

# *The key to natural health and beauty*

Jutta Oppermann

The amazing Mineral Silica for beautiful skin and hair, strong nails and bones, cellulite and more!



## External acne treatment with colloidal silica gel

### Study 1

Double blind placebo study with 30 patients for 6 weeks, 2 times a day 20 minutes application.

**Result:** "A highly significant difference in efficacy between test group and placebo group in favour of the actively treated group... After a follow up period (3 months) no deterioration

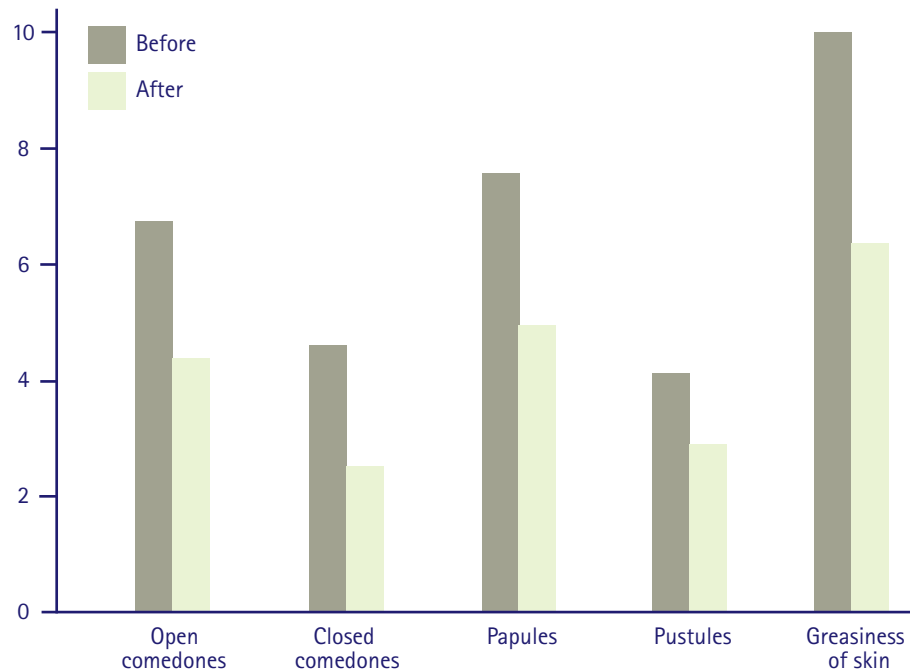
was observed in the active patients, showing either complete cure of improvement."<sup>\*</sup>

### Study 2

6 weeks treatment with 51 participants.

**Result:** Statistically significant 86% overall improvement<sup>\*\*</sup>

## Mean scores before and after treatment with silica gel to the skin for typical acne-related problems. All changes were statistically significant ( $P < .05$ )



\*The Journal of International Medical Research, 1996; 24: 340-344

\*\*Advances in Natural Therapy, Vol. 18 No. 2, March/April 2001



## Applications from A to Z

### Acne

*Application:* Apply silicic acid gel unto the areas of the skin affected, allow it to work for about ten minutes and wash off with some lukewarm water; in addition: take silicic acid gel, capsules, etc. every day (dosage according to manufacturer's instructions).

*Duration:* 2–3 months (twice a year).

### Intestinal disturbances/diarrhea:

*Application:* Take silicic acid gel every two hours (dosage according to manufacturer's instructions).

*Duration:* Until the complaint is solved.

### Colds / strengthening the immune defence:

*Application:* Mix silicic acid gel (dosage according to manufacturer's instructions) with water, tea or fruit juices once a day and drink in between meals.

*Duration:* Two to three months.

### Inflamed skin/grazes/minor wounds

*Application:* Apply silicic acid gel undiluted onto the areas of the skin affected, allow it to work for about ten minutes and wash off with some lukewarm water.

*Duration:* Until the complaint is solved.

### Inflamed gums / inflammations in the mouth

*Application:* A mouth-rinse with a mixture of one teaspoon of silicic acid gel in a quarter of a glass of lukewarm water three times a day.

*Duration:* About one month.

### Inflamed joints / sprains

*Application:* Apply moist, warm bandages with silicic acid gel (undiluted) for 30 minutes twice a day.

### Skin impurities

*Application:* Moisten the parts of the skin affected and apply silicic acid gel undiluted onto the areas of the skin affected, allow it to work for about ten minutes and wash off with some lukewarm water; in addition: take silicic acid gel/capsules every day (dosage according to manufacturer's instructions).

*Duration:* Two to three months (once or twice a year).

### Hoarseness/coughs

*Application:* Gargle twice a day with a mixture of silicic acid gel in a quarter of



a glass of lukewarm water; in addition, to strengthen the immune system: take silicic acid gel/ capsules etc. every day for two to three months (dosage according to manufacturer's instructions).

### Insect bites

*Application:* Dab the area of the bite generously with silicic acid gel or silicic acid powder diluted in water many times a day until an improvement is seen.

### Itching (chickenpox, allergies)

*Application:* Spread silicic acid gel or silicic acid powder diluted in water on the affected parts of the skin many times a day.

### Stomach problems/irritated stomach

*Application:* Take silicic acid gel two to three times a day (dosage according to manufacturer's instructions).

*Note:* The silicic acid can also be stirred into muesli or yogurt.

### Colds

*Application:* Mouthwash four times a day with silicic acid gel (mix with some lukewarm water beforehand); in addition, to strengthen the immune system: take silicic acid gel every day for two to three months (dosage according to manufacturer's instructions).

### Digestive problems

*Application:* Take silicic acid gel every day (dosage according to manufacturer's instructions).

### Slight sunburn / sun allergy

*Application:* Coat the parts affected many times a day with silicic acid gel

diluted with a little water; in addition: take silicic acid gel once a day (dosage according to manufacturer's instructions).

### Bleeding gums / irritation of the gums

*Application:* A mouth-rinse with a mixture of one teaspoon of silicic acid gel in a quarter of a glass of lukewarm water twice a day. In addition, rub gel into the gums twice a day plus take silicic acid gel once a day (dosage according to manufacturer's instructions).



### TIP:

This is how to keep your organism fit: for the sake of your health, take 1 tablespoon of silicon/silicic acid gel every day. If you fast for a day now and again, drink lots of herb teas or a glass of water with 1 tablespoon of silicic acid/silicon gel every hour.

### Important note

The information contained in this booklet is strictly intended for research and educational purposes not as a diagnostic tool or a prescription for any ailment.

## Distinct improvement with skin problems



### TIP:

A compress with silicon / silicic acid gel replaced every half-hour cools, soothes and heals burns and sunburn.

**S**ilicic acid can help with skin problems. According to scientific examinations and a number of reported personal ex-

periences, skin irritations such as itching, spots, eczema, sore spots, injuries of the skin, bites, scolds, insect bites, sunburns and burns all improve with the application of silicic acid.

Silicon compounds are contained in a number of dermatological powders. Silicic acid also has a distinct positive effect on acne.

