

The Dead Sea

Geographical and Historical Facts about the Dead Sea:

Deep in the valley of Jordan lies one of Nature's wonders; the Dead Sea. A world famous treasure-trove of health and beauty since ancient times, the Dead Sea is a gift of nature.

The Dead Sea is located on the border between Jordan and Israel situated at 1300 ft. (400 m) below sea level- the lowest point on earth, it is 50 km long and with a maximum width of 17 km (see table 1 for Dead Sea Characteristics). It was geologically formed three million years ago when a small fracture occurred in the Jordan rift valley. Seawater rushed in and collected in this fracture. The dry climate and high rate of evaporation gradually increased the concentration of minerals in the water. Salt, chalk and gypsum precipitated along the length of this fracture eventually resulting in a lake-like formation. This lake eventually ended its relationship with the sea to become an inland lake. Nowadays, it continues to be fed by the Jordan River and numerous mineral springs that pour into it from the adjoining mountains.

Table 1: Dead Sea Characteristics

Location	40 km west of Amman (capital of Jordan)
Humidity	50%
Pressure	795 mm Hg
Oxygen level	10 times higher than that of any atmosphere
Atmosphere	Very dense
UV rays	Filtered (low penetration UV rays = less danger to the body in sunburn conditions)

This lake has been named the Dead Sea; called so because no form of life has been able to exist in its extremely salty water. Unlike its name, the Dead Sea is very much alive with more than 21 health-giving minerals found in its water and mud. It has the highest salt content of all the seas in the world and contains about 45 billion metric tons of dissolved minerals; its salinity is about 32% compared to the 3% average salinity of the Mediterranean Sea and Atlantic Ocean as shown in Table 2 based on the study of Gay-Lussac, the well known French scientist, discovered in 1819 in his laboratory in Paris.

Table 2: Gay-Lussac comparison table between The Dead Sea and Atlantic Ocean water:

Minerals	The Dead Sea Percentage (%) of Minerals	The Atlantic Ocean Percentage (%) of Minerals
Na +	11.4	30.8
K +	2.3	1.1
Mg ++	13.2	3.7
Ca ++	5.0	1.2
Cl +	66.4	55.3
Br -	1.6	0.2
HCO ₃	0.1	0.4
Others	1	7.3

Benefits of Dead Sea Salt and Mud:

The beneficial effects of the Dead Sea's raw materials on the skin and their unique therapeutic and beautifying powers have been recognized since ancient times.

Cleopatra, considered to be the most beautiful woman in the world, who was presented with Dead Sea salts by King Solomon upon her visit to the holy land, went to great lengths to obtain exclusive rights over the Dead Sea area by urging Marc Antony to conquer the Dead Sea region in his Judean campaign. At her command, pharmaceutical and cosmetic factories were built near the Dead Sea. Their remains can still be seen today at Ein Bokek and Ein Gedi.

Following in the tradition, about 50 modern plants now manufacture cosmetics and skin care products based on minerals from the Dead Sea. Scientists at these plants have developed lines of mineral-rich cosmetics products which are exported all over the world as Dead Sea cosmetics products.

The use of Dead Sea products proved that it is very effective in the treatment of psoriasis, eczema, arthritis, rheumatism, acne, pimples and rash muscle stiffness.

Dead Sea Bath Salt Benefits:

The use of Dead Sea bath salts at home is an effective way to relax and absorb the minerals of the Dead Sea. Research has proven the efficiency of Dead Sea bath salts in alleviating skin diseases such as psoriasis, and it is also highly beneficial for relieving muscle tension, softening the skin or for simply relaxing and enjoying a rejuvenating experience. Bath salts also stimulate blood and Lymph circulation, since the high mineral content improves circulation by stimulating the flow of oxygen to the skin, this has an additional benefit of draining trapped fluids. This action is especially good for relieving circulatory related ailments such as arthritis and rheumatism. Skin regeneration is also achieved, as the high mineral content helps skin to breathe and provides it with the nourishment for cell renewal and regeneration. Israeli dermatologist Dr. Zvi Even Paz studied the effect of Dead Sea bath salts on 50 psoriasis patients in 1989. For forty-seven of the fifty patients tested, significant relief was achieved. Maximum improvement was noted when patients soaked in two pounds (one kilogram) for three baths per week for a period of six weeks.

Dead Sea Mud Benefits:

Dead Sea mud, rich in minerals with similar chemical composition to Dead Sea waters, can either be applied to the entire body or individual areas, and is also popular as a facial mud mask.

Dead Sea mud has many benefits such as:

- Cleansing and removing impurities which impede the nourishment process.
- Relieving pain caused by joint inflammation.
- Preventing skin pigmentation.
- Stimulating blood circulation.
- Exfoliating dead skin cells.
- Rejuvenating the skin.

Professor Zalmanovitch, a leading American dermatologist, tested the Dead Sea mud mask on thirty women of different age groups and varying skin tones. They found that the facial mud mask stimulates, tightens, cleanses and invigorates, leaving the skin with a refreshing glow.

The clay's remarkable absorbency reaches deep into the pores, thoroughly cleansing and removing grime which impedes the nourishing process. Through reverse osmosis, minerals from the mud nourishes the skin and restores its vitality. The mineral action also works to tighten the pores, helping skin to look and feel its best. Superfine grains allow for easy application, even coverage and easy removal.

The high mineral content of these special salts, and the detoxifying properties of the mud combined to cleanse and detoxify naturally, pulling the toxins out and away from the body. This is a perfect product for those unable or unwilling to change their dietary regime.

The role of Dead Sea minerals on skin smoothing was recently studied. Surprising results were found to be superior in comparison with 45 leading cosmetic brands in smoothing the skin's surface and reducing wrinkle depth and skin roughness with Dead Sea minerals.