



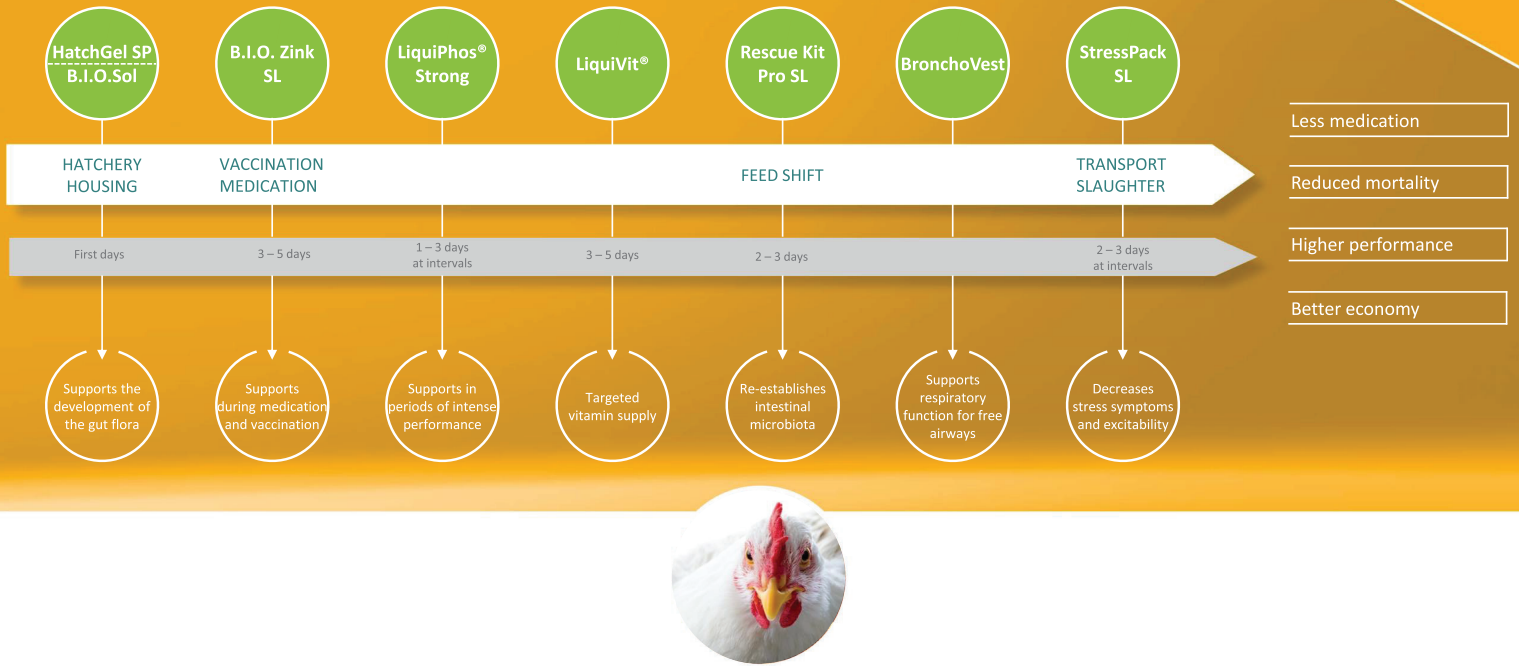
HatchGel SP

For visible support

IPC[®]
INTERPHARMA

 **Biochem**[®]
Feed Safety For food Safety

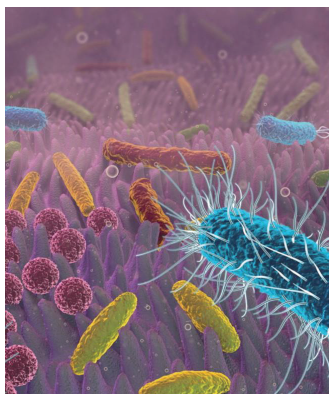
HatchGel SP



Colonization of the gut



In **the wild** the bird's gut is colonized through contact with bacteria from the egg shell, the hen and the nest. This helps the bird to create barriers against facultative pathogenic bacteria.

