



For layers and breeders

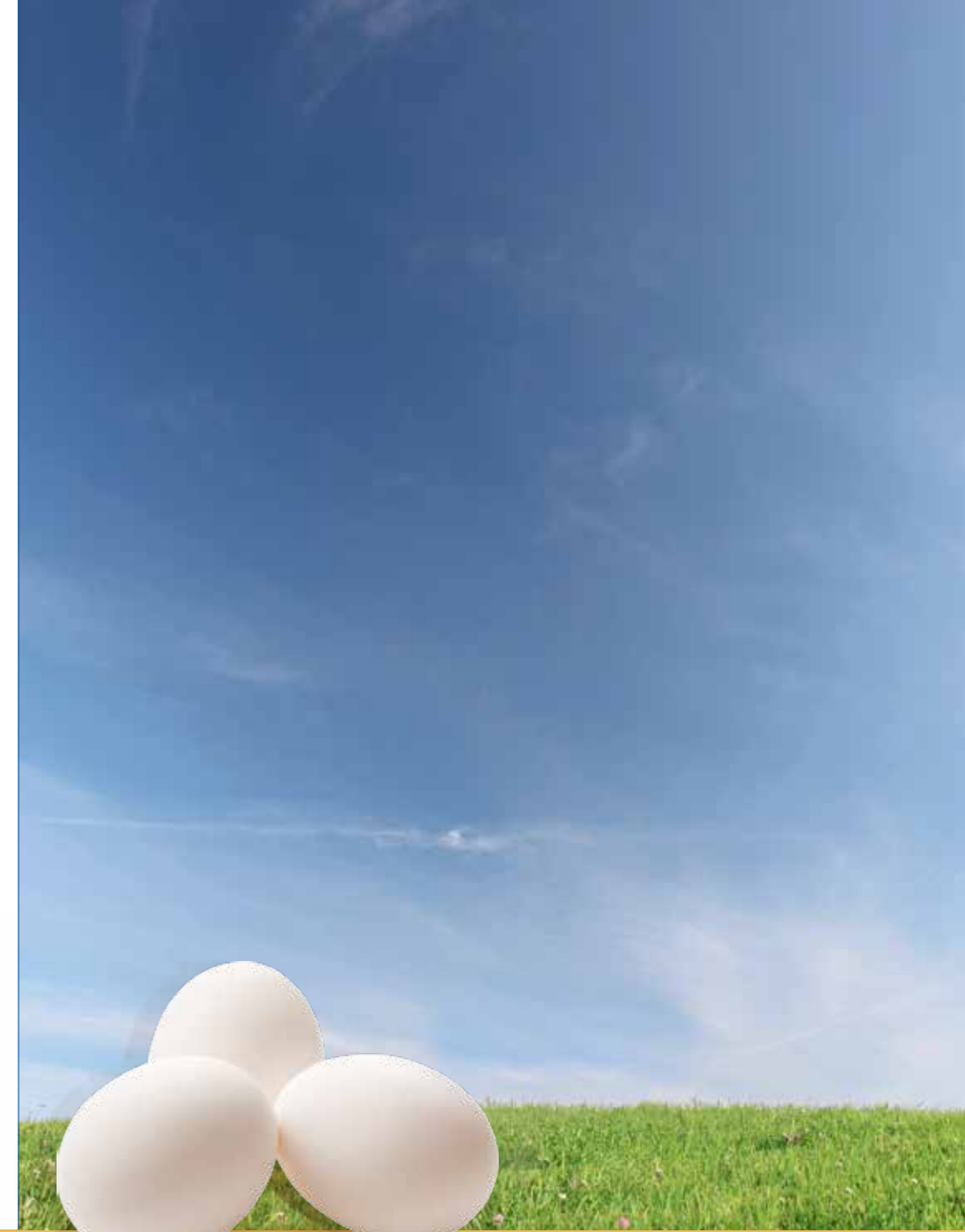
- **Dosage:** During the second phase of the laying cycle: 1 kg/Mton
- **Packaging:** Bags of 25 kg
- **Storage:** Store cool and dry

The starting point for rearing healthy, productive animals is **safe nutrition.**

Active in over 60 countries worldwide, we produce premixes, concentrates and functional feed ingredients for the animal feed industry.

We strive to constantly innovate, and at the heart of our unique ingredients are our ongoing research, development and testing programmes. We are widely acknowledged as the industry's benchmark for increasing yields and reducing disease naturally.

Through our worldwide reach, constant innovation, thorough testing and proven results, we are proud to say that, today and tomorrow, Nuscience will remain at the heart of feed.



