



To bring the proof of efficacy in laboratory models

"Innovation and In Vitro & In Vivo Services"



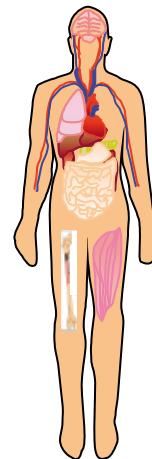
NATURALPHA - LABS provides a broad range of *In Vitro* & *In Vivo* services

To meet the latest needs of both consumers and regulatory agencies, Naturalpha has developed a broad range of Preclinical Research Services (*In Vitro* & *In Vivo*) in order to give the scientific proof of health effect of your ingredients, dietary supplements, extracts and food products...

A broad range of tests



Therapeutic Areas



- Mental Health
- Cardiovascular Diseases
- Atherosclerosis
- Obesity, Weight management
- Satiety
- Diabetes, Glucose metabolism
- Cholesterol
- Inflammation
- Gut Health
- Joint Health
- Skin Health

NATURALPHA - LABS, the chosen partner to build up the proof of your health claim

- Various **application fields**
- A **global scientific assistance** from the R&D strategy design to results interpretation and validation
- A **leading and competitive technological capacity** answering to the Good Laboratory Practices and high quality standards which allows Naturalpha to suggest you a **broad range of protocols**. Those studies combine rapidity, specificity and selectivity which ensure reliable results in the best deadlines.
- Experienced teams in **scientific and regulatory consulting** and world renowned in **clinical trial** management dedicated to your project.



NATURALPHA

- HQs and laboratories: Lille (France), spin off in Boston (USA)
- Founded in 2001 - Turnover in 2008: M€ 3
- A 25-person multidisciplinary team
- What we do in Health & Nutrition:
 - **Consulting:** Intelligence & consulting in science & regulatory
 - **Labs:** Preclinical studies to validate health benefit
 - **Clinical Trials:** Clinical trial design & management
- Member of the "Nutrition, Health & Longevity" Cluster

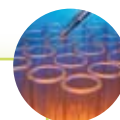
NATURALPHA - LABS, a cutting-edge technological platform



In Vitro Models

- More than twenty human and animal primary cells (isolation and culture)
- More than 30 cell lines routinely used (3T3-L1, Caco-2, MCF-7...)
- Cell differentiation (monocytes, adipocytes...)

In Vivo Models



- More than 40 animal models (genetical strains, surgery models, models of nutritional intervention)
- Covering more than 10 physiopathologies (obesity, diabetes, cardiovascular, inflammation...)
- In Vivo* Laboratories with more than 10,000 animals, especially rodents



Innovative technological platforms

- Platforms dedicated to the "omics" technologies: genomics, proteomics, bioinformatics...
- Cell biology platforms (lines and primary cells, cellular models...) - Cellular culture
- Platform of molecular biology, biochemistry, extraction - analytical and screening chemistry



NATURALPHA - LABS meets your specific needs

Case-studies

Satiety focus - Examples of available tools

The food intake is regulated by a bunch of gastrointestinal hormones. The secretion of those hormones can be monitored either thanks to cell models or thanks to animal models on which the physiological factors are being studied.

Available models and tests

In Vitro

Cells culture (L-cell) and secretion of food intake gastrointestinal hormones (GLP-1...)

In Vivo

Animal models

- DIO rats / mice,
- Db/db mice,
- Fa/fa Rats

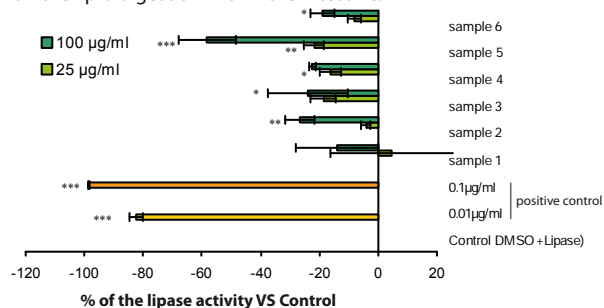
Factors and functional tests

- Food intake
- Weight management
- Gastrointestinal hormones secretion (GLP-1, ghreline, CCK, leptine...)

Obesity focus - Example of studies performed

In Vitro Test - Pancreatic lipase activity

In order to explore the anti-obesity effect of various compounds, we have chosen the pancreatic lipase. This a relevant target participates on the lipid digestion within the intestine.



In Vivo study - Anti-obesity effect in DIO model (Diet Induced Obesity)

After an fattening treatment, enriched in fats, the weight evolution of mice is monitored.

