

**INDUSTRIES
FOOD**

HIMALAYAN PINK SALT

**AI RESEARCH
SAYS**



Salt Type

Avg. Price (lb)

Key Characteristics

Persian
Blue Salt

\$ 20 - \$ 40

Extremely rare with a unique blue color from sylvinite; mined in Iran.
Intense initial saltiness with a mild, slightly spicy finish

Himalayan
Pink Salt

\$ 3 - \$ 8

Mined from the Khewra Salt Mine in Pakistan; pink hue comes from trace minerals like iron oxide.
It has a subtle, mild flavor .

Common
Table Salt

\$ 0.88 - \$ 1.77

Sourced from salt mines or evaporated seawater; highly refined to remove minerals.
Uniformly white with a sharp, salty taste .

Himalayan pink salt is a type of rock salt (halite) mined mainly from the Khewra Salt Mine in the Punjab region of Pakistan near the Himalayas. It is naturally pink in color due to trace minerals such as iron, magnesium, calcium, potassium, and others, which also give the salt a subtle, slightly sweet flavor and mineral undertones. This salt is less processed than regular table salt and is often marketed as a natural and mineral-rich alternative to table salt.

The salt is primarily composed of sodium chloride, like regular salt, but it contains up to 84 different trace minerals, which are responsible for its distinctive color and purported health benefits. However, while it does contain more minerals compared to table salt, the amounts are typically too small to significantly boost mineral intake without consuming an unhealthy amount of sodium.

Himalayan pink salt is commonly used as a food additive and for cooking, including ground fine or coarse crystal forms. It is also used for decorative purposes (like salt lamps) and in spa treatments such as bath soaks, where it is claimed to soothe skin and support hydration due to its mineral content. Despite various health claims, scientific evidence supporting unique health benefits of Himalayan pink salt compared to regular salt is limited.

When cooking, it can be used similarly to table salt but may have a slightly different sodium content depending on crystal size. It is recommended to use it in moderation as excessive salt intake can contribute to health problems like high blood pressure.

Himalayan pink salt is a natural, mineral-rich salt harvested from ancient deposits in Pakistan near the Himalayas. Its trace minerals provide color and flavor, and it is valued for culinary and cosmetic uses. Health claims exist but are not strongly supported by scientific research, and it should be used with the same caution as other salts regarding sodium consumption.

These salt beds originate from the Salt Range Formation in the Punjab region of Pakistan. Geologically, they are a thick layer of evaporites from the Ediacaran to early Cambrian period, which formed from the evaporation of ancient inland seas.

While some sources state the deposits are around 250 million years old, detailed geological analysis of the formation places its origin further back, in the 540 to 600 million-year range.

The salt is primarily extracted from the Khewra Salt Mine, the second-largest salt mine in the world. Legend suggests the salt was first discovered by the army of Alexander the Great around 326 BC, though the first recorded mining dates to the 1200s.



Himalayan Pink Salt deposits are among the oldest known salt formations in the world, with geological estimates placing their age at 540 to 600 million years old. This places their origin in the Ediacaran to early Cambrian periods when they formed from the evaporation of ancient inland seas. Some sources even suggest they could be as old as 800 million years and are possibly the oldest and most extensive salt deposits globally.

When comparing the age of Himalayan salt to other rock salts, it's useful to understand how these salts are formed. Most rock salts, also known as halite, are the result of ancient seas evaporating millions of years ago, leaving behind crystallized sodium chloride that was eventually buried by sediment. The specific age of a deposit depends on when this geological event occurred.

Blue Persian Rock Salt was formed approximately 100 million years ago from the evaporation of ancient seas and lakes in what is now Iran. The salt's distinctive blue color is not a pigment but an optical illusion caused by the mineral sylvinite, a form of potassium chloride, embedded within the salt crystals.

Like other rock salts, it began as halite deposits left behind by the evaporation of ancient seas and lakes around 100 million years ago. These deposits are primarily found in the Semnan province of northern Iran. Over millions of years, immense geological pressure from the movement of tectonic plates compressed the salt layers.

