



Beobachter

FERMENT

Sour vegetables for the intestines and the immune system

🕒 Reading time: 6 minutes

Take vegetables, water, salt and let it ferment. The preservation method from great-grandmother's time is in demand: Sour preserves strengthen the intestines and the immune system.



«Whole villages used to meet at harvest time. Since everyone has a freezer, that is over. " - Franziska Wick,
health economist Source: Anne Gabriel-Jürgens

From **Mario Güdel**

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Sauerkraut, of all things. There were three and a half tons of it on board, and Captain James Cook had a problem: how was he going to get it into his crew? His trick: every day he had the fermented cabbage served at the officers' illustrious table.

A week later, Cook had to ration the sauerkraut. "Such are the whims of all seafarers: if you give them something unusual, they will not accept it," he noted on April 13, 1769 in his diary. "But from the moment you see that your superiors appreciate it, it becomes the best in the world."

With the sour herb, the great explorer wanted to protect his crew from scurvy, which causes teeth to fall out and cardiac death. The disease wiped out half the crews because for months they only ate cured meat and rusks, but no fruit and vegetables. The disastrous result: a lack of vitamin C. The canned cabbage contained enough of it - it was supposed to defeat scurvy. From now on, the white man with sauerkraut in his stomach subjugated the earth.

"Since I've been fermenting, I've been sick much less often"

250 years later we're not much further, and poor white cabbage is still having a hard time. Nobody likes him. Neither do I.

Franziska Wick wants to change that: "Sauerkraut can provide much more than vitamin C. Fermented vegetables help the intestines and thus the immune system. Since I've been fermenting, I've been sick much less often."

And so we meet at the planting plant of the fermentation specialist in Dübendorf ZH to stimulate our intestines. With cabbage and the like. And lactic acid bacteria that make the vegetables ferment. Are there those in the bacteria shipment? "No, don't worry, they're already here," says Franziska Wick. "They live on the plants." After successful consumption, they should provide a rich intestinal flora bouquet.

In the meantime, friends and neighbors have come to pickle vegetables in brine together. And what feels like ten children are buzzing around. "Fermenting is also a social

happening," says Wick. «Whole villages used to meet at harvest time. Since everyone has a freezer, that is over. »

So we dutifully chat, let the children chop the vegetables and pot them. Some dare to do more and spice up the fermentation material: Curry cauliflower, ginger and carrot stalks, dill beans, garlic paste, Mexican salsa and even ketchup should be created.

Fermentation self-experiment, day 3:

Three glasses with three kinds of sauerkraut are in the kitchen. One with hot paprika, one with turmeric, one colored with beetroot.

Fermentation is trendy. The sourdough boom of the last few months is just the most popular offshoot. More than 5000 products can be found on Amazon under the search term "Fermentation". Hundreds of instruction books, preserving jars in all shapes and colors, an "original sauerkraut masher" made of German beech, made in China. The world-famous gourmet restaurant Noma in Copenhagen even operates its own fermentation laboratory. That has [200,000 subscribers on Instagram](#) - and makes a sauce for a mushroom dish from fermented squirrels.

So if we happen to stumble across a dead croissant, do we just put that in? "Basically everything that is edible can be fermented," says Franziska Wick. "But when it comes to meat, you have to know exactly what you're doing. It's not just harmless lactic acid bacteria that are involved." During fermentation, a fight for displacement breaks out among the microbes. As in Hollywood, the following applies: the good must win.

Fermentation self-experiment, day 9:

The three glasses sometimes secretly give off a little gas. It smells suspiciously of human. But nobody wants to have been.

Many industrially produced foods are pasteurized at around 70 degrees. All bacteria bite the grass. "Sauerkraut from the supermarket is clinically dead," says Franziska Wick. "Apart from fibers, that doesn't do much good for the intestine. It has to be raw. "

The 40-year-old health economist is convinced that our intestinal flora is stunted. «Monocultures, pesticides, industrial food, antibiotics and stress. This is how we destroy biodiversity - not just outside in nature, but also in our own belly. "

"If you eat unhealthily, you reduce the diversity of your intestinal bacteria," confirms intestinal specialist Bettina Wölnerhanssen from the Claraspital in Basel. "This in turn

can have a strong influence on the metabolism and the [immune system](#) , but also on the psyche and behavior."