## Burns aren't half as bad

Due to its inflammation-inhibiting and wound-healing effect, silicic acid helps in slight burns.

## Soothes sunburn

Silicic acid soothes slight sunburn. The affected skin must be coated with silicic acid gel several times a day.

## Wounds, which heal more quickly

Thanks to its great binding capacity, silicic acid has an inhibiting effect on inflammations and contributes to wounds healing better and more quickly. It soothes cuts, scrapes and burns amongst other things.

### Case study

#### H. R., male, 44 years old

*Clinical picture: H. R. suffered sunburn on shoulders, chest and back.*

*Diagnosis: Sunburn.*

*Treatment: One part silicic acid gel to three parts water applied twice daily over a period of 14 days.*

*Course of disease: The pain subsides quickly and the burn is totally healed within a few days.*

*Outcome: Very good therapeutic effect.*

#### T. L., female, 54 years old

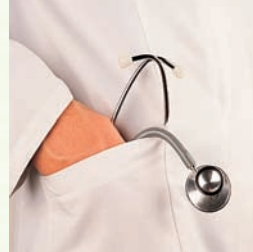
*Clinical picture: T. L. is suffering from slight skin burns.*

*Diagnosis: First degree burns.*

*Treatment: A small amount of silicic acid gel to three parts water applied three times daily for 15 days.*

*Course of disease: Clear reduction in pain sets in a few hours after initial application. The burn subsequently heals without complications.*

*Outcome: Good therapeutic effect.*



## Your personal health check: Do you need silicic acid?

Can you become healthier by using gel containing silicic acid? Answer the following questions, count up the points and read the evaluation.

	2 points	1 point	0 points
1. Do you have spliced or dull hair?	<input type="checkbox"/> yes	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
2. Do you suffer from loss of hair?	<input type="checkbox"/> yes	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
3. Are your fingernails fragile or do they have grooves?	<input type="checkbox"/> yes		<input type="checkbox"/> no
4. Is your connective tissue weakened / do you have cellulite?	<input type="checkbox"/> yes, very much	<input type="checkbox"/> yes, slightly	<input type="checkbox"/> no
5. Do you have impure skin, does it appear wrinkled and shrivelled to you?	<input type="checkbox"/> yes	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
6. Is your skin often reddened or blotchy?	<input type="checkbox"/> yes	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
7. Do you suffer from neuro-dermitis, skin allergies or other skin diseases?	<input type="checkbox"/> yes	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
8. Do you suffer from joint diseases or osteoporosis?	<input type="checkbox"/> yes		<input type="checkbox"/> no
9. Are you particularly susceptible to infections or is your general condition weakened?	<input type="checkbox"/> yes, very much	<input type="checkbox"/> yes, slightly	<input type="checkbox"/> no
10. Do you have stomach complaints or digestive problems?	<input type="checkbox"/> regularly	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
11. Do you have problems with your teeth and gums?	<input type="checkbox"/> frequently	<input type="checkbox"/> sometimes	<input type="checkbox"/> never
12. Are you older than 40?	<input type="checkbox"/> yes		<input type="checkbox"/> no
13. Do you regularly eat vegetables and wholemeal grain?	<input type="checkbox"/> no	<input type="checkbox"/> not much	<input type="checkbox"/> yes

### Less than 5 points ♦ Silicic acid level is adequate

Congratulations! You obviously do not have a silicic acid deficiency.

### 6 – 14 points ♦ Silicic acid recommended

Attention! You are not yet suffering from an obvious silicic acid deficiency, but could nevertheless profit from the substance. After only a few weeks of regularly taking Silica colloidal prepared gel, you will see a noticeable improvement in your appearance, your general health and your mood.

### More than 15 points ♦ Silicic acid absolutely necessary

Take care! There are indications that you have a silicic acid deficiency. By taking the natural product in the form of a course of treatment for two to three months you can improve on your overall health and general well-being. Silicic acid enhances the health of your body just like it does the beauty of your skin, hair and nails.



## Help for osteoporosis

**S**ilicic acid plays an outstanding role, both in the young and old, as a nutrient and structural agent for our bones and cartilage. The silicon contained in the silicic acid accelerates the incorporation of minerals into the bones. In particular it has a tractor function for calcium by additionally supporting the synthesis of collagen thus providing further essential components to the bone, cartilage and connective tissue.

For this reason, silicic acid can, for example, be considered as a supporting measure in osteoporosis therapy. There are indications for the fact that the progress of osteoporosis depends upon a lack of silicon, amongst other things.

## Calcium and silicic acid - a strong team

**C**alcium and silicic acid have a preventive effect against osteoporosis and support healthy bones as we age. The silicon contained in the silicic acid helps to store calcium in the bones and strengthen the structure of the tissue. Calcium is the most important structural agent for bones and teeth alongside phosphor. The skeleton of an adult human contains about one kilogram of this mineral.

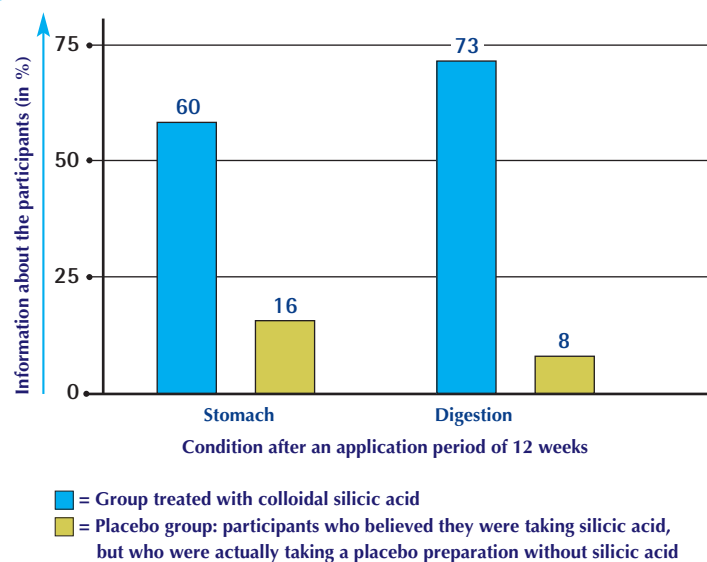




improved quickly and continuously. It was also observed that the undesirable side-effects, which are the order of the day with many medicines, did not occur when taking the silicic acid preparation.

