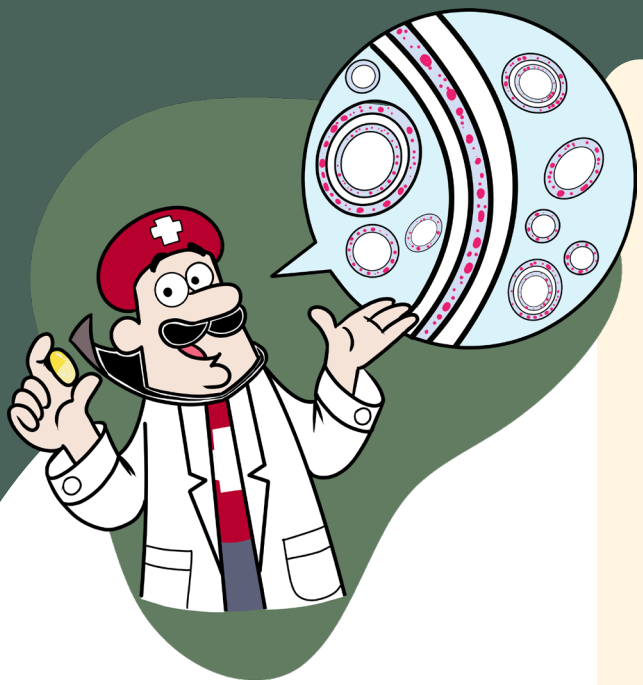
sundalp®
Liposomal Technology

SWISS MADE

Sundalp® Oil Products

excellent tolerability
good absorption in the body
reduced gastrointestinal disorders

Natural lipid dispersion composed of sunflower lecithin and triglycerides of vegetable origin. Sundalp® facilitates the digestion of a substance, extract, salt or vitamin.



Sundalp® and fat-soluble substances

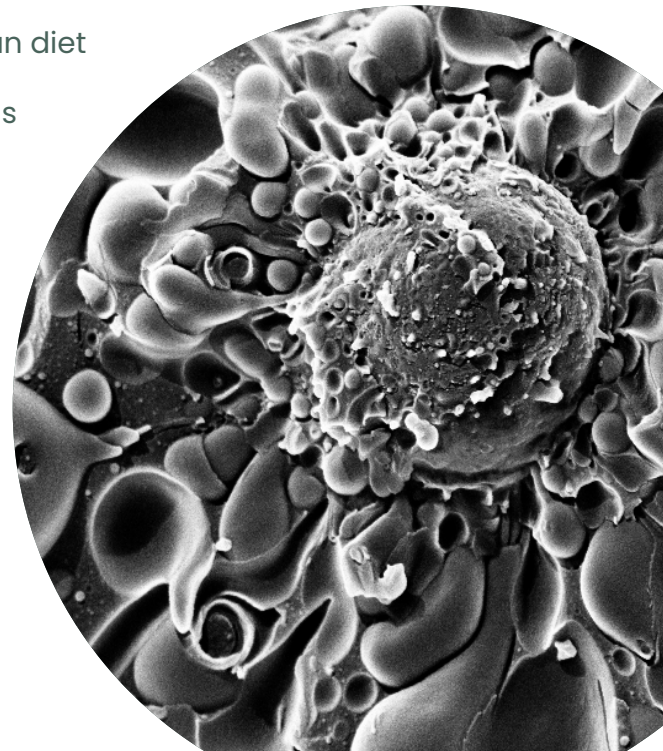
Sundalp® oil in capsules:
this presentation is suitable for the administration of substances/extracts that are liposoluble.

When the Sundalp®/extract mixture encounters the gastric juices, the lipophilic substances are incorporated into the lipid layers of the dispersion and remain micro-encapsulated.

This dispersion is thus ready to be well digested. Examples of this presentation are Black cumin oil (Nigella sativa), Indian frankincense extract (Boswellia serrata) and whole Turmeric extract (Curcuma longa).

Why choose Sundalp® Liposomal Technology

- All components are of natural origin suitable for a vegan diet
- Absence of allergens and GMOs
- Biological affinity for stomach membranes and gut cells
- "Friends" of the intestinal microbiota
- Easier digestion
- Absence of synthetic emulsifiers



Boswellia

Boswellia + Turmeric

Turmeric

Black Cumin

sundalp®
Liposomal Technology

Turmeric Sundalp®

Better absorption and compatibility thanks to Sundalp® Liposomal Technology.