In fact, studies show that changes in the so-called microbiome in the intestine are linked to intestinal inflammation, colon tumors, colon cancer, obesity, arthritis and multiple sclerosis. But also with autism, Alzheimer's, anxiety disorders, obsessive-compulsive disorder and depression. This is explained by the fact that the intestine and the brain constantly exchange chemical and electrical signals; experts speak of the intestinal-brain axis.

More on this: [Gut-brain axis: This is how the gut influences our personality](#)

Fermentation self-experiment, day 14:

The three glasses with sauerkraut are in the refrigerator. Fermented completely. Now all you have to do is eat it.

With sauerkraut against depression? Unfortunately, it's not that simple. It is scientifically controversial whether the supply of new intestinal subtenants directly promotes health. "There are still too many unknowns from research," says Bettina Wölnerhanssen. In the future, personalized microbiome therapy will likely be most successful. The potential here is huge.

"One thing is certain: good nutrition and little stress benefit the intestine in the long term. Both favor flora that is beneficial for the individual. However, cures or short-term changes have hardly any lasting effect. "

So raw sauerkraut is in demand every day? "It probably doesn't have to be every day," reassures the expert. The foundation stone for the microbiome is laid in the first four years of life. "This time should be used as optimally as possible for a varied, fiber-rich diet." But it is never too late for that: "Some of the intestinal flora depends on what we constantly supply."

Fermentation self-experiment, day 17:

The three glasses with sauerkraut are still in the fridge. You seem somehow threatening and reproachful at the same time.

"My children got used to the sour stuff long ago," says Franziska Wick. Her daughters, aged five and eight, often wished: "I want to eat bacteria."

How about the adults? "Sixty percent of the people who take my courses have chronic illnesses. I get a lot of positive feedback."

Fermentation self-experiment, day 18:

I opened the jars. It tastes best with paprika. No side effects worth mentioning.

The love of sour things seems to run through the gastrointestinal tract. Even with me. I broke the principle "What the sailor does not know, he does not eat". Like Captain Cook. With sauerkraut, of all things.

This is how the vegetables get into the jar

For thousands of years, humans have used fermentation for preservation. Today it can be found in bread, cheese, wine, beer, chocolate, coffee, tea, sauerkraut, salami, vinegar, yogurt, miso, tempeh, soy sauce, kefir, kombucha and other things.

When vegetables are fermented in brine, microorganisms break down carbohydrates into lactic acid at room temperature. After a few weeks, what is preserved in this way is preserved.

If the pH value is below 4.6, it can be kept cool for months. Important: It should not be pasteurized or cooked - otherwise it no longer contains a healthy life.

Mixed vegetables, fermented

ingredients

Fresh vegetables, for example carrots, radishes, kohlrabi, snap peas, fennel, cauliflower, red cabbage, celery

if you like, fresh dill, coriander, garlic, pepper, mustard seeds

Cabbage leaf, brine with 2 percent salt, i.e. 10 g salt for about 5 dl of water

round mason jar with clips and rubber ring

Ceramic or glass weight (small saucer or glass bowl)

preparation

Put the spices and herbs in the glass.

Wash the vegetables, peel them, cut into bite-sized pieces, add.

Cover with appropriately cut cabbage leaf and weigh down with weight.

Fill up to the brine with the brine. It should cover the vegetables, including the cabbage leaf, at least two centimeters high - no air should get in during fermentation. Nothing must be allowed to float on the surface, this can cause mold.

Close the glass with a rubber ring and clamps so that the carbon dioxide produced can escape. Never use a screw jar, it could explode.

Place the jar in a shady place at room temperature for two to three weeks. Do not open during this time.

After at least two weeks, the ferment will be acidic enough to last.

Now store in a cool cellar (7 to 14 degrees) or in the refrigerator and consume within six months.

Information and courses

wildkitchen.ch

Book tip

Immune system - this is how I strengthen my bodyguard

What happens in the body when our immune system has to defend itself against attacks from viruses, bacteria or fungi? Why does it react excessively with allergies, and why does it bomb itself with autoimmune diseases?

This guide book shows how we can take targeted care of our immune system.

[More info](#)