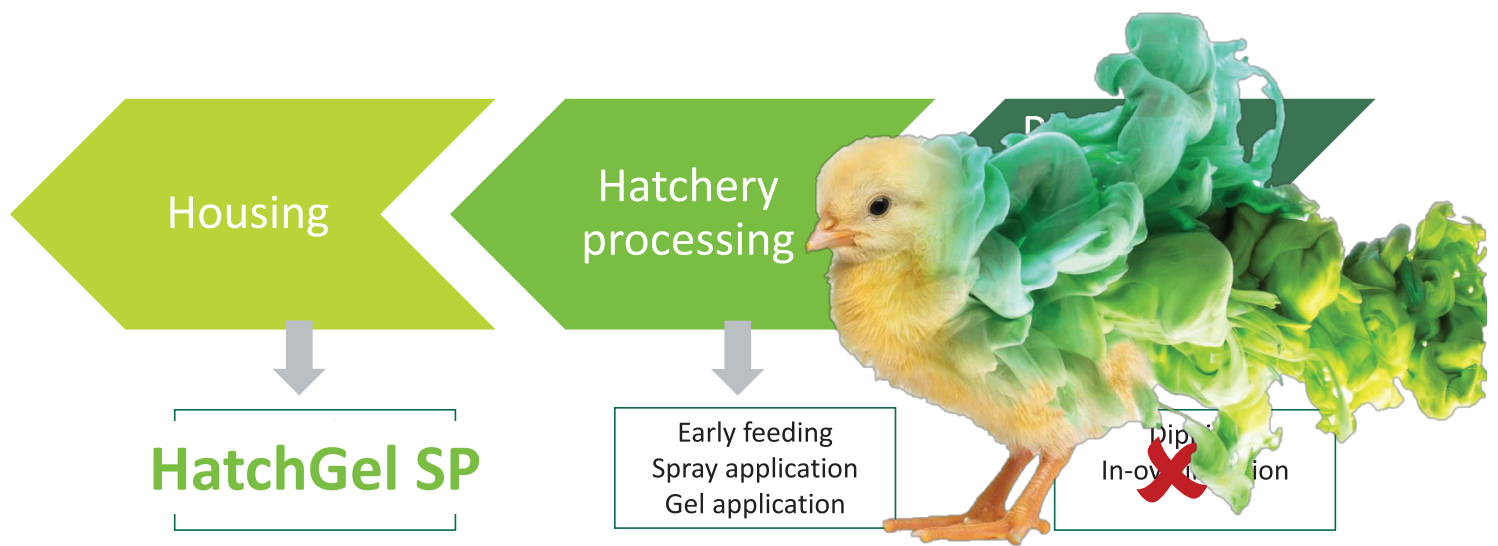


In **commercial hatcheries** this inoculation does not occur due to high sanitary conditions and lack of contact with nature. This will increase the risk of pathogenic bacteria overgrowth.



Compensatory colonization of the gut is possible with controlled application of **lactic acid bacteria** – based probiotic products, as early as possible for best results.