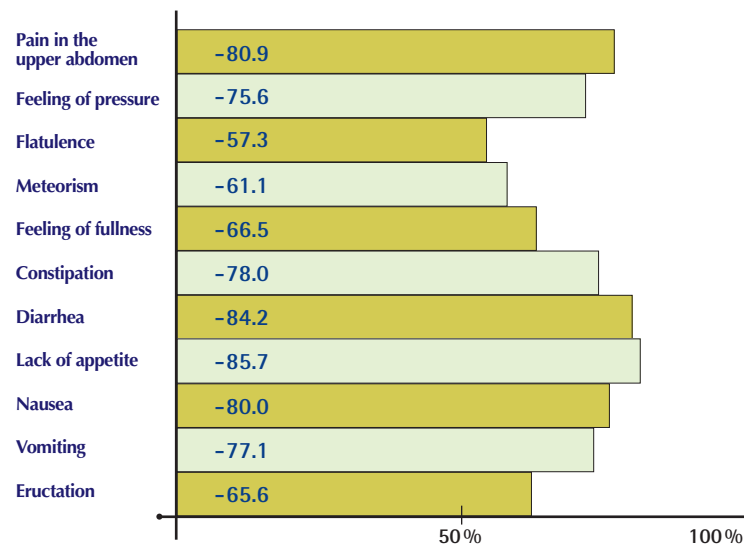
Within the framework of a study (Messerich, J.; study regarding the therapy of gastro-intestinal complaints by means of silicic acid, 1976) 71 men aged 34 to 65 years took 1 tablespoon of silicon / silicic acid gel with half a glass of lukewarm water every

#### Improvement in stomach and digestive complaints (in %)



Influences of colloidal silicic acid on the condition of stomach and digestion (Dörling, E.)

#### Decrease in stomach and digestive complaints (in %)



Efficiency of colloidal silicic acid in respect of digestive complaints (Messerich, J.)

day in the morning, at midday and in the evening. The average duration of treatment was two weeks. Complaints suffered by the trial participants included pains or a feeling of pressure in the upper abdomen, nausea and vomiting, diarrhea, constipation, a feeling of fullness and flatulence.

In the majority of the cases the symptoms decreased considerably the silicon preparation developed a very good efficacy in 62%, a good efficacy in 14.1%, a satisfactory efficacy in 15.5% of all cases and only insufficient efficacy in 8.4% of the trial participants.



## Prevent aluminum poisoning with silicic acid

The detoxicating effects of silicon compounds with regard to light metal aluminum have been particularly well researched. Silicic acid reduces the availability of aluminum which is detrimental to health in food or drinking water and, thus, lowers the risk of poisoning.

In the eighties and nineties of the 20th century the British research scientist J.D. Birchall discovered and investigated the special relationship between both elements. The starting-point of his research was the initially unsolved observation that silicon deficiency and aluminum poisoning can cause similar disease symptoms in human beings. Birchall discovered that this

phenomenon is based on the fact that, in the case of a silicon deficiency, nothing impedes the aluminum present in food or drinking water from entering our bodies and causing symptoms of poisoning. A sufficient level of silicon prevents the unrestricted absorption of aluminum and the organism remains healthy.

According to expert opinion, the consequences resulting from this discovery are more far-reaching than the layman would expect at first glance. For example, in respect of the prevention of the Alzheimer's disease, for some time now doctors and scientists have assumed that there is a relationship between Alzheimer's disease and an accumulation of aluminum in the brain.

Silicon compounds reduce the availability of hazardous aluminum in drinking water.



## SCIENTIFICALLY PROVEN EFFECTIVENESS

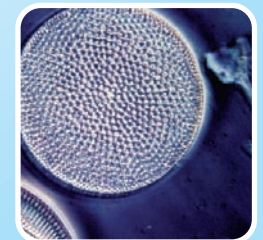
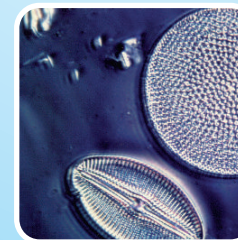
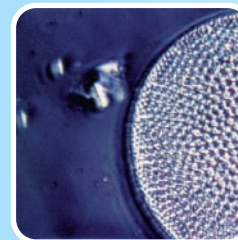
A number of studies and scientific investigations leave little doubt about the efficiency of silicon compounds for treating a variety of digestive complaints. Here are three examples:

The results of a study carried out with 12 persons aged from 30 to 70 prove that the stomach and intestines benefit from an increased supply of silicic acid (Dörling, E.; test evaluation of a silicic acid preparation, 1979). 10 trial participants took colloidal silicic acid gel for 12 weeks, 2 participants took a gel without silicic acid (placebo group). Afterwards the participants were asked whether the gel had been effective. 60 per cent, and 73 per cent respectively, of the trial participants who had taken silicic acid stated that the condition of their stomach or their

digestion had improved after using the preparation. Particular emphasis was placed on the positive effects of the silicic acid product in respect of complaints such as heartburn, diarrhoea and stomach problems resulting from nervousness.

Medical investigation of a silicic acid product, which was tested for its efficiency in the treatment of intestinal illnesses, led to results similar to those of Dörling's study (Gegeckas, A., 'Medical Investigation', final report on the efficiency of a silicic acid preparation in the treatment of gastro-intestinal illnesses, 1983). A number of persons suffering from gastritis, stomach ulcer (ulcus) and gastroenteritis were investigated. After taking the silicic acid product the symptoms of the trial participants

...continued page 28



## TIP: HOW TO HELP YOURSELF

### Prophylaxis

Application: drink 1 tablespoon of silicon / silicic acid gel dissolved in water every day

Tip: You can also mix the gel with muesli or yogurt.

### Nervous stomach complaints due to stress or functional dyspepsia

Application: take 1 tablespoon of silicon / silica gel two or three times a day.

Duration of application: at least 2 months

### Stomach complaints / excess stomach acidity

Application: take 1 or 2 tablespoons of silicon / silica gel two or three times a day (in case of heartburn mix it with peppermint tea).

Duration of application: 1 or 2 months

### Mild intestinal discomfort / digestion difficulties / flatulence

Application: take 1 tablespoon of silicon / silica gel two or three times a day.

Duration of application: at least until symptoms are relieved.

### Acute / inflammatory gastro-intestinal complaints

Application: take 1 or 2 tablespoons of silicon / silica gel every two hours (once symptoms are reduced, 1 tablespoon two or three times a day).

Duration of application: application should be continued for approx. 1 week after symptoms have been relieved, longer application is possible if required.

### For diarrhea

Application: take 2 tablespoons of silicon / silica gel every two hours (after relief from symptoms 1 tablespoon two or three times a day).

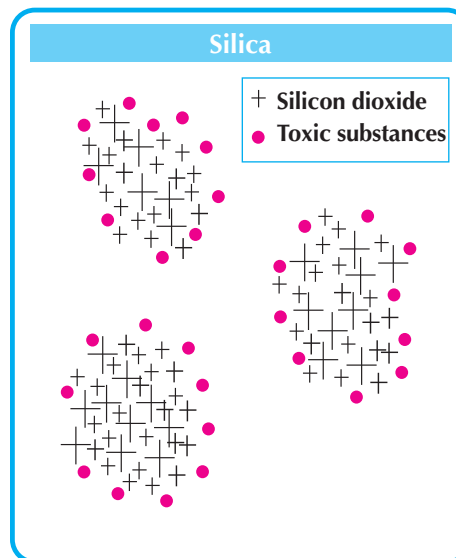
Duration of application: application should be continued for a few days after symptoms have been relieved.



