Broiler Feeding Programs

To maximise efficiency and profitability in broiler production, it is necessary to select a feeding program designed to produce a bird that meets your market requirements and suits your own management system. Provimi will create the optimal feed formulations for your specific situation which will help to maximise profitability.

Supported by many years of research, Provimi is able to predict an animals' response to changes in environmental conditions, and has tailor made nutritional solutions to maximise your economical output. This work is the foundation in the development of the **BroilerMax** concept.

BroilerMax is the result of extensive research into all aspects of broiler performance, such as the protein/energy balance, amino acid and energy levels per phase, physical form of feeds (pellet size, fineness, structure), feed appearance (pellet/meal, quality of pellet/meal), breed and sex differences, quality and

type of raw materials and additives. Provimi identifies five feeding phases for broilers as shown in figure 1. We recommend feeding each broiler 100g of the complete broiler prestarter **ProGress** from day 1 to approximately 6 days old, then moving on to the Starter diet up to 14 days followed by the Grower diet until 28 days old. Finisher 1 is recommended from 28 days until five days pre slaughter when it is replaced by Finisher II. The Finisher II does not contain a coccidiostatic. These diets are based on Provimi premixes or concentrates to ensure optimal feed balance and maximal production.

Figure 1. The five different feeding phases for broilers











A Cargill Company



ProGress (age: 1 - 6 days)

Prestarter for broiler, laying hens, breeders and ducks (100g per bird)

The first period in a chick's life is very critical. Digestibility is limited because the digestive tract is not fully developed and enzyme activity is low. The combination of limited digestibility and low feed intake makes it difficult to achieve a good start. ProGress anticipates on this shortcoming and ensures improved development. Paying enough attention to the first week of life is rewarding. From literature and Provimi research it is proven that 10g extra live weight gain in the first seven days results in ±70g extra live weight in 42 days. Several factors determine the start-up of

the young bird. The health status and uniformity of the day-old chicks and the climate on arrival are important factors. However, our focus will be the nutrition in the first week, which strongly influences production capacity in later stages.

The specially designed ProGress supports the young chicks in many ways.

Feed intake is stimulated by an optimal pellet size, length, hardness and durability. An early and high feed intake is important for good digestive tract development. The presence of feed will also trigger the development of the enzyme system and stimulates the

- digestion of the yolk sac.
- ProGress is based on easily digestible protein and fat sources for an optimal nutrient supply and to overcome digestive problems.
- ProGress has a positive influence on the immune system. The development of the immune system in the first days requires the availability of amino acids to build up the different proteins involved in the immune response, such as immunoglobulin. These come from the digested feed and from the yolk sac digestion. A highly digestible prestarter will result in higher nutrient availability for immune and body development.
- Different additives are included in ProGress to improve the digestion, support the development of the digestive and immune system, and to promote the gut flora.

Provimi research and field trials show positive results with ProGress. Live weight at the end of the range of feed related factors enables us to predict fattening period increased considerably, and feed conversion ratio often improved. Furthermore, results from the field trials show improved flock uniformity and reduced mortality. The latter is also an indication that feeding ProGress positively influences the health status of the chick.

In laying hens and breeders the birds are able to produce more eggs per bird. The combined effects result in positive cost-benefit ratios in the vast majority of trials. ProGress is effective in broilers, rearing hens, breeders and ducks as it generally improves the animals early development, which results in improved production and stronger birds.

One of the special additives in ProGress is Biacid. Biacid is a specific blend of organic acids and essential oils designed to enhance production performance of chickens by encouraging feed intake and efficient digestive function. Biacid is included in the prestarter diets and throughout the fattening period.

Organic acids and essential oils are known to have bacteriostatic/bactericidal activity.

However, the effectiveness of different compounds varies and is dependant on many interacting factors. Biacid has been formulated following detailed research into these compounds and into their combined effects, to ensure that the most effective blend is used for optimising broiler chick performance. Provimi research and field trials show improved broiler performance and profitability when Biacid was added to diets.

Characteristics and benefits of ProGress

- Highly digestible ingredients
- Improved feed intake
- High daily gain
- Low feed conversion ratio
- Good health status
- Good uniformity
- High return on investment

Provimi Starter, Grower, Finisher phases (age: 6 days - end)

Provimi's knowledge of how birds respond to a their performance. Predictable results allow us to work with you to develop an optimal feed program for your specific company to obtain maximum profit.

We normally recommend a five phase feed program for the different stages of the bird. The nutrient levels of the complete feed per phase differ depending on circumstances, such as the availability and prices of raw materials, and the company goals, such as lowest cost per kg of meat, maximum daily gain or lowest feed cost per kg feed or per bird.

The recommended feed program from six days old will depend on local raw materials and circumstances, and will incorporate Provimi fullconcentrates, concentrates or premixes depending on the system. In this way we can work with the customer to formulate optimal programs for integrators, feed mills and home mixers in order to maximise economic performance.

Biacid, Provimi's natural growth promoter, can be added to concentrates or is available as separate additive.