COMPANY PROFILE

Linnea
MISSION

We improve the quality of life by manufacturing and supplying great natural solutions worldwide. Doing business responsibly.
35 years experience in Natural Science

At Linnea, we manufacture Herbal Extracts, Purified Ingredients and Semi-synthetic APIs of Natural Origin.

We specialize in the Extraction and Purification of Plant Materials and in the Synthesis of Fine Chemicals for use in Pharmaceutical, Nutraceutical, Health-Food and Cosmetic products.

We provide a full qualified support in Process Technology, engineering, Analytical and Regulatory.

GMP Facilities 24/7
Continuous Quality Improvement

Quality is our measure of excellence

It is the result of our procedures and control to reach a “state of being” free from defects, deficiencies, and significant variations.

Manufacturing Processes are fully integrated starting from the raw materials preparation, through the extraction, the synthesis and drying in dedicated equipments (rooms and ISO 8 spray dryer).

Selected Raw Materials

We strive to maintain a presence on-site and work closely with our selected network of suppliers during every step of the process.

- More than 2000 Tons of raw materials handled every year
  Each shipment of raw material is personally inspected and locally analyzed before shipment.
  Each raw material delivered is analyzed to ensure conformity with purchase specifications.
  Environmental and cost-effective logistics are important aspects, carefully and constantly monitored.

- Direct controlled farms
  The cultivated and harvested raw material is supplied from selected plantations using sophisticated and environmentally friendly farming methods.
  Each Farm is regularly audited to monitor every step of the process and ensure the compliance with Linnea Quality Standards and Good Agricultural Practices.

- Selected wild collected raw materials
  The wild collected raw material arrives from many sources and different countries worldwide, from the European woods to the African forests.
  Harvesting, selecting, cleaning, sewing, drying, freezing are critical processes carefully monitored.
Innovative Natural Solutions

Inspired by Nature

INGREDIENTS
With great attention to medicinal chemistry and science, we continuously research in Nature new compounds from small molecule to phytocomplex.
We like to partner with our customers in new developments and in customizing productions.

TECHNOLOGY
We process our high-quality ingredients into effective solutions.
Our team of experts researches new technologies to optimize the product profile to satisfy specific targeted applications.
Linnea design and test effective formulations combining selected ingredients with innovative technologies.

SCIENCE
We collaborate with public and private research institutes and universities to study our products from safety to clinical evidences.

Commitment to service
We provide full service to our clients across 5 continents directly from our Headquarters in Switzerland.

Regulatory support
Our experts and local representatives work closely with federal, state, and local regulatory authorities to provide the documentation required.

Shipping
More than 700 shipments promptly delivered every year thanks to our internal specialists and external qualified partners.

Customer service
Our service is tailored to customers’ requirements with more than 250 customized requests covered each year.
Natural Solutions

ACTIVE INGREDIENTS
Manufactured in Switzerland and GMP certified.
Suitable for Pharmaceuticals, Dietary Supplements and Cosmetics.

DELIVERY SYSTEMS
Two innovative technologies for the effective delivery of natural compounds in targeted formulations.

FINISHED PRODUCTS
Medical Device formulations are available for Licensing.

Active Pharmaceutical Ingredients (API)
Herbal Extracts
Purified Ingredients

NeoSol™
Water Soluble Ingredients for Liquid Supplements

NioSkin™
Niosome Active Ingredients for Cosmetics

SylTech™
Finished Dosage Forms for Topical Application
**HERBAL EXTRACTS**

**BILBERRY**
Standardized and refined dry extract of *Vaccinium myrtillus* fruits
(EP: between 32.4 % and 39.6 % anthocyanins; USP: NLT 36 % anthocyanins).

**TRADITIONAL USES:** Eye health, vasoprotection and antioxidant.

**CANNABIS EXTRACT**
Extract of *Cannabis sativa* L. (THC< 1%)

**TRADITIONAL USES:** Antiepileptic, anti-inflammatory, anti-emetic, muscle relaxing, anxiolytic, neuroprotective and anti-psychotic activity.

**GINKGO BILOBA EPG 246**
Refined and quantified dry extract of *Ginkgo biloba* leaves
(between 22.0% and 27.0 % ginkgo flavon glycosides and NLT 6.0% terpene lactones).

**TRADITIONAL USES:** Antioxidant and peripheral vasodilator (brain support, cerebrovascular disorders, neuroprotection and tinnitus).

**GINKGO BILOBA ETHANOL 246 E**
Herbal extract of *Ginkgo biloba* leaves (NLT 24% ginkgo flavon glycosides and NLT 6.0% terpene lactones).

**TRADITIONAL USES:** Antioxidant and peripheral vasodilator (brain support, cerebrovascular disorders, neuroprotection and tinnitus).

**RED CLOVER IFL 40**
Standardized and refined dry extract of *Trifolium pratense* aerial parts (between 36.0% and 44.0% total isoflavones).

**TRADITIONAL USES:** Relief of menopausal symptoms.

**ZEA MAYS UNSAPONIFIABLE FRACTION**
Extract of the unsaponifiable fraction of *Zea mays* oils (between 20.0 % and 25.0 % β sitosterol).