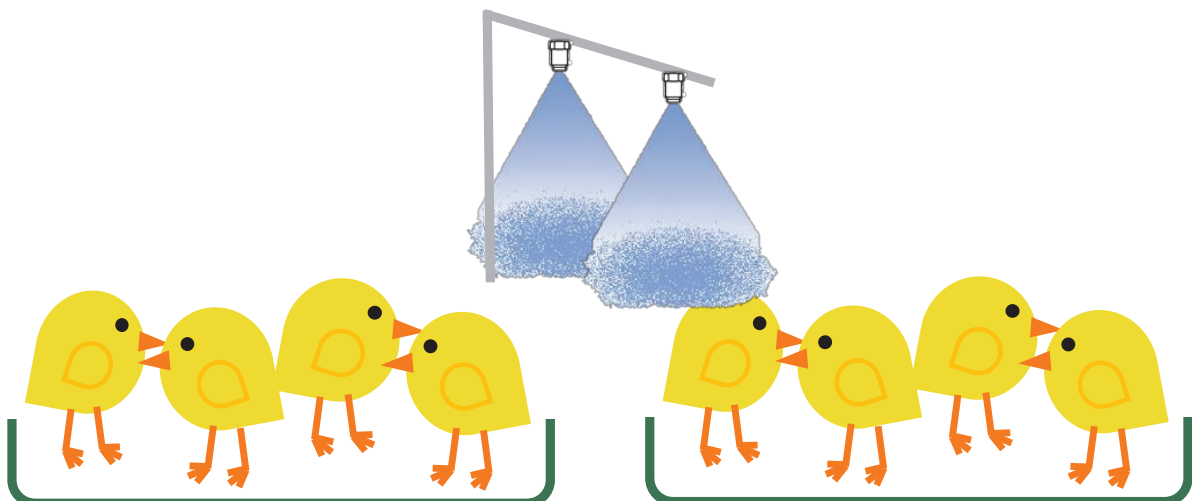


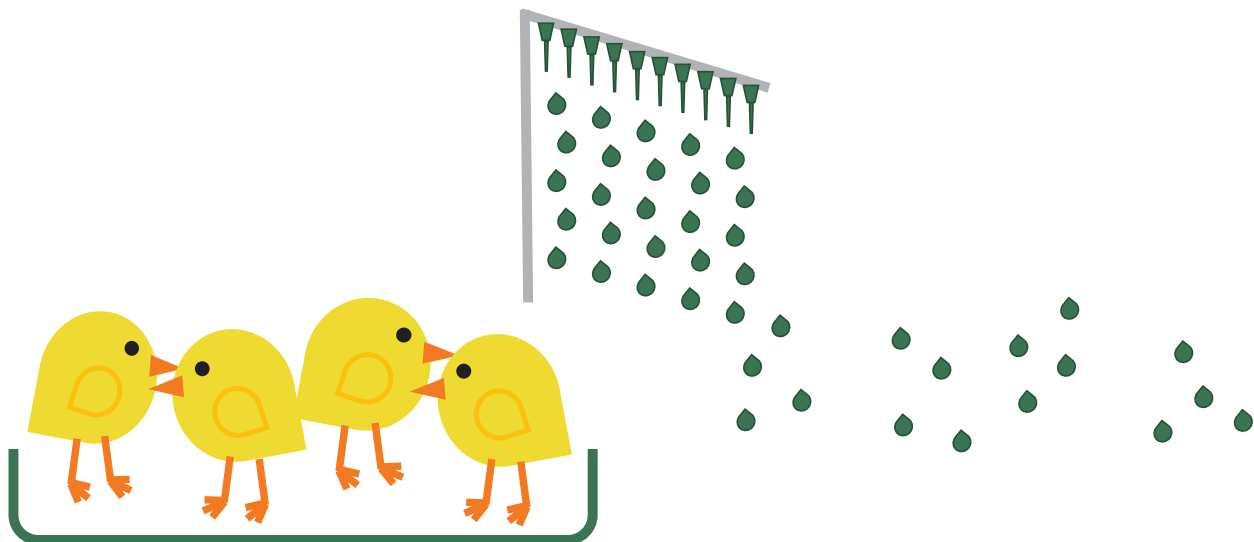
CHALLENGES OF HATCHERY APPLICATION – IN OVO



- High hygiene standard
- High contamination risk
- Unsuitable for probiotics
- High equipment expense

CONVENTIONAL WATER BASED SPRAY





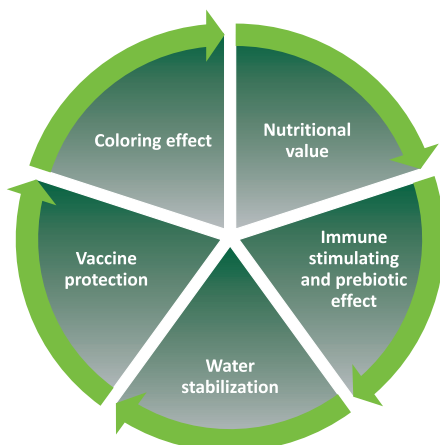
ADVANTAGES OF GEL APPLICATION

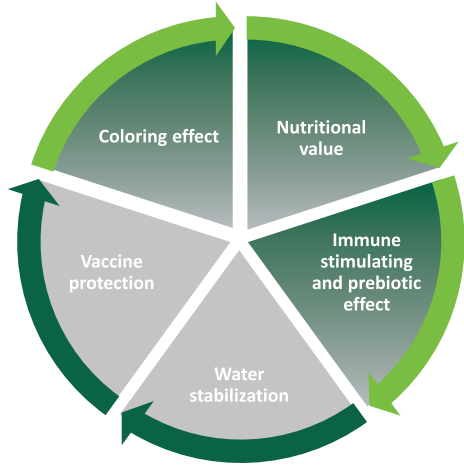


- Even coverage of & uptake by chicks
- No wetting of feathers
- No negative impact on thermoregulation
- No risk of inhalation
- Ideally suited as a carrier for:
 - Probiotics (B.I.O.Sol)
 - Vaccines
 - Vitamins
 - Etc.



More than just a carrier?

