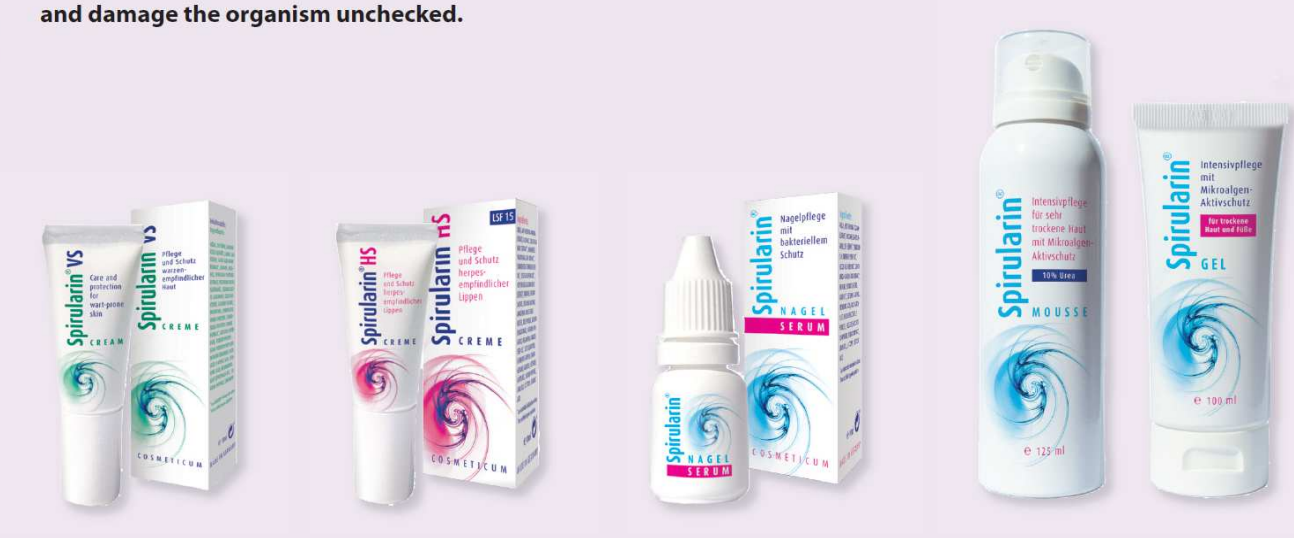
Spirularin®

Ocean Pharma GmbH, Reinbek

mdm

Active Cosmetics for the skin and nails in impaired skin barrier function

The skin is our largest organ and shields us from the environment. Humans would not survive without the acid mantle and the mechanical as well as immunological skin barrier. An uncontrolled loss of the water content of the body, which is greater than 70%, would occur. Harmful microorganisms such as bacteria, fungi and viruses would be able to enter and damage the organism unchecked.



The active cosmetics of the Spirularin® skin and nail product range combine high-quality, moisturising skin care components featuring the innovative method of action of Spiralin®.

Many ailments of the skin and nails develop because of a temporary or chronic impairment of the skin barrier function. For instance, the skin barrier function is often chronically impaired in diabetics due to malperfusion of the feet.

On the one hand, the affected individual's skin becomes dry and chapped as a result. On the other hand, microbial alterations of the skin and nails are much more common and difficult to treat in this risk group. Therefore, the goal of innovative active cosmetics ingredients should be to help the organism re-establish a stable skin barrier function.

Spiralin®: New option for smart active cosmetic for impaired skin barrier function

Certain strains of microalgae have developed defence mechanisms for self-protection against unfriendly microorganisms such as bacteria, fungi and viruses, which can be used in a smart way to support and stabilise the impaired skin

Foot before (left) and after (right) one week of concomitant therapeutic care with Spirularin® mousse.

Atopic dermatitis before (left) and after (right) concomitant therapeutic care with Spirularin®.

Foot before (top) and after (bottom) one week of concomitant therapeutic care with Spirularin® nail serum and Spirularin® gel.

barrier function in innovative skin care products for risk collectives such as e.g. diabetics, patients with atopic dermatitis and the elderly.

With special processing and extraction procedures, Ocean Pharma of Reinbek in cooperation with specialised researchers at different universities have succeeded in potentiating and standardising these defence mechanisms of a particularly suitable strain of microalgae in the natural mixture of the algae extract in Spiralin®. ■

"A new level of concomitant therapeutic skin care"

Interview with Pof. Kristian Reich (Dermatologikum Hamburg)

Aesthetic Dermatology:
Prof. Reich, you played an instrumental role in the clinical development of the different Spirularin® ready-to-use formulations. In your opinion, what is special about these products?

Prof. Reich:
These products contain high-quality nourishing and moisturising ingredients, which have already been used in other special skin care products and which we have recommended to our patients with impaired skin barrier function for concomitant therapeutic use in the past. The broad antimicrobial protection achieved with the ready-to-use products containing this active ingredient is the special feature of the new active ingredient Spiralin®. It has been demonstrated with hard data and in my opinion raises the possibilities of concomitant therapeutic care in the presence of impaired skin barrier function to a new level.

