Japan's Most Acidic Hot-Spring Water

Highly acidic spring water, like that of the Obuki spring, comes from volcanic gases and can only be found in areas near active volcanoes.

The high level of acidity is due to the presence of hydrochloric and sulfuric acid derived from the hydrogen chloride and sulfur dioxide found in volcanic gas. Just how acidic the spring water becomes depends on how much of these two acids the volcanic gas contains, as well as the ratio of volcanic gas to groundwater.

Spring water with acidity levels as high as those at Obuki—where the pH hovers around 1—can slowly dissolve iron, aluminum, and even the cement in concrete. Over time organisms living in rivers downstream of highly acidic springs are also adversely affected.

The waters used in Tamagawa Onsen are not only diluted to make them completely safe for bathing, but have also been shown to have numerous health benefits.