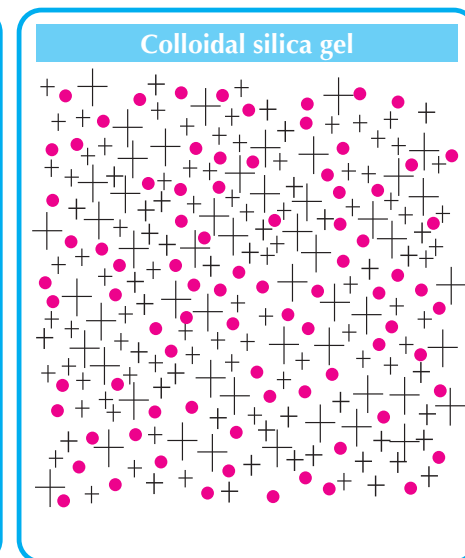
## IMPORTANT!

A prerequisite for self-treatment with silicon / silica gel is responsible behaviour in respect of your health. There is no risk related to taking the gel but this guide is not intended to encourage you to treat serious illness yourself. If you believe that you are seriously ill you should see a doctor or homeopath.

## Ability of silicious earth and of colloidal silicic acid gel to bind with harmful substances



Large molecular complexes = only a few toxic substances are taken up.



Fine and equally distributed molecules = a large number of toxic substances are absorbed and can be excreted via the intestines.

## How and why does colloidal silicic acid support digestion?

At first glance silicic acid's capacity for binding with toxic substances may appear surprising, but upon closer examination this property is easy to understand. It is due to the fact that in gel form the silicon compound is present in fine distributed molecules, colloidal dissolved in water. The tiny silicic acid molecules which are "floating" in solvent have a large and very absorbent surface of approx. 300 square meters per gram of silicon / gel,

an area which corresponds to the dimensions of a football pitch. This surface offers an enormous amount of space for absorbing a large quantity of harmful substances (and gases), "binding" them and finally excreting them via the intestines, so that they can no longer damage your organism. In order to ensure a detoxicating effect, it is important that the silicon dioxide molecules in the product we take are in colloidal form, that means fine and equally distributed in water. If the molecules join to large complexes the resulting surface is smaller and therefore less toxic substances can be absorbed.



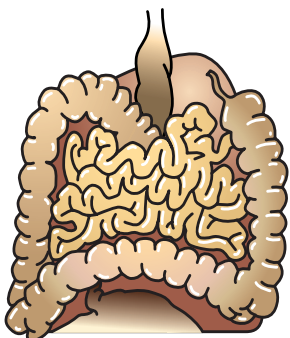
What is the basis for the extremely wide range of effects which silicic acid has on our gastro-intestinal system? There are several reasons:

**TIP:**

It is advisable to always have a supply of silicon or silicic acid gel at home for use should a gastro-intestinal disorder occur. It is also an essential component of every travel first aid kit.

- Silicic acid inhibits inflammatory processes, as it is excellently suited to absorb water and, as a result, suction off or dries out the inflammatory secretions.

- Silicic acid provides natural disinfection.
- Silicic acid has a strong bonding property for gases and toxic substances.
- By strengthening our endogenous defence system, silicic acid has an indirect positive influence on the gastro-intestinal tract. It, therefore, also reduces the risk of pathogens spreading.



Silicic acid provides relief from gastro-intestinal disorders

**Case study****P. K., male, 53 years old**

*Clinical picture: P. K. got a serious bowel infection a few months ago.*

*Although this has been completely cured following medical treatment, diarrhoea and severe digestive complaints still occur.*

*Diagnosis: Protracted gastrointestinal inflammation.*

*Treatment: One tablespoon of silicic acid gel diluted with water twice daily over a period of five weeks.*

*Course of disease: At first, P. K.'s condition deteriorated; we cannot say with certainty whether this was a case of "initial deterioration" due to the stimulation of the body's defences. After 16 days, the patient reported a clear improvement in his digestive complaints and reduced diarrhoea. This result cannot be significantly improved by the end of treatment.*

*Outcome: Satisfactory therapeutic effect.*

**Case studies****S. U., female, 41 years old**

*Clinical picture: S. U. often suffers from severe flatulence, partly caused by diet, and irregular bowel movement with a tendency towards constipation. Regulation of bacterial symbiosis, prescribed on "suspicion", did not bring about any noticeable improvement and even linseed could not bring about a satisfactory improvement of bowel tolerance.*

*Diagnosis: Flatulence with constipation.*

*Treatment: One tablespoon of silicic acid gel diluted with water twice daily over a period of six weeks.*

*Course of disease: After only 14 days, there was a reduction in flatulence and bowel movement was subsequently gradually normalized. At the end of treatment, flatulence only occurs on rare occasions while defecation is almost regular.*

*Outcome: Good therapeutic effect.*

**O. M., male, 60 years old**

*Clinical picture: O. M. has suffered for around ten years from frequently recurring gastric ulcers and chronic hyperacidity.*

*Diagnosis: Hyperacidity and gastric ulcers.*

*Treatment: One tablespoon of silicic acid gel diluted with water twice daily over a period of 2.5 months.*

*Course of disease: After only the first week, O. M. reports a clear improvement in his symptoms and there are no symptoms after the end of treatment. The complete healing of the ulcers is confirmed by an X-ray examination.*

*Outcome: Very good therapeutic effect.*

# Health through silicic acid

It is no surprise that silicic acid keeps the human body healthy on a number of levels as the water content in our connective tissue is dependent on the level of silicic acid in our bodies. Only adequate water content secures adequate supply of nutrients to our cells and fosters the removal of toxins.



For example, silicic acid has a positive influence on a number of diseases which frequently occur with increasing age; amongst them arteriosclerosis and high blood pressure.

Silicic acid is of utmost importance to the structure of connective tissue; it improves all symptoms associated with weakness of the connective tissue - for example varicose veins.

## Typical deficiency symptoms

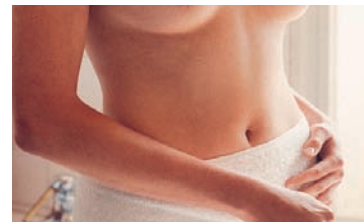
What are the consequences if the body does not absorb sufficient silicic acid via nutrition?

- ◆ slackened, weakened connective tissue
- ◆ recurrence of broken bones
- ◆ growth disturbances
- ◆ pale skin
- ◆ skin impurities
- ◆ itchy skin
- ◆ dull, spliced hair
- ◆ loss of hair
- ◆ fragile nails
- ◆ problems with teeth and gums
- ◆ weakened tendons and ligaments
- ◆ increased susceptibility to infections
- ◆ general feeling of weakness
- ◆ people with a lack of silicon have a tendency to feel chilly

# Fountain of health for the digestive system

Silicic acid keeps the human body healthy in a number of ways. This is not that surprising as the available silicic acid level is a decisive factor for the water content in our cells and high water content is essential for an adequate supply of nutrients and, subsequently, for the functioning of our cells and the elimination of toxic substances. As a result, silicic acid works naturally to produce a positive effect on the gastro-intestinal system, the course of many illnesses, weakness of connective tissue, as well as on the condition of skin, hair and nails.

