



Aziz reflects

A series of articles from Aziz Sacranie,
Technical Director Poultry, Alltech Inc

The foundations of success

To be successful in the business of broiler chick production it is necessary to appreciate where we have come from.

The modern broiler industry is some 60 years old. In the 1950s it took 70 days to grow a 2.00kg broiler; now it takes 35 days, with a feed consumption of 3.33kg, compared to 6.50kg in 1952. The table below shows this genetic progress in terms of live weight of a typical broiler at 42 days old:

Year	1990	2000	2010
Live weight (kg)	1.90	2.35	2.78

The genetic progress for growth and feed efficiency has been both continuous and dramatic. The industry expects this progress to continue to support the industry's objectives of increased market share and increased poultry meat consumption in real terms – the future is bright for very good social and economic reasons.

We do not get something for nothing and the chicken business is no exception. In five decades the birds have become more sophisticated. This is despite the breeding companies striving to balance reproductive performance with the prime objective requirements of the broiler generation.

Broiler genetic progress requires improved parent stock management. Inevitably it becomes a more difficult task to achieve both predictable and repeatedly good chick numbers from parents of high performance broilers. The parent stock management techniques used from 1970 to 2000 progressively, and very evidently, became inadequate and reappraisals are required.

In future columns I will describe the way in which we can establish a system of management, husbandry and feeding that has the capacity for adaptation to meet the demands of future genetic development.

The broiler parents also possess the desirable broiler characteristics, therefore will also have the ability to consume high amounts of feed and rapid weight gain is undesirable in breeders from a performance point of view.

The effect of not controlling bodyweight and allowing the broiler parent stock to eat freely and grow to its genetic potential, will ensure low peak and no persistency, with final results being disastrous. The aim is to maintain the genotype but change the phenotype!

Improved broiler performance requires better management techniques for optimum reproductive performance from the parent stock.

Logical rearing management is required ensuring that the correct sequence of physiological development takes place.

We can divide the growth period from day old to sexual maturity into critical stages, based on the sequence of physiological development. It is for that reason the restricted bodyweight profile is parallel to the natural growth profile, albeit 47-50% lower.