GNUBIOTICS SCIENCES

A natural solution from

- GnuBiotics Sciences’ 1st product is GNU100, which is a Microbiota Accessible Carbohydrate (MAC) that serves as a dense protective barrier on gut cell surfaces.

- GNU100 is a natural and structural mimic of Human Milk Oligosaccharides with diversity reflecting HMO’s functionalities.

Disclaimer: This information has not been evaluated by the Food and Drug Administration.
5 KEY TRENDS
DRIVING THE PETCARE MARKET

- **RISING PET POPULATION**: Pet ownership continues to grow in popularity across both developed and emerging markets. Petfood growth is further driven by owners feeding their pets prepared foods rather than leftovers.

- **HUMANISATION CONTINUES**: Pet humanisation continues to deepen as companionship provided by pets, particularly cats and dogs, appears to address a psychological need in many people as society becomes more urbanised. Pets are treated as family members.

- **CONSUMERS PREPARED TO PAY MORE**: Value sales of premium dog and cat food continues to outperform the wider pet food market with “added value” products taking the lead.

- **NARROWING GAP BETWEEN PET AND HUMAN FOOD**: A growing number of consumers display a willingness to pay a significant premium for products classified as “human grade” “grain free”, “raw”, “hypoallergenic” or containing “superfood” or “active” ingredients.

- **OBESE PETS**: Obesity is a growing problem among both dogs and cats worldwide. With 53% of dogs and 51% cats classified as obese, the pandemic shows no signs of abating. Awareness of the problem is increasing and this is translating into an increase in sales of products aiming to counter obesity.
GNUBIOTICS’ COMPOUND, NATURALLY PRODUCED, BRINGS A UNIQUE APPROACH AND KNOWLEDGE OF THE MECHANISM OF ACTION OF THE MICROBIOME.

- Influencing the gastrointestinal microbiome to restore gut equilibrium and health through natural compounds is increasingly viewed as the most sustainable treatment for digestive disorders.

- GnuBiotics proprietary Multiplex Sequencing Tool is able to take higher resolution snapshots and produce a picture of the motion and changing diversity within the microbiome. This will provide an enhanced view of the effect of our pipeline candidates.

- Compound has demonstrated clear in vivo efficacy in 3 disease states

  A. Restoration of gut health post antibiotic treatment
  B. Prevention of onset of Clostridium Difficile infections
  C. Modulating the effects of a high fat diet.
BREAKTHROUGH SOLUTION TO ADDRESS PET OBESITY
HOW IT WORKS.

THE SCIENCE: GNUNBIOTICS’ COMPOUND PASSES UNDIGESTED FROM THE STOMACH TO THE GUT TO ENRICH SPECIFIC GUT MICROBIOTA WITH KEY COMMENSALS

- Microbiota Accessible Carbohydrates (MACs) are carbohydrates that are resistant to digestion by a host’s metabolism, and are made available for gut microbes, as prebiotics. These prebiotics enable the modulation of the microbiome and produce measurable clinical effects.

- Human Milk Oligosaccharides (HMOs) as well as our initial pipeline candidate, GNU100, are examples of MACs.

- GNU100 offers protection from diet-induced obesity by breaking down fat in the lower intestine thereby reducing weight gain.
  - Fat which normally would be deposited is instead broken down (gluconeogenesis) into glucose.
  - GNU100 also causes an increase in «good energy-harvesting» bacteria in the gut. This energy- or glucose-harvesting bacteria «eat» up the broken down glucose instead of eating up the good glycan which line the gut.

ADDRESSING THE NEED FOR IMPROVED GUT HEALTH PROTECTION IN PETS AS WELL AS CURBING THE OBESITY EPIDEMIC IN CATS AND DOGS.

Human Milk Oligosaccharides (HMO) GNU100, Microbiota Accessible Carbohydrates
Gnubiotics Sciences is a biotech founded in the Swiss Alps to develop **A PLATFORM** to commercialise microbiome modulating products for the functional nutrition and the therapeutics markets.

**“GUT NATURALLY UNDERSTOOD”** became our raison-d’être with a goal to accelerate metabolic health in animals and humans.

**GNUBIOTICS SCIENCES IS READY TO TALK ABOUT HOW GNU100 CAN BENEFIT** your product and business, and, more significantly, how it can help to change the lives of your consumers and their pets.

If you want to talk further please contact

**info@gnubiotics.com**
PUBLICATIONS:


de Jesus Raposo, M. F., et al. (2016). «Emergent Sources of Prebiotics: Seaweeds and Microalgae.» Mar Drugs 14(2)


Glucose based oligosaccharides digestibility and microbial populations in dogs - Abbott study 2000
GnuBiotics Sciences Sàrl
Rte de l’Ile-au-Bois 1A
CH – 1870 Monthey

Mail: info@gnubiotics.com
www.gnubiotics.com

Tel: +41 79 906 92 27