## A reliable partner for combating all gastro-intestinal complaints



Silicic acid is a reliable partner for combating a large number of gastro-intestinal disorders. Among its most important applications silicic acid provides effective treatment for excess stomach acidity, heartburn, stomach disorder caused by nervousness, gastri-

tis and gastric ulcers, pain in upper abdomen, infection and inflammation in the digestive tract, flatulence, constipation and diarrhea. The silicon compounds are also much more effective than many other household remedies which, in spite of their acclaimed health benefits, all too often prove disappointing.



### TIP:

#### TAKE A DAILY DOSE OF HEALTH

For the sake of your health take one tablespoon of silicon / silica acid gel every day. If you occasionally fast for a day, we recommend that you drink plentiful amounts of herbal tea or a glass of mineral water with one tablespoon of silicon / silica acid gel every hour.

Silicon compounds have had therapeutic significance so far as part of the medicines used to bind gastric acidity (so-called antacids). But even in cases of Crohn's disease and colitis ulcerosa - both chronically inflammatory diseases of the digestive tract which usually develop in stages - they have frequently been used in practice with success. Homeopathy has also discovered the potential of silicic acid and uses it to combat constipation, flatulence and hard stool.



## Fingernails as an eye-catcher

Our hands and our fingernails are prominent visual features of our bodies. People are immediately drawn to beautiful hands and nails and are repulsed when they see unsightly nails. Use of everyday household cleaning products from some bathing soaps to soap liquids to more harsh solvents such as tile and bathroom cleaners can cause damage to our hands and

nails. We need to put some moisture and balance back to our skin while we tax them with these harsh products that contribute to dry, brittle nails.

Silicic acid is one of the most important elements contributing to growth of finger and toenails. On one hand, the silicic acid ensures a good supply of nutrients to the nails on the other hand it improves the transverse linkage of the keratin/protein modules and gives the fingernails stability.

The positive influence of silicic acid towards growth and strength of the nails does not become immediately visible. You will start to see improvement after approximately five to six months of daily usage. This is the period that nails need in order to renew completely.



### Case studies

#### L. B., female, 55 years old

**Clinical picture:** L. B. suffers from flaccid, prematurely aged skin and brittle nails.

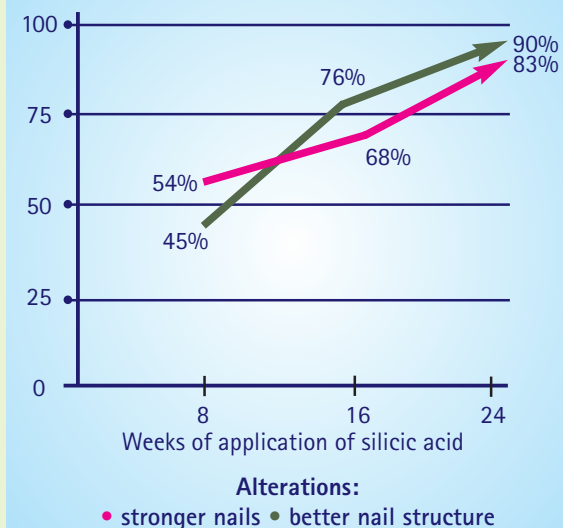
**Diagnosis:** premature ageing of the skin due to weak connective tissue and silicic acid deficiency.

**Treatment:** Take one tablespoon of silicic acid gel diluted in water twice daily and apply pure silicic acid gel on the face for ten minutes three times a day; carry out treatment over a period of 2.5 months.

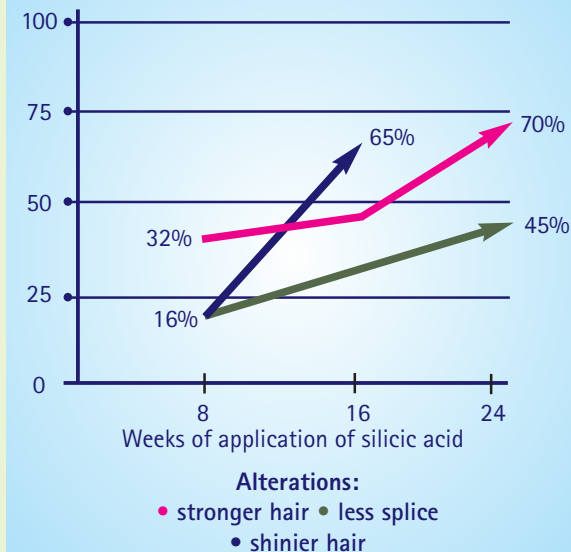
**Course of disease:** L. B.'s nails become stronger and stronger. The skin becomes smoother and looks fresher.

**Outcome:** Good therapeutic effect.

### Improvement of the nails (in %)



### Improvement of the hair (in %)



Altered properties of nails and hair thanks to the application of colloidal silicic acid (Study: Clinical Research Laboratories, Incl., New Jersey, USA, 2000/2001)

## Cellulite Solutions



### TIP:

Three-month course of treatment against cellulite: drink silicon / silicic acid gel diluted with water every day for three months. Repeat the application once or twice a year.

Scientific investigations prove that if the connective tissue has too little silicic acid at its disposal, it loses its elasticity and thus becomes unstable - one of the best preconditions for cellulite.

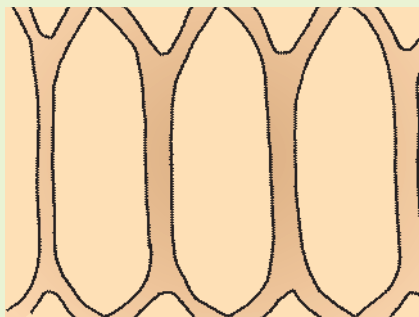
More than eighty percent of all women aged above 20 have cellulite. Cellulite recesses and wrinkles in the skin on the thighs, buttocks, hips and

stomach resulting from Yo-yo diets, inactivity, pregnancies and hormonal imbalances are nightmares for many women.

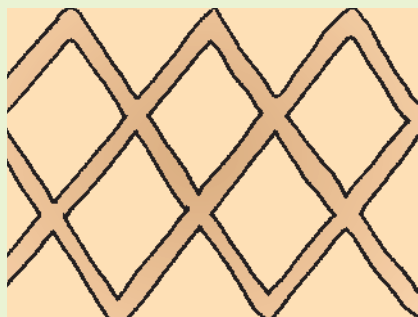
In women, the connective tissue strands of the sub-cutis are merely interlocked in parallel. In men there are additional transverse links.

Therefore men very rarely have the problem with cellulite because the tensile corium is thicker compared with the sub-cutis and the connective tissue strands of the sub-cutis are more strongly connected with one another. Transverse links have a better grip on the fat - even if the connective tissue loses its tension and strength in the course of time. Therefore, the tissue remains tighter, but is also less capable of expanding.