**TRADITIONAL USES:** Dental and mouth disorders (gum disease).

**VALERIAN DRY HYDROALCOHOLIC EXTRACT**
Extract of *Valeriana officinalis* root (NLT 0.25 % sesquiterpenic acids).

**TRADITIONAL USES:** Relief of mild nervous tension, mental stress and sleep disorders.

**PURIFIED INGREDIENTS**

**5 HTP (L-5-Hydroxytryptophan)**
Purified extract of *Griffonia simplicifolia* seeds (NLT 99.0% L-5-Hydroxytryptophan).

**USES:** Mood booster, antidepressant, migraine, appetite control and sleep disorders.

**HMRlignan™ (7-Hydroxymatairesinol)**
Purified extract of *Picea abies* knots (NLT 90% 7-Hydroxymatairesinol).

**USES:** Relief of menopausal symptoms, cardiovascular protection, metabolic syndrome.

**ACTIVE PHARMACEUTICAL INGREDIENTS**

**BUTYLSCOPOLAMINE** *(Hyoscine Butylbromide)*
Semisynthetic derivative of *Duboisia* leaves.

**USES:** Antispasmodic (treatment of abdominal pain and cramps).

**HY JECT** *(Hyoscine Butylbromide)*
Semisynthetic derivative of *Duboisia* leaves. API non sterile, suitable for injectable use.

**USES:** Antispasmodic (treatment of abdominal pain and cramps).

**VINPOCETINE**
Semisynthetic derivative of *Voacanga africana* seeds.

**USES:** Peripheral vasodilator (brain support, cerebrovascular disorders and neuroprotection).

**VINJECT** *(Vinpocetine)*
Semisynthetic derivative of *Voacanga africana* seeds. API non sterile, suitable for injectable use.

**USES:** Peripheral vasodilator (brain support, cerebrovascular disorders and neuroprotection).

**VINCAMINE**
Semisynthetic derivative of *Voacanga africana* seeds.

**USES:** Peripheral vasodilator (brain support, cerebrovascular disorders and neuroprotection).

**PURIFIED INGREDIENTS**

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WATER SOLUBLE INGREDIENTS
FOR LIQUID SUPPLEMENTS
An innovative technology to achieve optimized natural extract solubility.

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</tr>
<tr>
<td>NeoSol™ Ginkgo</td>
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<td>Anti-aging in young skin (+30)</td>
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NIOSOME ACTIVE INGREDIENTS
FOR COSMETIC FORMULATIONS
Nioskin niosomes are a new and effective delivery system designed to improve skin penetration of natural ingredients.

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<td>NioSkin™ HMRLignan</td>
<td>Anti-wrinkle at any age</td>
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<td>NioSkin™ Ginkgo</td>
<td>Local tissue microcirculation</td>
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<tr>
<td>NioSkin™ MedCan</td>
<td>Anti-inflammatory</td>
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NeoSol™, proprietary Active Ingredients.

Nioskin™ Active Ingredients are patented.
### FINISHED PRODUCTS

Medical Device formulations available for licensing. SytTech™ formulations are clinically tested and suitable for being consistently promoted to medical profession.

#### Gynecology

- **Vulvar Spray Foam**
  - Vulvar contact dermatitis
  - Vulvar dermatosis (lichen)
  - Vulvar redness, irritation post-coitum
  - Post-partum lesions

- **Vaginal Gel with NioSkin™ RCL40**
  - Vaginal discomfort in menopause
  - Vaginal atrophy
  - Dryness, dyspareunia

- **Vaginal Softgel**
  - Aerobic vaginitis
  - Day surgery lesions (colposcopy/laser)
  - Ectropium

- **Wipes**
  - Hygiene for local lesions

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#### Dermatology

- **Topical Repair Spray Powder**
  - Exudative wounds
  - Pressure ulcer
  - Small cut

- **Topical Face Acne Cream Gel**
  - Acne
  - Skin impurities

- **Herpes Labial Cream Gel**
  - Adjuvant local treatment of herpes simplex labial

#### Oral care

- **Foam mouthwash**

#### Ophthalmology

- **Eye Gel**
  - (Under development)

- **Mini-Wipes**
  - (Under development)

### Proctology

- **Cream-gel**
  - With applicator

- **Wipes**
  - (Under development)

- **Wipes**
  - (Under development)

#### Oral care

- **Oral gel**

### Ophthalmology

- **Eye Gel**
  - (Under development)

- **Mini-Wipes**
  - (Under development)

- **Eye Gel**
  - (Under development)
The Linnea plant was built in 1980 by an Italian entrepreneur that implemented a phytochemical plant, specializing in botanical extractions and semi-synthesis processes.

The Company was named Linnea in honour of the botanist Carl Nilsson Linnaeus, the father of modern taxonomy of plants.

In 1990 Linnea was acquired by a Joint Venture of Schwabe (Schwabe.de) and Ipsen (Ipsen.fr).

The new shareholder further developed Linnea’s production capacity to improving quality and safety standards.

During the last 10 years, Linnea has strengthened its position in the global API and botanical extracts markets through a continuous commitment of quality and a constant focus in the evolution of the international trends.
Linnea’s headquarters are based in Riazzino, a small town close to Maggiore Lake, in Ticino Canton, Switzerland. Linnea Inc., the American branch, was founded in 1997, in Easton PA and manages the North American market.