# Spirulina:

Spirulina platensis microalgae belong to the most precious alkaline natural substances of our time. In a concentrated natural form they provide more than 50 vital substances for human beings and animals. In all eras they have been used as a supplement food, e.g. in previous ancient cultures of the Maya and Aztec.

- estimated age: approx. 3.1 billion years
- natural sources: shallow, mineral rich lakes, in tropical or subtropical climes, e.g. Africa, South-America India, China, Taiwan, Japan
- global use: as food and in food, as a food supplement, as animal feed, especially for ornamental fish, birds, and small animals, as a cosmetic agent

## Chlorella:

Chlorella probably has the highest chlorophyll content in the plant kingdom. From there it gets its neme which means "little greenness".

Chlorophyll is an important oxidant carrier and is also called "treasured up sunlight".

- estimated age: approx. 2 billion years
- natural sources: shallow fresh-water lakes, in subtropical climes, e. g. India, China, Taiwan, Japan
- characteristic: the cell wall has to be unlocked before consumption
- global use: as a food supplement, for removing quicksilver, as animal feed, especially for horses, as a cosmetic agent

# Common ground and differences between Spirulina and Chlorella



Attributes	Chlorella pyrenoidosa	Spirulina platensis
Botanical name	Chlorella pyrenoidosa	Spirulina platensis
Species	<ul> <li>green algae (Chlorophyta)</li> </ul>	• blue algae (Cyanobacteria)
Conditions of growth	• in fresh-water	<ul> <li>in very alkaline soda-water (pH-value 9 - 11)</li> </ul>
Microscopic pictures		Sol
Cell form characteristic	<ul> <li>Protozoa, round</li> </ul>	<ul> <li>Protozoa in a thread-shaped compound, spiral</li> </ul>
Cell wall	• cellulose with sporopollenin, of which it is	• easily digestible polysaccharides, which
	said to have a heavy metal binding quality	takes care of good digestibility and a good bioavailability of all vital substances
Cell nucleus	with cell nucleus	• no cell nucleus, free spiral DNA
Nutrient characteristics	• rich in nutrients, with over 50 vital substan-	• rich in nutrients with over 50 vital substances
	ces and all 8 essential amino acids	and all 8 essential amino acids
	Difference to Spirulina	Difference to Chlorella
	<ul> <li>contains vitamin C</li> <li>contains more chlorophyll</li> </ul>	<ul> <li>contains more vitamin B<sub>12</sub></li> <li>contains phycocyanin (blue plant pigment)</li> </ul>
	contains more polyunsaturated fatty acids	
Traditional application	• as a cure	permanent consumption
	<ul> <li>accompaniment for amalgam decontamina- tion, and deacidification</li> </ul>	<ul> <li>accompanyment for immune system fortifica- tion, improvement in performance, normali-</li> </ul>
		sation of metabolism, supports fasting cures
Specific characteristic	<ul> <li>purifies the intestine by its natural rate of cellulose</li> </ul>	• supports the immune strength of the intestin- al flora by its high rate of phycocyanin
		Quality page

#### Quality page

#### Product Specification

- preference for herbal resources
- suitable for vegetarians
- maximum effectiveness
- preference for resources of controlled ecological cultivation
- preference for local growers, distributors and wage workers

#### Harmony & Subtle Energy

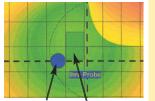
- storage and processing in geopathically and electromagnetically sanified rooms
- use of subtle measuring methods, such as super-colorplate and bio-chemical terrain analysis
- products of Sanatur leave the house in a material and etheric faultless condition

The use of the super-colorplate-way, a picturing quality method. This shows the energy and harmony of the products.

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Super-COLORPLATE ® by Spirulina Hau.

The use of bio-electronic by Prof. Vinzent; the bio-chemical terrain-analysis



BioSpirulina Life optimum

### Cultivation and Processing

Sanatur did pioneer work and in 2001 developed ecological standards - in cooperation with BCS Nürnberg - for microalgae, which closely models the official German policies for ecological cultivation.

Thus, Sanatur was abel to be the FIRST company which could offer businesses a certified OrganicSpirulina product in accordance with BCS and Naturland guidelines.



#### Cultivation & Processing

- cultivation and processing according to ecological rules
- growth in mountain spring water with drinking water quality
- breeding of strong and healthy type of strains of Spirulina platensis and Chlorella pyrenoidosa
- nutritional and active ingredient values are controlled in every state of growth
- carefully harvested at the moment of maximum nutritional density
- Algae are carefully spraydried within seconds
- natural powder
- tablets are pressed especially gently and without any additives
- capsules without any fillers etc.

### Quality & Product Safety

EVERY algae charge is subject to extensive quality and security controls which exceed by far the legal guidelines. Security is guaranteed by this independent testing seal:

The following security standards were achieved

by Sanatur in every OrganicSpirulina, Spirulina or Chlorella charge.



Sanatur

- Herbicides/Pesticides unverifiable
   Examination for over 60 different chemical substances
   Quality inspection according to Ph. Eur. 2005
- Heavy metals no imposition
   Examination for arsenic, cadmium, lead and mercury
   Quality inspection according to DIN 38406-E29; Basis:
   suggested value (PTIW) of the World Health Organisation (WHO)
   plus security factor 50
- Microbiology no imposition
   Examination for indicator germs for defilement or alarmingly
   unhealthy germs
   Quality inspection acc. to § 64 LFGB, ISO 4833, 7954, 4832,
   7402, 6888
- Algae toxins unverifiable
   Examination for micro cystines, nondularine, anatoxin
   Quality inspection through LC-MS/MS
- General indication: Sanatur products are not treated with ionizing rays. Inspection through photoluminescence procedure.

# Sanatur quality therefore blongs to the leading microalgae standards worldwide.

- Algae farm is certified by ISO 9002,
- NO! bargain offers from the world market,
- Spirulina bio-cultivation by Naturland and BCS controlled and certified.

**Quality page** 