### Differing interlinking of the connective tissue:



women



men

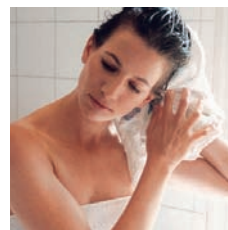
In women, the connective tissue strands of the sub-cutis are merely interlocked in parallel, whereas in men there are additional transverse links.

## Hair care right down to the roots

The healthier and more resistant our hair is, the fewer problems it will have with mechanical, chemical or other environmental factors. The silicon contained in the silicic acid is an essential component for promotion of healthy and resistant hair - A lack of silicon in our bodies would ultimately lead to brittle, matt and fragile hair.

Shampoo alone, even if the shampoo contains silicic acid cannot guarantee an adequate supply of nutrients. To avoid silicon deficiency it is recommended that silicic acid be taken internally as well for a number of months.

Silicic acid ensures healthy connective tissue and a good supply of nutrients for the hair from the ends to the roots. In addition, the silicon contained in the silicic acid can also directly strengthen the structure of the hair by supporting the transverse linkage of the keratin/protein modules and thus improving stability, structure and appearance.



## Case study

**R. K., female, 36 years old**

*Clinical Picture: R. K. suffers from weak connective tissue. She tends to suffer from sprains and strains, complains of back pain (weak posture), brittle nails and fine, very frizzy hair. She also has varicose veins.*

*Diagnosis: Inherent weakness of the connective tissue.*

*Treatment: Take two tablespoons of silicic acid gel diluted in water daily over a period of three months.*

*Course of Disease: There was no noticeable effect for the first few weeks. After six weeks R. K. claimed that her nails and hair had become stronger. These effects became more pronounced during the rest of the course of the disorder. In addition, the back pain and varicose veins receded. Finally, even after walking longer distances, the sprains and strains no longer occurred.*

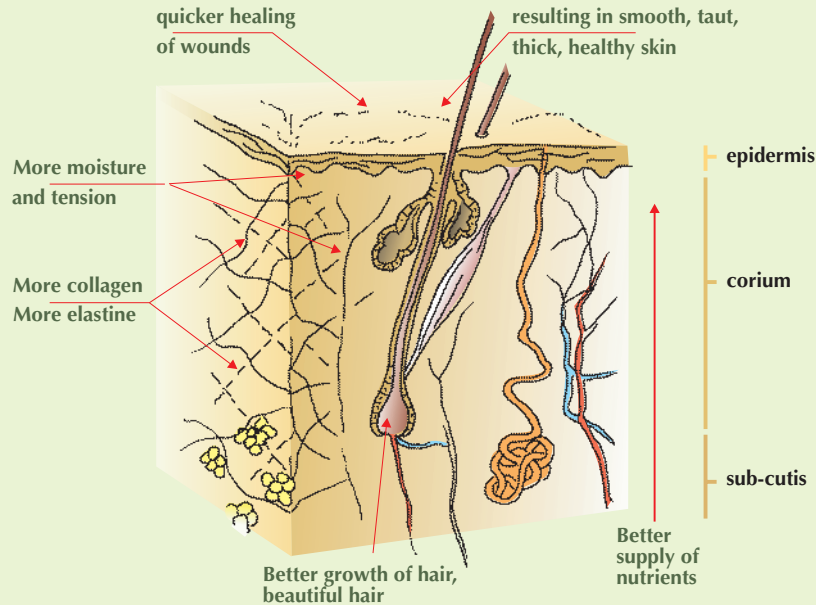
*Outcome: Good therapeutic effect.*



# Beauty through silicic acid

A healthy, firm connective tissue is the prerequisite for taut skin, strong hair and firm fingernails. Silicic acid is second to none when it comes down to strengthening the connective tissue thanks to its unique ability to bind water. Personal experiences reported by people along with numerous scientific studies demonstrate that silicic acid actually makes the connective tissue of our bodies healthier, more elastic and firmer. To be more precise, if silicic acid is missing, the tissue loses its elasticity and becomes unstable - wrinkles and cellulite become evident in such cases. The silicon contained in silicic acid is needed for the formation of the basic substance of the connective tissue. It increases the moisture of the tissue and ensures a regulated transport of nutrients from the blood vessels to the skin's cells. It also aids in the removal of metabolic products and toxins from our system. It supports the formation of the connective tissue fibres collagen and elastine.

## What silicic acid does to the skin



## Case studies

### W.F., male, 48 years old

**Clinical picture:** W. F. suffers from skin impurities and had severe common acne when younger.  
**Diagnosis:** Impure, oily skin.  
**Treatment:** One tablespoon of silicic acid gel diluted with water twice daily; in the evenings, a pure silicic acid gel facemask is applied and washed off after 30 minutes; treatment over a period of around two months.  
**Course of disease:** The skin impurities improve and sebum production is normalized. Fewer impurities occur after conclusion of the treatment.  
**Outcome:** Satisfactory therapeutic effect.

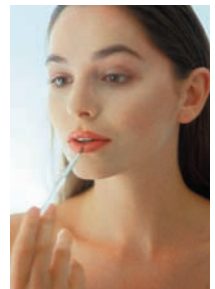
### P. M., female, 53 years old

**Clinical picture:** P. M. suffers from flabby and flaccid skin with a poor blood supply and protruding veins.  
**Diagnosis:** Weak connective tissue, premature ageing of the skin.  
**Treatment:** One tablespoon of silicic acid gel (diluted with water) is taken internally daily and a facemask with a tablespoon of gel to three parts water is applied (washed off after 20 minutes); treatment over a period of ten weeks.  
**Course of disease:** After two weeks, the skin appears fresher and better supplied with blood. This process continues and in the end the skin appears much younger.  
**Outcome:** Good therapeutic effect.

## The skin - a mirror-image of your well-being

Silicic acid is the guarantee of young and beautiful skin. Therefore, it should be used internally to compliment your external skin care and makeup applications. The silicon in silicic acid has a multitude of influences on our skin:

- ◆ It helps fine lines and wrinkles to become smoother and to make the skin look younger.
- ◆ It has an inhibiting effect on inflammations and soothes skin irritation and ailments such as burns, rashes and sunburn.