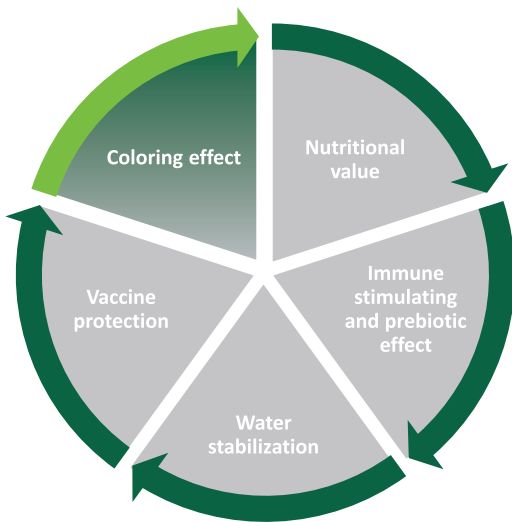




◆ What is Spirulina?

- Microalgae, also known as phytoplankton, at the beginning of food chain
- One of the oldest life forms on earth
- Single-celled organisms, 5 – 100 µm
- Long known for its health benefits in humans
- Recent studies also in animals
- Authorized as straight feeding stuff

SPIRULINA: COLORING EFFECT

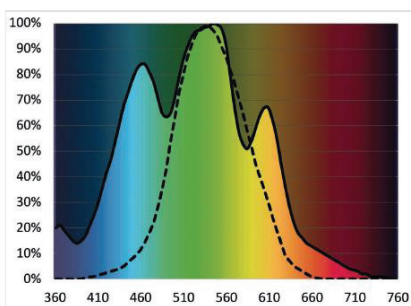


◆ Spirulina has high contents of chlorophyll, carotenoids, and pyhcocyanin, providing a natural, fine dark green color

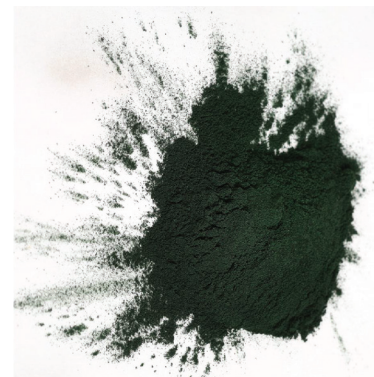
- No need to add further colorants
- Excellent visibility for the chicks



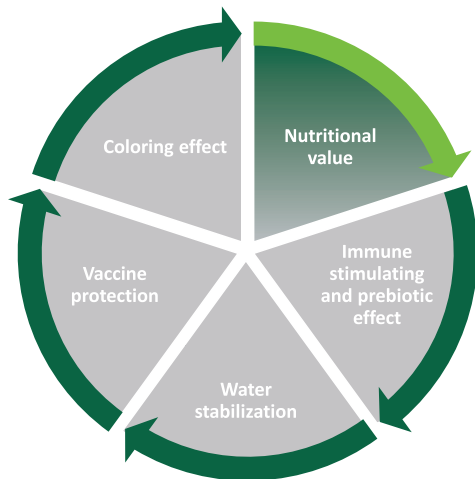
Spirulina: Coloring effect



Comparison of human and chicken photopic vision (Hy-Line International)



USE OF „ SUPERFOOD “ SPIRULINA ADDS MORE VALUE



Spirulina as a livestock supplement and animal feed. - NCBI

<https://www.ncbi.nlm.nih.gov/pubmed/22860698> ▼ Diese Seite übersetzen

von BW Holman - 2013 - Zitiert von: 97 - Ähnliche Artikel

02.08.2012 - Spirulina as a livestock supplement and animal feed. ... poultry, swine and rabbits and their responses to dietary Spirulina supplementation are ...

Spirulina as a functional ingredient in broiler chicken diets | SASAS ...

www.sasas.co.za/spirulina-functional-ingredient-broiler-chicken-... ▼ Diese Seite übersetzen

In recent years there has been increased interest in the production of novel functional foods by utilizing eco-friendly materials and methods. Therefore, the ...

[PDF] EFFECT OF USING SPIRULINA PLATENSIS ALGAE AS AFEED ...

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von YA Mariey - Zitiert von: 31 - Ähnliche Artikel

Spirulina platensis algae afeed additive local laying hens. 203. MATERIALS AND METHODS. This study was carried out at El- Gimmizah Poultry Station, Animal.

Spirulina Granules / Spirulina in Poultry | SPIRULINA ...

