

Q-Biotic™ 1DP

Improving your FCR can help counteract rising feed costs



Q-Biotic™ 1DP and Feed Conversion Ratios

Q-Biotic™ 1DP is a new direct fed microbial product offering from QTI. It consists of a proprietary *Bacillus subtilis* strain, and developed to enhance the integrity of the digestive tract of farm animals. There is strong evidence that broiler chickens can benefit from adding Q-Biotic™ 1DP to their diets. Let's take a look at the evidence, and later, at the economic advantages of utilizing Q-Biotic™ 1DP as a feed additive.

Q-Biotic™ 1DP has been trialed under various conditions at contract research facilities and Universities and has demonstrated its effectiveness in improving broiler chicken feed conversion.

In four floor pen trials, using male Cobb 500, Ross 308 or Ross 708 broiler chickens, having 10 to 15 replicate pens per treatment and 18 to 29 birds per replicate, showed an improvement of 6.9 points (0.069) or 3.8% in feed conversion ratio (FCR), on average across four trials. These trials used new wood shavings topped with used litter or used litter, typical stocking density of 0.89 or 0.92 foot², and primarily corn-soy based diets from 0 to 42.75 days of age on average.

So what does all of this mean? Simple, if your broiler chickens are gaining weight on less feed, you save money on feed. So what are the economics involved.

Economics of Feed Additives

An example of the economic impact of an FCR-Beneficial Feed Additive (1-point better FCR) would work out like this:

Assume the broiler chicken live weight at 5.240 Lb. and 1.797 FCR. A 1-point improvement in FCR results in 1.787. A 9.4163 Lb. (5.240x1.797) feed/broiler marketed means 1 ton of feed produces 212 broiler chickens.

1 point (0.01) better FCR saves 0.05240 Lb. feed/bird [9.41628 Lb./bird - (5.240 Lb.x1.787 FCR = 9.36388 Lb./bird) = 0.05240]. That is 11.1088 Lb. feed savings for 212 chickens (212 x 0.05240 Lb. feed/bird = 11.1088 Lb.), so 1 pt improvement in FCR is worth \$0.889/ton feed at \$160/ton feed cost.



Economics of Q-Biotic™ 1DP

Of course, if you are thinking of using Q-Biotic™ 1DP in the diet so that your broiler chickens gain more weight and have better FCR, you have to incorporate the cost of Q-Biotic™ 1DP into the ration, the same as any other feed additive. So, do you make more money when you include Q-Biotic™ 1DP in your feed?

YES! With four floor pen trials showing a 6.9-point improvement in FCR, Q-Biotic™ 1DP can have a strong economic impact for producers.

Higher Feed Prices Create a Higher Benefit

Sometimes when feed prices go up, the tendency for producers is to decrease feed supplements. Economically, the exact opposite makes sense. As feed prices go up, the benefits of using a supplement, which improves feed conversion, go up. Using the cost savings listed above, the 0.05240 Lb. feed/bird savings (1-point FCR improvement; 212 birds), is worth \$0.004192/bird or \$0.89/ton feed at \$160/ton (\$0.08/Lb.) feed cost. If feed cost increases to \$220/ton, the savings increase accordingly, to \$0.00576/bird or \$1.22/ton feed saved per 1 point of FCR. At \$260/ton, the numbers continue with this trend to \$0.006812/bird or a saving of feed of \$1.44/ton per point of FCR.

If we use the FCR improvement from the 4 Q-Biotic™ floor pen trials at 6.9 point improvement, value in feed cost savings could be \$6.1, \$8.4 or \$9.9 (relative to the above scenarios). A 8.7 to 1 return on investment (ROI) was calculated using the average performance results (weight gain, FCR, livability) of the 4 Q-Biotic™ 1DP floor pen trials, using \$220/ton feed cost, additive MSRP price and \$0.40/Lb. live chicken meat price assumptions.

Q-Biotic™ 1DP is available exclusively in North America from Quality Technology International, Inc.

The World of Bacteria

Have you ever tried to explain to the layman that bacteria can be good? We find it interesting that most people don't have a problem eating cheese or yogurt, but would cringe at the idea that they have bacteria in their system. If you want to scare your neighbor, let them know these interesting items, taken from Wikipedia:

- There are typically 40 million bacterial cells in a gram of soil.
- There are approximately 10 times as many bacterial cells as human cells in the human body.
- Bacteria is used in making antibiotics.
- It's believed that some dormant endospores can survive for millions of years.

Intestinal Integrity™