Aesthetic Dermatology:
What are your experiences with your own patients?

Prof. Reich:
Based on my experience with several hundred patients, the regeneration potential and regeneration speed of skin with impaired skin barrier function increase significantly under concomitant therapeutic care with Spiralin®-based products. This benefits diabetics, patients with atopic dermatitis and psoriasis among others. In patients with atopic dermatitis whose skin is particularly brittle and prone to chapping, the administration of the mousse can initially cause minor burning in individual cases. This is due to the 10 per-cent urea concentration rather than to Spiralin®. However, this phenomenon is of short duration and generally resolves completely after several applications thanks to the rapid regeneration of the skin. Since the active ingredient Spiralin® is also used in other product ranges of the Company Ocean Pharma, I am pleased to report excellent outcomes with the concomitant therapeutic application of corresponding preparations likewise for acne, rosacea, perioral dermatitis and seborrheic eczema.

Aesthetic Dermatology:
How well is the active ingredient Spiralin® tolerated?

Prof. Reich:
IBased on my clinical experiences with Spiralin®-based products, I have not observed any disadvantages in terms of tolerability compared with other skin care products, quite the contrary. All products proved to be very well tolerated. This is the requirement for any cosmetic active ingredients recommended to our patients.

Aesthetic Dermatology:
Reports suggest that Spiralin® also has an antiviral effect. Can you tell us more about this?

Prof. Reich:
Solid and authoritative data for different types of viruses are also available in this regard. I consider this to be a very exciting field. Experimental and clinical trials to investigate this topic are currently being conducted at a high scientific level under my supervision. With respect to these, I can only say that the available results are very interesting and promising, including in comparison with known pharmaceutical active ingredients.

Aesthetic Dermatology::
Dear Prof. Reich, thank you very much for your time! ■

The interview was conducted by F. Höppner

Antimicrobial profile of Spiralin®

"Based on results of our experimental analyses, the natural mixture of the active ingredients of the algae extract contained in Spiralin® conveys a broad antimicrobial protection to the studied cosmetic formulations, which even includes the increasingly problematic MRSA strains. Since these highly useful properties were not only conserved after billions of years of evolution, but in fact evolved further, we assume that the natural mixture of the algae extract suppresses the development of resistances and that the emergence of resistances in connection with the use in humans is hence fairly unlikely in the long term."

– Prof. Dr. Johannes F. Imhoff, KIWIZ

Inhibition of select pathogens by the active ingredient Spiralin®®

Bacteria	Staphylococcus aureus	+++
	MRSA	+++
	Propionibacterium acnes	+++
Yeasts	Candida glabrata	+++
	Candida albicans	+++
Dermatophytes	Trichophyton rubrum	+++
	Trichophyton mentagrophytes	+++
	Microsporum canis	+++

Tested with 1% extract in the assay,
inhibition +++ >80%, ++ 80-50%, + 50-20%.

(Source: Prof. Imhoff, Dr. Labes, KIWIZ (Kieler Wirkstoffzentrum))

User testimonials

"Thanks to the extraordinary properties of the used microalgae ingredient, the Spirularin and Skinicer products help close a major gap between standard cosmetic and pharmaceutical products for a host of problems. I am convinced that the possibilities of Spiralin will reach far beyond the existing product range. "

– Dr. Eddie O'Gormon, Belfast/Northern Ireland

"For me, professional medical foot care without Spirularin products is almost no longer imaginable for many problems involving the feet and nails. The results are simply extraordinary. Any diabetic patients and even customers at risk of MRSA infection are benefitting from it. "

– Podiatrist Anke Niederau, Düsseldorf

"I have known the Spirularin product range for 16 months now. My patients are simply grateful, because the concomitant therapeutic care using Spirularin products allows me to achieve results for their nails and skin, which were impossible in the past. My personal success can likewise be tied to the number of flower bouquets I received from happy customers. "

– Podiatrist Marzena Widomska, Lublin/Polen

"Diabetics often experience major problems involving their feet because of malperfusion. Because of the insufficiency of the sin barrier function, the feet of diabetics are exposed to harmful pathogens without effective protection. The results achieved with the application of Spirularin products for typical problems affecting the feet of diabetics by far surpass the previously known options. "

– Dr. Jaroslav Polak, Bratislava/Slowakei

"As supplier of foot care products and training centre for podiatry in Istanbul, our goal is to help establish podiatric care in Turkey based on the German model. Because diabetic foot syndrome and feet prone to chapping and infection are likewise part of the daily routine of medical foot care in Turkey, we need products such as Spirularin to be able to achieve corresponding outcomes in the quality of results of our treatments. We, our customers and our students are inspired by the results of the use. "

– Senay Caglidil, manager training / podiatry for a/r/m medikal, Istanbul/Turkey