





# Our Research

#### We are Innovative

NUQO© is an independent company that promotes transparent and innovative solutions. We are pioneers in the field of marine algae and we perform research to identify, source, combine and protect plant extracts (from land or sea) and various ingredients, to bring unique solutions to the market.

### **Library of active ingredients**

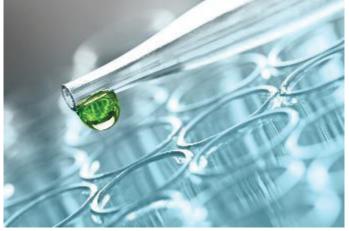
Our R&D team and our network of experts have in-depth knowledge; we own a comprehensive database of ingredients that we screen to combine the right molecules. We continue to explore new opportunities and exclusive partnerships to source directly new molecules and compounds (such as phycogenics) with specific physiologic effects, to design new solutions

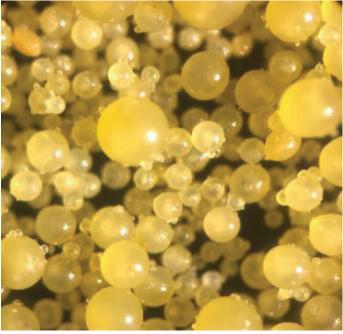
### **Cutting-edge production technologies**

NUQO© has extensive knowledge of technologies to produce the most suitable solutions. Thanks to our network of experts and our different production sites, we can select and adapt the right method, such as encapsulation, granulation, fermentation or adsorption, to increase stability or activity of molecules, to control physical properties (dust, irritation, odor, caking ...) and to guarantee the adequate control release of our products









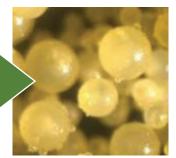
# A short introduction to NUQO® NEX

## Technology of NUQO<sup>©</sup> NEX

- •NUQO®NEX is designed to improve performance of animals.
  - ➤ It is a sustainable solutions that contains natural extracts from land plants + specific algae extracts.
  - Ingredients are encapsulated to preserve activity of active principles
- •NUQO®NEX is designed to improve performance of poultry
  - **Broilers**
  - Breeders
  - > Layers
  - > Turkey
- •NUQO®NEX can be used as an alternative growth promoter to increase performance of animals, and to optimize FCR & performance and increase ROI of operations
  - Unique
  - Consistent
  - > Sustainable
  - Competitive









**Direct sourcing** 

Smooth drying

Encapsulation

Field application

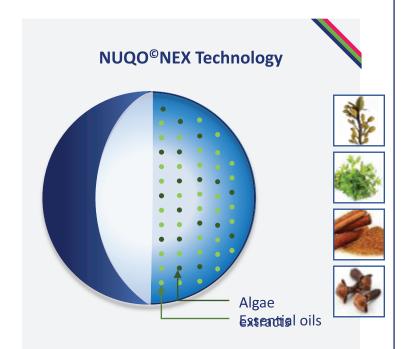
# Technology & Mode of Action

## Technology of NUQO<sup>©</sup> NEX

NUQO<sup>©</sup>NEX contains 4 ingredients from land and marine origins:

- 3 essential oils, Cinnamaldehyde, Eugenol and Thymol. These 3 substances naturally occur in Clove bud, Cinnamon & Thyme.
- 1 brown algae (Ascophyllum nodosum).
  We source it directly from specific regions in North Europe and treat it to guarantee an optimal composition

To preserve activity of ingredients and ensure a good release, the 4 ingredients are encapsulated in a fat soluble matrix to obtain micro-pearls of NUQO®NEX, with an homogeneous and high concentration of essential oils together with the marine algae NUQO®NEX is the first and only combination of protected land & marine natural extracts



- High concentration
- High stability of compounds
- Homogeneous free flowing product
- User friendly & suitable for feed

### Mode of Action

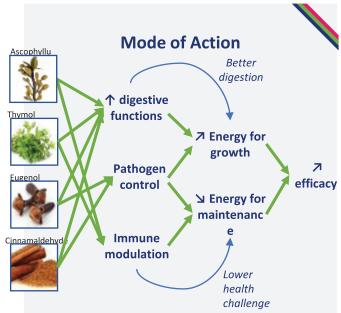
NUQO<sup>©</sup>NEX is designed to release ingredients at targeted site in small intestine to trigger specific effects

- Essential oils (T,C,E) improve gut functionality (enzyme secretion, digestion) & modulate gut microflora
- Sulfated polysaccharides or fucoidans from Ascophyllum directly impact immune status of animals
- Antioxidants from Ascophyllum and from thyme, clove and cinnamon (essential oils) reduce gut inflammation & improve gut morphology

The application of NUQO®NEX leads to:

- Better gut efficacy
- Better digestibility of nutrients
- Improved metabolism & growth
- Better feed conversion

Active compounds of NUQO<sup>©</sup>NEX are released for synergistic effects & performance increase



- Improvement of feed efficacy
- Application on top or in formulation (matrix)
- Sustainable solution to promote growth
- High return on investment

