The Dead Sea
DEAD SEA

is the lowest unspoiled point on earth
(410 meters below sea level)
Located In the holy land, 55 km southeast of the capital of Jordan, Amman
feed by Jordan river
the world's richest source of natural salts,
hiding wonderful treasures that accumulated throughout thousands of years
with a unique source of hypertonic water and thermo-mineral springs.
Dead Sea Geographical Facts

- The lowest point on earth, 410 m below sea level.
- Formed 3 million years ago when a fracture occurred amidst the Jordan rift valley.
- No form of life is able to exist in its salty waters.
- 32% salinity, the highest salt content of all sea water.
- The Dead Sea contains 43 billion metric tons of salt.
- Humidity: 50%.
- Pressure: 795 mm.
- Oxygen level at site: Is 10 times higher than that of any environment.
- Atmosphere: very dense.
- Filtered UV rays: Low penetration of UV rays = High skin protection.
A unique combination of several factors makes Dead Sea's total attraction:
the chemical composition of its water.
the filtered sunrays and oxygen-rich air.
the mineral-rich black mud along the shoreline.
the adjacent fresh water and thermal mineral springs.
# Climacteric Conditions at the Dead Sea

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Max. Temp. C</strong></td>
<td>20</td>
<td>22</td>
<td>25</td>
<td>29</td>
<td>34</td>
<td>37</td>
<td>39</td>
<td>38</td>
<td>36</td>
<td>32</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td><strong>Average Min. Temp. C</strong></td>
<td>11</td>
<td>13</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>27</td>
<td>24</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td><strong>Average Moist.</strong></td>
<td>50</td>
<td>46</td>
<td>42</td>
<td>37</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>36</td>
<td>40</td>
<td>41</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td><strong>Average Precipit. mm</strong></td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
Dead Sea salts and minerals
Comparative Concentration

<table>
<thead>
<tr>
<th>Minerals</th>
<th>NaCl</th>
<th>MgCl₂</th>
<th>CaCl₂</th>
<th>KCl</th>
<th>MgBr₂</th>
<th>CaSO₄</th>
<th>MgSO₄</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dead Sea</td>
<td>86 (29%)</td>
<td>132 (41%)</td>
<td>35 (12%)</td>
<td>11 (4%)</td>
<td>9 (3%)</td>
<td>7 (2%)</td>
<td>23 (11%)</td>
<td>300 g/l</td>
</tr>
<tr>
<td>Mediter. Sea</td>
<td>27 (7%)</td>
<td>4 (11%)</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>2 (3%)</td>
<td>2 (6%)</td>
<td>35 g/l</td>
</tr>
</tbody>
</table>

Great Salt Lake in Utah, U.S.A., have 20% to 27% salt concentration
The ocean is at 3%.
**Dead Sea salt** is not a normal sea salt. Its concentration of minerals is infinitely higher. Every Dead Sea crystal contains a unique mix of minerals essential for the body equilibrium:

- **Magnesium** Known for its anti-allergic influence on the skin and promotes healing.
- **Bromide** Known for its soothing, relaxing and tranquilizing affect on the nervous system.
- **Iodine** Important for the correct functioning of the thyroid gland and an important factor in the body's metabolic exchanges.
- **Sulfur** A natural disinfectant.
- **Potassium** A moisture regulator.
MEDICAL ACTIONS OF THE MAIN DEAD SEA MENIRALS

26 Different minerals have been found in the Dead Sea. Minerals are coenzymes that activate metabolic functions.

<table>
<thead>
<tr>
<th>Minerals</th>
<th>Role</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Chloride:</td>
<td>Provide energy to all cells (Providing a healthy muscle cell function)</td>
<td>4%</td>
</tr>
<tr>
<td>Sodium Chloride:</td>
<td>Primary carrier of osmotic pressure. Provides energy to the cells</td>
<td>25%</td>
</tr>
<tr>
<td>Magnesium Chloride:</td>
<td>Accelerates cell metabolism by activating the enzymatic reaction.</td>
<td>50%</td>
</tr>
<tr>
<td>Bromide:</td>
<td>Heals and soothes skin diseases.</td>
<td></td>
</tr>
<tr>
<td>Chlorine:</td>
<td>Balance the mineral’s concentration and distribution in the body.</td>
<td></td>
</tr>
<tr>
<td>Calcium Chloride:</td>
<td>Strengthens cell membranes &amp; Relieves pain. Affects the threshold of nerve stimuli.</td>
<td>12%</td>
</tr>
<tr>
<td>Iron:</td>
<td>A Carrier for oxygen into the cells</td>
<td></td>
</tr>
</tbody>
</table>
The Dead Sea has been the focus of interest and treatment since ancient times.

**ARISTOTLE** (304 - 322 B.C.), Describe the Dead Sea

“A very bitter and salty water in which no fish can live and where neither man nor animal can sink".

**JOSEFUS FLAVIUS** (37 - c.100), **GALEN** (122 - c.220), & **PLINY THE ELDER**

Reported the therapeutic characteristics of the Dead Sea water, mud and mineral hot springs.

**Cleopatra** (69-30 BC)

Used the Dead Sea as a resort benefiting from its rich quality of water and mud to immortalize her beauty and health.