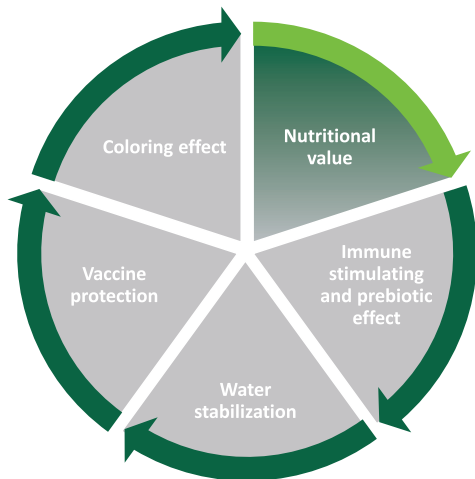
spirulinafoodandfeed.com/?page_id=230 ▼ Diese Seite übersetzen

Spirulina (blue-green alga) is one of the high quality natural feed additives that can be used in animal and poultry nutrition. The blue-green algae (Spirulina ...

Use of Micro-algae in Organic Poultry Diets - eXtension

<https://articles.extension.org/.../use-of-micro-algae-in-organic-p...> ▼ Diese Seite übersetzen

USE OF „ SUPERFOOD “ SPIRULINA ADDS MORE VALUE



◆ Spirulina is rich in...

- Protein
- Polyunsaturated fatty acids
- Vitamins
- Antioxidants
- Bioactive substances

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The screenshot shows a news article from Poultry World magazine, dated Friday, October 26. The article is titled "Algae boosts natural defences in broilers" and features two images: a green leafy algae and a red, branching marine alga. The text below the images states: "Broilers have to face several challenges throughout their production cycle. Innovative marine algae extracts boosts broilers' natural defences and optimises their performance without relying on antibiotics. [read more](#)"



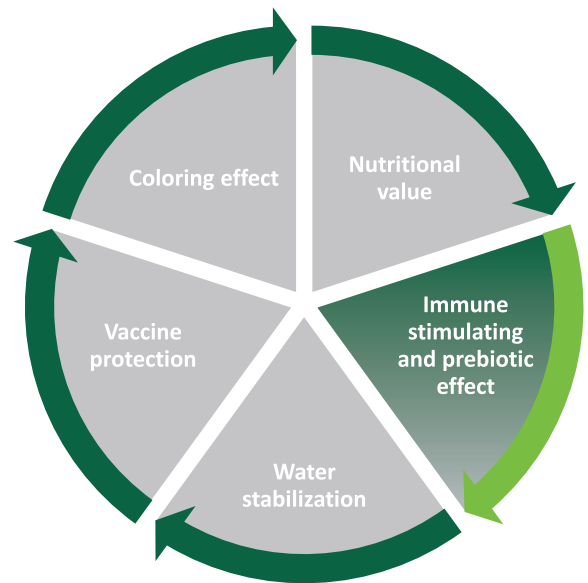
IMMUNE STIMULATING AND PREBIOTIC EFFECT

Common effects of microalgae, shown in studies:

- Anti-inflammatory, anti-oxidative
- Immune modulating
- Antibacterial

Studies in livestock have also shown positive effects on:

- Immunity
- Gut health
- Performance
- Fertility

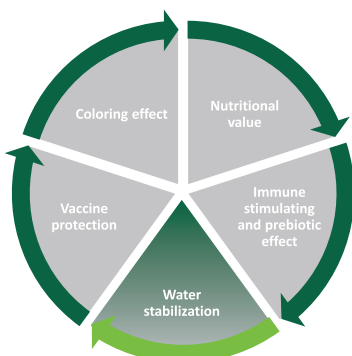


IMMUNE STIMULATING AND PREBIOTIC EFFECT

- Studies performed with microalgae as feed supplement
- Exact mode of action not clear – results are based on combined effects caused by different components (fatty acids, antioxidants, bioactive substances...)

Aspect	Effect	Studies
Immune status	Positive influence on immunologic blood parameters (specific and unspecific immune response)	Al-Batshan et al., 2001, An et al., 2016, Kang et al., 2013, 2016, Qureshi et al., 1996
Gut health	Positive influence on bacterial colonization (Lactobacilli)	Kang et al., 2013, 2016, Janczyk et al., 2009, Zheng et al., 2012
Meat quality	Increased content of Ω 3-fatty acids	Mooney et al., 1998
Production (Chl)	Increased weight gain and final body weights	An et al., 2016, Kang et al., 2013, 2016, Oh et al., 2015

WATER STABILIZATION : NEUTRALIZATION OF CHLORINE



- Sodium ascorbate used as a safe, natural alternative to sulfates to neutralize chlorinated water
 - Sodium thiosulfate used in some products labelled as „water stabilizers“
 - Not a feed additive
 - Legal use unclear
 - hazardous
- Up to 5 ppm chlorine content in the water can be neutralized



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