## Many forms of administration

Silicon products for natural beauty are offered in numerous preparations in forms of:

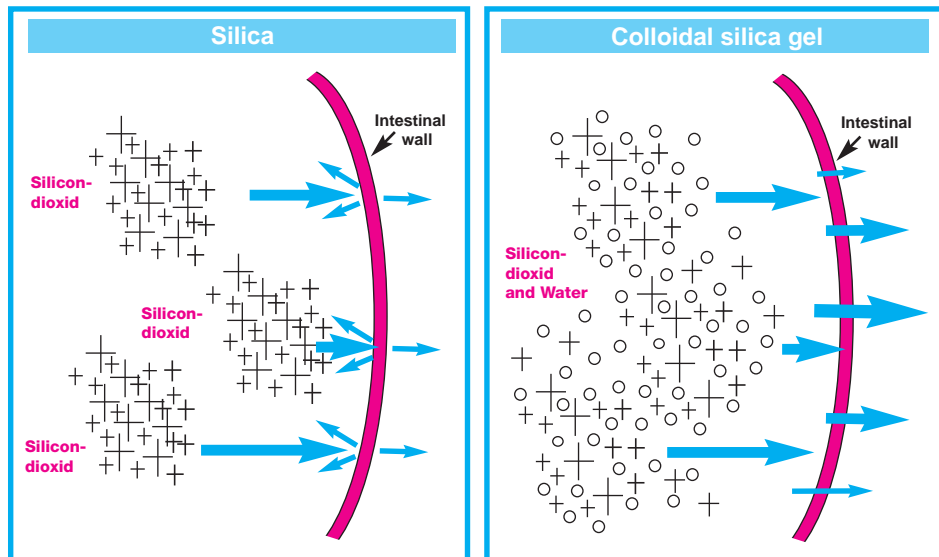
◆ balsam, tablets to chew or to dissolve in water and powder and in a variety of products such as cleansing milk, skin-peeling, toothpastes, hair-care agents, drops, and also as mouth or face wash.

Silicon compounds are mainly provided in three forms of administration:

- ◆ as silica (= a compound of silicon and oxygen on scaffolds of silicon algae)
- ◆ as vegetable preparations (e.g. as a tea from horse-tail)
- ◆ as a liquid, i.e. colloidal solution of silicon/silicic acid gel (= compound of silicon, oxygen and water, also called silica gel).

Common to all administrations is the natural trace element, silicon. The administrations however, do have differing effects. Silicon compounds in particular tend to form giant molecule complexes and crystals, unfortunately our system has great difficulty

## Absorption of silica and colloidal silica gel



Large molecule complexes = **difficulties in penetrating the intestinal wall**

Evenly distributed molecules = **simple penetration of the intestinal wall**

in absorbing these giant molecule complexes and the maximum benefits are lost in some administrations.

**For easier absorption and in order to prevent these accumulations of molecules, using silica prepared in colloidal form is recommended.**

By colloid (gel-like solution) preparation, silicic acid is evenly and finely distributed in water with the help of a specific process. This method results in a very fine and homogeneous distribution and accumulation of the molecules is thus reduced. The very small silicic acid molecules can then

easily pass the intestinal wall and an adequate quantity can go to our connective tissue, our body cells and above all into the quickly growing cells, which are essential for the structure of the skin, hair and nails.

## What you should pay attention to when buying products containing silicic acid!

**W**hen purchasing products containing Silicic acid the question is not so much the content of silicon but rather the amount of silicon that can be absorbed by the body. Therefore, make sure that the silicic acid is available in a very finely distributed, liquid (colloidal) form that is easy for the body to absorb. Purchasing that form thus then pays its way in the literal sense of the word. Silicic acid contained in colloid gel preparation can be ingested internally or applied externally.





## How much silicic acid is needed



### TIP:

In order to prevent a lack of silicon, take 1 to 2 tablespoons of silica or silicic acid gel every day.

Silicon is vital for man. Therefore, the trace element must be provided to the body regularly via food. Adults should

meat contains hardly any silicic acid. The rule of thumb is: anyone mainly eating vegetarian and preferring wholemeal grain products, as opposed to industrially manufactured bleached produce, is on the safe side. However, due to the increasing lack of nutrients in our soil, many wholemeal products are also lacking usable silicic acid.

There is one feasible solution - take silicic acid as a nutrition supplement on a regular basis.

take 10 to 40 milligrams of silicon per day.

Poor or imbalanced nutrition can lead to a silicon deficiency. For example,



### Ranking list of food containing silicic acid

Food	Silicon content per 100 g
Oat flour (wholemeal)	1150 mg
Garden cress	610 mg
Wheat bran	68 mg
Rice (wholemeal)	40 mg
Spinach	27 mg
Beetroot	25 mg
Parsley	13 mg
Raisins	12 mg
Green beans	10 mg
Dill, bananas	8 mg
Leeks, tomatoes	6 mg
Carrots	1 – 8 mg
Currants (black)	3 mg
Cheese	0.2 – 4 mg



## Who needs more?

Elderly people, pregnant ladies, growing children and the chronically ill need particularly large amounts of silicic acid.

Silica supply to the elderly people is particularly critical. As we age, the body's ability to absorb and to utilize the trace element silicon, drops at the same time the body's demand for this mineral rises.



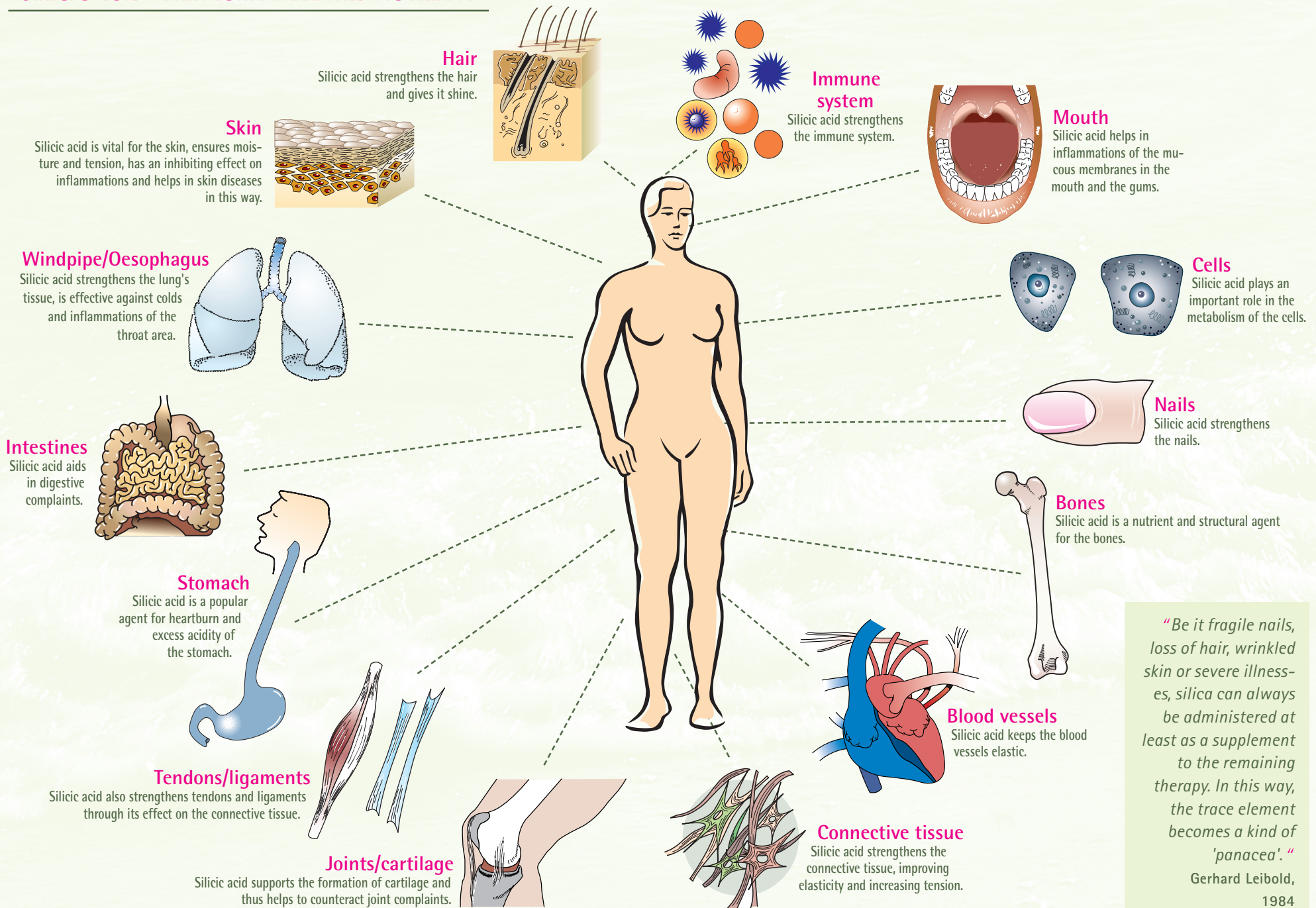
### Demand for silicic acid increases in these conditions