Visit us at www.nusciencgroup.com



POULTRY

KNOWLEDGE PARTNER IN NUTRITION AND HEALTH

Nuscience
 Boiebos 5
 B-9031 Ghent (Drongen)
 T +32 (0)9 280 29 00
 F +32 (0)9 282 34 27
 E info@nusciencgroup.com

Protonweg 10
 3542 AJ Utrecht, The Netherlands
 T +31 (0)30 248 20 60
 F +31 (0)30 241 02 34
www.nusciencgroup.com

shellbiotic
 unbreakable



The importance of albumen quality

Due to the latest developments in breeding technology both commercial layers as well as breeders have the potential to be kept for longer production cycles.

Therefore egg quality is becoming more and more the decisive parameter for profitability in the poultry industry. Maintaining both external and internal quality will therefore not only be beneficial to the industry in the short term but might also contribute to an improved growth potential.

A lot of knowledge is already present on the importance of albumen quality with regard to the calcification process as well as to the relation with hatchability and the quality of the day old chick. Currently, research is being executed in order to define the exact proteins which are affecting either the albumen quality or the organic matrix of the egg shell.



Reach the summit of quality... with Shellbiotic®



Throughout the years, Nuscience has acquired an extensive experience with Medium Chain Fatty Acids (MCFA). With the knowledge of the different effects of MCFA and their combinations with SCFA on the metabolism and intestinal health, Nuscience was able to develop **Shellbiotic** just specifically to sustain the genetic potential.

Shellbiotic is able to improve both the quantity of saleable or settable eggs and their quality, resulting in more first grade eggs with improved albumen quality.

The latter results directly in improved shell quality, hatchability and chick quality and might indirectly result in better growing performances of the offspring.

Better laying persistency

With the current genetics of laying hens and breeders good peak productions are achieved.

The challenge is to maintain these high productions as long as possible (= increasing laying persistency) for maximising the number of saleable consumption or settable hatching eggs.

Shellbiotic® keeps production high

Effect of Shellbiotic on egg production

		Control	Shellbiotic	
Before Shellbiotic	Week 22 - 58	249.6	249.5	2 eggs extra
With Shellbiotic	Week 59 - 85	139.9	141.8	
Total	Week 22 - 85	389.4	391.4	

Trial with Lohman Brown laying hens at Provincial Centre for applied poultry research, Geel, Belgium

Higher hatchability

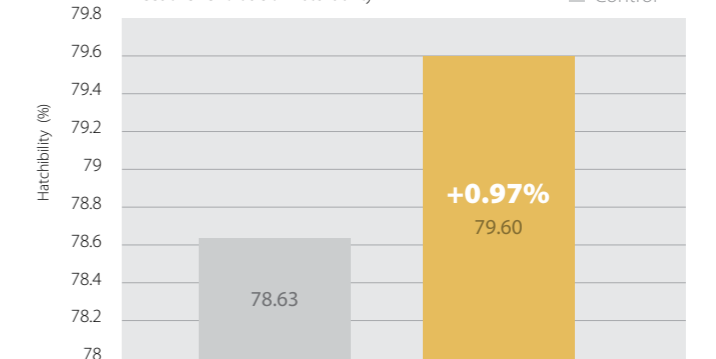
High quality eggs form a perfect environment for the developing embryo.

This results directly in improved hatchability and chick quality and might indirectly result in better growing performances of the offspring.



Shellbiotic® increases breeders performance by improving the hatchability rate

Effect of Shellbiotic on hatchability



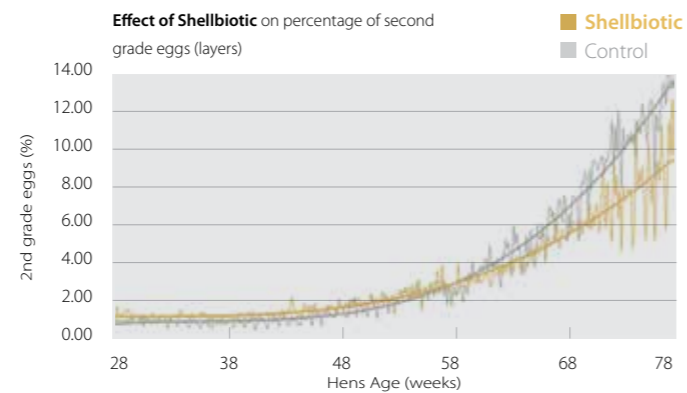
Better shell quality

The number of saleable/settable eggs is not only determined by egg production but also by egg shell quality.

A decrease of the percentage of second grade eggs results in a higher amount of eggs to be sold/set.

Shellbiotic® for more first grade eggs

Effect of Shellbiotic on percentage of second grade eggs (layers)



Better albumen quality

Next to a nutritional function, the albumen offers a physical protection against shocks. Moreover it forms a barrier for microbial contamination.

Therefore it is very important that the albumen quality (expressed in Haugh Units: HU) stays as high as possible during storage.

Shellbiotic® keeps albumen quality high during storage

Effect of Shellbiotic on HU during storage