Food supplement with full spectrum turmeric extract and vitamin E

Turmeric Sundalp® capsules contain the whole extract of Curcuma longa, which preserves the phytocomplex naturally present in the rhizome of the plant. More than 200 components have been identified in turmeric, which include curcuminoids and other biologically active compounds like turmerones.

1 capsule contains 12.5 mg of curcuminoids and 3.6 mg of Vitamin E (30% of NRV). Recommended daily dose: 1 capsule to be taken with liquids before meals. Each bottle contains 60 capsules that correspond to 1 month's supply.

Good absorption

In order to confirm enhanced bioavailability of Turmeric Sundalp®, its pharmacokinetic profile was determined (Figure 1). The highest concentration of Curcuminoids after oral administration (Cmax) was compared with that achieved by similar turmeric products on the market (Figure 2).

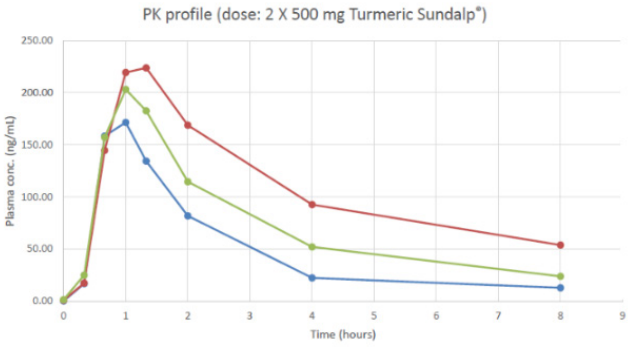


Figure 1. Pharmacokinetic profile of oral administration of Turmeric Sundalp® (single dose of 22 mg curcuminoids)

DMC: demethoxycurcumin; BDMC: bisdemethoxycurcumin;
THC: tetrahydrocurcumin; HHC: hexahydrocurcumin.
Plasma samples were analysed by "Centre universitaire romand de médecine légale, Unité de toxicologie et chimie forensiques, Toxicologie de l'exposition" in Lausanne (Switzerland).
NOTE: plasma samples were hydrolysed with β-glucuronidase prior to UHPLC- MS/MS analysis.

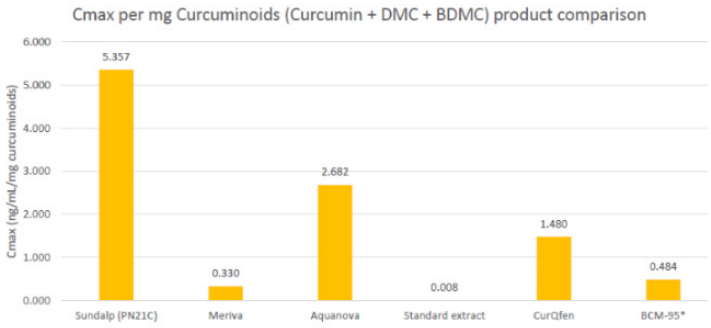


Figure 2. Cmax of Turmeric Sundalp compared to Cmax of competitor products

Turmeric Sundalp®: normalization has been done with the REAL Curcuminoids content of the capsules = 32 mg
Meriva (Cuomo et al., 2011): Dose = 1161 mg – Curcuminoids (~18% – 20%) = 209 mg
Aquanova (Schiborr et al., 2013): Dose = 8333 mg – Curcuminoids (~6%) = 500 mg
Standard extract (Cuomo et al., 2011): Dose = 1894 mg – Curcuminoids (~95%) = 1894 mg
CurQfen (Kumar et al., 2016): Dose = 1000 mg – Curcuminoids (~39%) = 391 mg

* BCM-95 (Antony et al., 2008): Dose = 2000 mg – Curcumin (~71%) = 1425 mg. This paper presents only curcumin results (DMC and BDMC are missing)

Particle size validation

In order to characterize and standardize the product, the size of liposomes is measured by a Laser Diffraction Particle Size Analyzer (Figure 3)

Figure 3. Liposome size distribution of Turmeric Sundalp®. Particle size: approx 70% between 250 nm and 1 µm and approx. 30% between 1 and 4 µm.