This intense pressure altered the crystalline structure of the salt. The presence of sylvinite (potassium chloride) within the halite caused the crystal lattice to deform. This deformation causes the salt crystals to refract light in an unusual way, creating an optical illusion that makes parts of the salt appear a striking sapphire blue. The blue color is not uniform and often appears as flecks or veins within the white salt crystals.

At about 100 million years old, the deposits of Blue Persian Salt are significantly younger than Himalayan salt, which dates back 540 to 600 million years. The salt's formation period corresponds with the Cretaceous period, when dinosaurs still existed.

It is considered one of the rarest and most exclusive salts in the world because it is mined from only a few locations in a single region of Iran, and only a few tons are extracted annually.

General Rock Salt (White, Grey): The term "rock salt" can refer to various deposits worldwide, many of which are millions of years old.

While many rock salt deposits are ancient, the Himalayan salt deposits are considered to be exceptionally old, with a geological history that extends back over half a billion years, making them a remnant of some of the planet's earliest oceans.

Consequently, "Best Before" or "Use By" dates are for the benefit of marketing and packaging practices only.



While the trace minerals in Himalayan pink salt are a key part of its marketing, they are not always beneficial to human health. The claims of health benefits are often overstated, and the presence of certain minerals can be undesirable.

The Claims vs. The Reality of Beneficial Minerals

Himalayan pink salt contains trace amounts of minerals like potassium, magnesium, and calcium, which are essential for the body. However, the quantities of these minerals are so small that they do not provide any significant health benefit. To obtain a meaningful dose of these minerals from pink salt, a person would have to consume a dangerously high amount of sodium. For example, a regular diet provides far more of these essential minerals than one could ever get from using pink salt as a seasoning.

Presence of Non-Beneficial and Potentially Harmful Elements

Analyses of Himalayan pink salt have shown that its 84 trace minerals include not only beneficial ones but also elements that are not beneficial and can be toxic in larger amounts. These include :

Lead

Mercury

Arsenic

Cadmium

Thallium

Uranium

While these elements are present in very small, "trace" amounts and are not considered dangerous at normal consumption levels, their presence demonstrates that the mineral content is not uniformly "beneficial". The term "trace minerals" simply refers to all elements present in small quantities, without distinguishing between those that are nutritive and those that are not.

Lack of Iodine

One of the most significant health considerations is that Himalayan pink salt typically lacks iodine. In many countries, standard table salt is fortified with iodine, an essential nutrient for thyroid function. Iodine deficiency can lead to serious health issues like goiters and developmental problems. Relying solely on pink salt without ensuring adequate iodine intake from other sources (like seafood or dairy) can pose a health risk.

The health benefits of the trace minerals in Himalayan pink salt are largely a myth due to their insignificant quantities, and it lacks the added iodine that makes table salt a crucial public health tool.



Cost Difference

There is a significant domestic price difference between Himalayan pink salt and common table salt, with pink salt being considerably more expensive. On average, Himalayan pink salt can cost up to 20 times more than generic table salt.

The price for 100 grams (about 3.5 ounces) of Himalayan pink salt can range from \$5 to \$8. (2024) In other retail examples, it can cost between 35 cents and \$1 per ounce. In contrast, common table salt is much cheaper due to its highly industrialized and efficient production methods.

Several factors drive the higher cost of Himalayan pink salt:

The vast majority of authentic Himalayan pink salt is hand-harvested from one specific location: the Khewra Salt Mine in Pakistan. While the salt is abundant in the mine, the use of traditional, labor-intensive mining methods contributes to its cost.

Transportation and Logistics: The salt must be transported from Pakistan to markets around the world, adding significant shipping and distribution costs.

Himalayan salt is marketed as a natural, unrefined product. It is minimally processed, which preserves its mineral content and pink color. This "natural" quality is a key selling point that commands a higher price.

Pink salt is positioned as a gourmet, artisanal product with purported health benefits, appealing to wellness-conscious consumers. Its unique color and story contribute to a perception of luxury and purity, which supports a premium price point. In contrast, table salt is mass-produced, refined to be pure sodium chloride, and often has anti-caking agents and iodine added, making it a functional, low-cost commodity.

Despite the large price gap, the nutritional differences between Himalayan pink salt and table salt are minimal. The primary component of both is sodium chloride. While pink salt contains trace minerals, they make up only about 2% of the salt and do not provide significant health benefits.