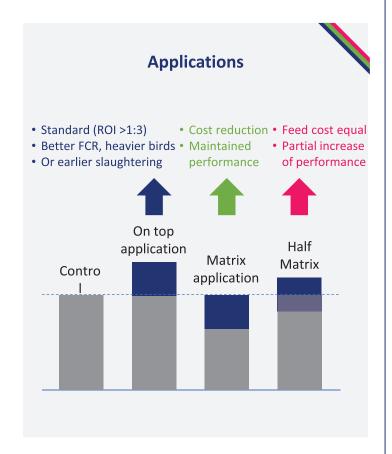
## Program for broilers

#### Application of NUQO<sup>©</sup>NEX

- 100g/ton till 21 days and 75g/ton after 21 days
- With or without AGP

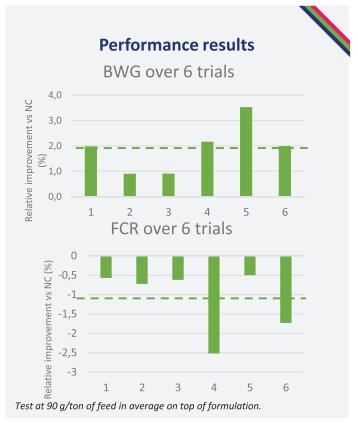
#### **Formulation**

- On top of formulation for extra performance (Shorter fattening period or heavier birds at same final time line)
- Matrix: 'In formulation' to reduce feed cost (save energy and/or protein\* for same performance but lower cost)
- Half-matrix: Intermediate formulation, NUQO®NEX 'for free' (apply only half of matrix to neutralize cost of additives and get part of extra performance)



### Overview of technical results





## **Program for Layers**

Pullet until 16 -18 wk.

Laying hens after 18 weeks

**NEX** 

# **NEX**

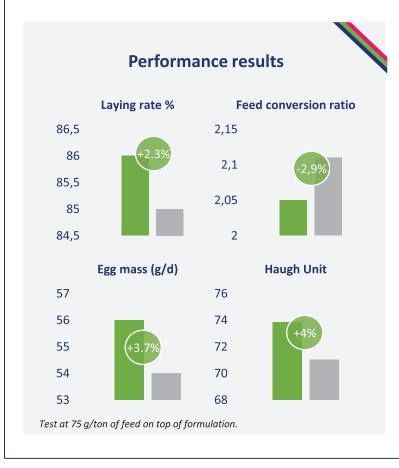
#### NUQO<sup>©</sup> NEX

- Secure growth & FCR & health support
- Preparation to laying period
- 100g/ton up to 3-4 weeks
- 75g/ton up to 16-18 weeks

#### **NUQO<sup>©</sup> NEX**

- Digestibility / Energy uplift / feed cost reduction
- Better egg quality / less eggs broken
- 75g/tón after 18 weeks

## Overview of technical results





# NUQO<sup>©</sup> NEX / Product information

## Technology of NUQO<sup>©</sup> NEX

•Name NUQO©NEX

•Code G20-PE01

Description
 NUQO©NEX is an encapsulated

blend of carefully chosen appetizing substances and

feed materials

• Target species Monogastric animals (Poultry)

Composition Encapsulated micro-particles

containing a standardized combination of marine algae (ascophyllum nodosum) and

essential oils (thymol,

cinnamaldehyde, eugenol)

• Appearance Form: Micro-pearls

• Color: Dark green to brown color

•Legislation in conformity with European feed legislations. Free from GMO (Regulation 1830/2003/CE) and animal products. Undesirable substances Maximum concentrations in conformity with directive 2002/32/CE, Directive 2005/87/CE, Directive 2006/13/CE and

Directive 2009/124/CE

• Dosage For animal nutrition, into feed or premix. NUQO©NEX is recommended monogastric animals; broilers, nullets, layers, turkeys, at 75-100 g/t

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Packaging 25 kg boxes

•Shelf life 24 months when stored in original packaging and kept in a cool (below 35°C) dry place, with no direct exposure to the sun. Variations in color are independent of its appetizing and physical properties

• Storage Store under cool and dry conditions, in original closed packaging

• Safety No specific measures required. General protective and hygienic measures apply.

• NUQO©NEX is produced under GMP+ quality insurance scheme





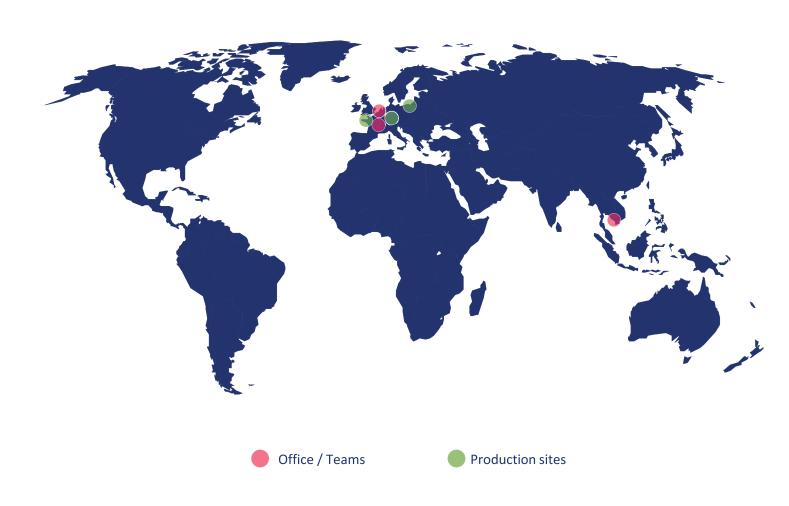








NUQO©'s teams develop and promote natural ingredients and feed additives to improve performance and health of animals. For more information: <a href="mailto:info@nuqo.eu">info@nuqo.eu</a>





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