- ◆ Poor nutrition
- ◆ Stressful and demanding occupations
- ◆ Intense Physical activity and training
- ◆ In old age
- ◆ During pregnancy
- ◆ Children
- ◆ During sickness or convalescence

Silicic acid used on a daily basis offers enhanced health and beauty without risks.



# SILICIC ACID - THE MULTI-TALENTED NUTRIENT



*"Be it fragile nails, loss of hair, wrinkled skin or severe illnesses, silica can always be administered at least as a supplement to the remaining therapy. In this way, the trace element becomes a kind of 'panacea'."*  
Gerhard Leibold,  
1984





## *The key to natural health and beauty*

**A**longside oxygen, silicon is the second most important element on our earth, its compounds making up more than 75 per cent of the weight of the earth's crust and the earth's mantle. This shows the significance that nature has given this original substance. Without sufficient absorption of silicon in the form of silicic acid, people would look very old.

### **Gel for skin, hair and nails**

Strong, healthy connective tissue is the prerequisite for taut skin, strong hair and firm fingernails. Silicic acid strengthens the connective tissue, regulates the moisture reserve and supports the formation of collagen. It is the foundation for beautiful skin, hair and nails.

### **Fitness for the immune system**

With a strong immune system, our body can fend off pathogens and thus protect us against illnesses. Silicic acid supports the immune system and increases well-being.

### **Small amount - great effect**

For a long time, many doctors and nutrition scientists underestimated the potential of silicic acid. This may be the case because the silicon contained in silicic acid only occurs in tiny amounts in the human body. Our organism only contains 1.4 grams of silicon - which is why it is called a trace element.

### **Scientific research**

In 1972, the American scientist Prof. Edith Muriel Carlisle discovered that silicon is vital for the human body. In the meantime, researchers from all over the world have proven the importance of the substance as an indispensable nutrient for the connective tissue, skin, hair, nails, teeth, bones and cartilage.





## Silicic acid - the basis of health and beauty

All living beings need the original substance silicon contained in silicic acid. Humans need it for development, of bones, cartilage, connective tissue, skin hair and nails and animals need it for development of horns, hooves and feathers. Plants also make use of this vital substance as a component part of the supportive tissue and for resistance against diseases and pests.

One of the original desires of man is the wish for eternal youth. The cosmetic industry tries to counteract the ageing process with a wide range of external beauty care products claiming to give the skin a more natural radiant and youthful appearance. These agents are often temporary solutions that offer very short-lived effects. Rarely is internal supplemental beauty care from within advocated. The silicon contained in the silicic acid which feeds the connective tissue, is necessary for cell production. It allows us to have stronger hair, skin and nails and become beautiful from within.

The supply of Silicic acid within our bodies becomes a crucial concern as we age. The skin, collagen, connective tissue of the arteries, bones and cartilage become brittle as silicon depletes. To alleviate those symptoms silicon should be continually restored

In addition, silicic acid strengthens the immune defence system and supports the digestive system. This is why silica is so widely recommended as a vital mineral and basis for a healthy appearance and regeneration of cells by a number of experts.

Prof. Dr. Dr. Reinhard E. Wodick,  
Ulm University

## Silicon/silicic acid in the media and in science

» Possible fields of application are in the treatment of hair loss, fragile nails, a lack of elasticity of the skin, osteoporosis, which is also caused by an insufficient supply of silicon. «

Burgersteins Nutrients Manual;  
Haug Verlag, 1997

» In cosmetics, silicon is successfully used against so-called problem skin and against wrinkled and dry 'old-age skin' ... If silicon is missing in the cells of the connective tissue, they become weak and unstable and lose elasticity. «

Carola Berger: Health and taut tissues through silicon; Urania, 1998

» Itchy skin, hair loss, vertebral disk complaints, weakened defences in man are brought into connection with a lack of silicon. Products rich in silicon are used nowadays for various complaints or diseases. «

Heinz Scholz: Minerals and Trace Elements; Trias, 1990

» It has been seen that silicon plays an important role in the context of the connective tissue, in particular in bone and cartilage tissue. «

Prof. Edith Muriel Carlisle: Silicon as an essential trace element; VitaMinSpur 3,3, 1988

» Silicic acid is destined to play a large and important role in the therapy of various diseases in future. «

Louis Pasteur, French biologist and chemist (1822 - 1895)



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## Sources of silicon

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**Powdered silica**



**Liquid "colloidal" silica gel**

! Whether the following tips refer to Silicic acid or silicon, both substances exist as one and the same. Silica and/or colloidal solutions of silica gel are excellent sources of silicon.

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## Silicon or silicic acid - what is it?

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**S**ilicic acid with its important trace element Silicon takes on numerous tasks in our bodies. The most important, beyond doubt, is its role in the formation of connective tissue and thus its importance for the structure of skin, hair and nails. In addition, silicic acid is a nutrient and structural agent for connective tissue, bones, cartilage and teeth.

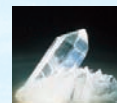
Silicic acid is important for adequate water binding in our cells. No other substance can bind 300 times its own weight of water. A sufficient water reserve guarantees that the cells receive enough nutrients, help prevent and alleviate wrinkles, contributes to the elasticity of the blood vessels, help in digestive processes and have an inhibiting effect on inflammations.

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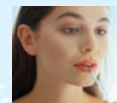
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416.748.3073 - [www.nakaherbs.com](http://www.nakaherbs.com)





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