal of every company or complex is to provide consistent, predictable results while maximizing profitability. Using the techniques described above will help ensure that Hybrid turkeys in your system are receiving adequate nutrients to thrive and grow. When nutrient requirements are satisfied, birds are better equipped to handle unexpected stresses without downgrades or disaster. Take time to evaluate your program and be bold enough to evaluate changes when necessary. For more information on feeding turkeys go to:

www.hybridturkeys.com/Library/Nutrition

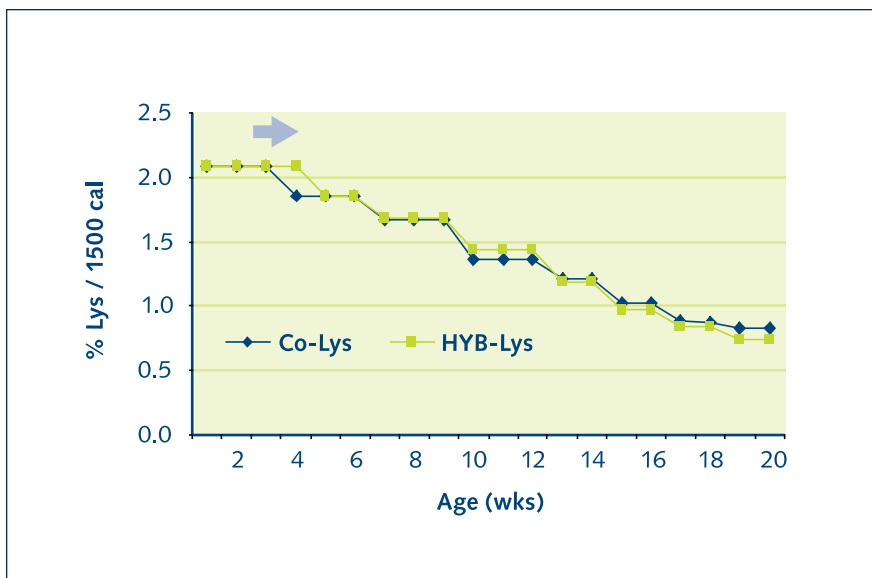


Figure 2
Hybrid Converter Tom Feed Lysine