

English

Atlas Obscura

Can Putting a Frog in Milk Keep It Fresh?

Modern science may have an answer to this Russian folk belief.



An unmilky *rana temporaria*. [Ernie/Public Domain](#)

In 2012, scientists in Moscow announced a surprising finding. Of the 76 peptides identified in secretions of common frogs (*Rana temporaria*), many have antibacterial properties. The announcement and the resulting media from the discovery was exultant. Any discovery of antibacterials is important, given the threat of drug-resistant bacteria. But the study sparked excitement for another reason: the finding propped up a venerable Russian folk belief that putting a frog in milk can keep it from spoiling. (That said, no one's recommending that you start throwing frogs in milk cartons.)

Preserving food in the pre-refrigeration era was tough. Cellars and salting helped, but even in Russia's cold climate, fresh milk proved tricky. The longer milk stays unrefrigerated, the more bacteria will grow, making milk sour and sometimes dangerous to drink.

Enter the common frog. In Ariel Golan's *Myth and Symbol: Symbolism in Prehistoric Religions*, he notes in his section on frogs that "Russian peasants placed a frog in milk to keep the milk fresh (to no avail)." These days, the belief is well-known but discounted. (A Russian friend of mine, when I asked about the superstition, responded that he had heard of it and it sounded gross.) But where did the belief come from?

Frogs in milk appear more than once in Russian folk belief. One proverb tells of two frogs that fall into a milk can. One frog gives into despair and drowns. The other keeps afloat by swimming furiously. By the morning, the milk had been churned into solid butter and the frog escapes.

Another story describes Babushka-Lyagushka-Shakusha, the magical, sentient “Grandmother Hopping Frog,” swimming around in a bath of milk. There could even be a more practical association. Frogs are cold and clammy to the touch, and people may have believed those characteristics could transfer to the milk.

Or the link between frogs and milk may simply come from the ability of frogs, Russian and otherwise, to frequently find their way into milk. In an 1854 letters-to-the editor exchange in the New York Times, a farmer described how submerging his milk cans in a spring to keep them cold inevitably resulted in froggy invasions.

The farmer wrote that after fishing out the frog, the milk was still perfectly fine and sent along to customers. Five days later, an indignant reader wrote in that despite reading many accounts of frogs in milk, “the idea of drinking from a frog’s lactal bathing tub is not the most agreeable.” Perhaps the Russian peasant of yesteryear was just making the best of a froggy situation.

Source: [Curious and Wondrous Travel Destinations - Atlas Obscura](#)

Comprehension questions:

1. What surprising discovery did scientists in Moscow make in 2012?

Scientists discovered that secretions from common frogs contain peptides with antibacterial properties.

2. Why was this discovery significant, especially in relation to Russian folk beliefs?

The discovery was significant because it supported the Russian folk belief that putting a frog in milk could help prevent it from spoiling, which added an unexpected scientific perspective to an old superstition.

3. How did people in Russia try to preserve milk before the invention of refrigerators?

People tried methods like storing milk in cellars, salting, or adding a frog to the milk to keep it fresh.

4. What might have led Russian peasants to believe that frogs could keep milk fresh?

Frogs' cold, clammy feel may have given the impression that they could help cool the milk. Alternatively, frogs frequently ended up in milk by accident when milk cans were submerged in springs to stay cold.

Talking point:

1. Traditional Food Preservation Techniques:

Before refrigeration, people used creative methods to keep food fresh, such as cellars, salting, or using natural "preservatives" like frogs. What are other traditional preservation methods used worldwide, and how effective were they?

2. **Perception and Superstition in Food Safety:**

Many folk beliefs about food preservation, like placing frogs in milk, seem strange to us today but had practical origins. Why do some food-related superstitions persist, and how have modern discoveries changed our views on food safety and preservation?

3. **Cultural Narratives and Animal Symbolism:** Russian folklore features animals like frogs in symbolic roles, such as the "Grandmother Hopping Frog" story. How do animals in folklore often represent practical or moral lessons, and what are some other examples where animals play significant roles in different cultures' folklore?

VIDEO

<https://youtu.be/ustog4b8pFI?si=tBAWNpeUhgdW5vTr>