**JULIUS AFRICANUS** (the 3rd century)

said: "Bathing in the Dead Sea is therapeutic for everyone".
Minerals are essential for the skin metabolism. When the body begins to age, simultaneously the level of minerals also begins to deplete. The aging body no longer produces minerals on its own and must draw on external sources of supply. The body needs minerals. It is all there in the Dead Sea products manufactured by Jordanian companies.
Dead Sea

is The Source of..!!

• The finest natural recipes for health and beauty.
• A unique and rich combination of natural minerals in high concentrations.
• It is used as effective cosmetics & as treatment for many skin diseases
SKIN or INTEGUMENT: Roles

- **PROTECTION**: chemical-mechanical
  - water loss
  - radiation
  - bugs
  - immune

- **SENSORY**

- **THERMOREGULATION**

- **METABOLISM**: vitamin D
  - fat storage

- **COMMUNICATION**

- **MECHANICAL**: friction surface
  - scratching
  - padding
<table>
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<th>SKIN or INTEGUMENT: Roles - Correlations</th>
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<tr>
<td><strong>PROTECTION</strong></td>
</tr>
<tr>
<td>chemical-UV</td>
</tr>
<tr>
<td>mechanical</td>
</tr>
<tr>
<td>water loss,</td>
</tr>
<tr>
<td>bugs</td>
</tr>
<tr>
<td>immune</td>
</tr>
<tr>
<td>keratin, melanin, sebum</td>
</tr>
<tr>
<td>thick epithelium, hair,</td>
</tr>
<tr>
<td>dermal papillae</td>
</tr>
<tr>
<td>Dermal CT defenses</td>
</tr>
<tr>
<td>Langerhans cells</td>
</tr>
<tr>
<td>dermal lymphocytes</td>
</tr>
<tr>
<td><strong>SENSORY</strong></td>
</tr>
<tr>
<td>Merkel cells</td>
</tr>
<tr>
<td>sensory receptors &amp; fibers</td>
</tr>
<tr>
<td><strong>THERMOREGULATION</strong></td>
</tr>
<tr>
<td>blood flow, sweat gands, hair, fat</td>
</tr>
<tr>
<td><strong>METABOLISM</strong></td>
</tr>
<tr>
<td>vitamin D</td>
</tr>
<tr>
<td>fat storage</td>
</tr>
<tr>
<td>keratinocytes</td>
</tr>
<tr>
<td>adipocytes</td>
</tr>
</tbody>
</table>
Human Skin Facts

- Surface area: 1.5 - 2 sq. mtrs. Measuring around 7% of total body weight.
- Thickness: 1.5 - 4 mm
- The average person sheds 18 kg. of skin cells in a lifetime.
- The skin contains 5% of the body's blood supply.
Factors that affect the skin conditions

- 1. Negligence.
- 2. Climate.
- 4. Diet.
- 5. Medications.
- 6. Heredity.
- 7. Stress.
All Dead Sea Products Contains Minerals that Act in Three Different Ways:

1. They help the body’s metabolic process (metabolic ionic co-factor enzymatic reactions).
2. They contribute to the skin’s moisturization to enhance its elasticity.
3. They strengthen cell membranes and protect against dehydration and environmental hazards.

Results

- **Hydration:** Minerals are primary osmotic pressure carrier so that the skin’s optimal moisture level is maintained.
- **Elasticity:** Minerals improves Skin’s elasticity by increasing the optimal amount of moisture through skin’s NMF “Natural Moisturizing Factor”.
- **Protection:** cell membranes are fortified and the skin enjoys higher protection against dehydration and environmental factors.

These natural minerals are essential to facilitate and maintain the skin’s natural look & function.
What is mud?

- Mud contains a variety of high mineral concentrations.
- Mud is composed of tiny particles of clay with a tremendous capacity for absorbing water and other liquids.
- Mud acts as a purifying & deep cleanser of the skin pores.

Mud

- Is used to absorb skin secretions such as sebum (excess fat) and perspiration.
- Is also well recognized for its healing effects on a wide range of skin diseases and disorders such as:

  - psoriasis, eczema, acne, pimples & fungal inflammation.
MUD CARE
The Dead Sea Mud

Mud is brewing naturally over thousands of years. Mud gives the best possible results for body beauty and treatment products the followings effects:

**Mud Mask**
Facial mask “The power of Acne treatment”
- Mask effect for facial cleansing and tightening.
- Grease & debris removal effect.

**Black Mud**
For body and Joints treatments
- Purifies the upper layer of the epidermis.
- Stimulates the skin cellular metabolism.
- Restore skin’s radiance and smoothness.

**Hair Mud**
For Hair treatment
- Strengthens hair roots & stimulate hair growth.

The Mud is used for healing Eczema
Purifying, Revitalizing, Mineralizing and Regenerating the skin with the best Raw Materials
OPTIMUM TREATMENT BY Dead Sea PRODUCTS FOR THE FOLLOWING DISEASES:

- PSORIASIS.
- PSORISIS FOR SCALP.
- ACNEA.
- ATOPIC DERMATITIS Eczema.
- VITILIGO.
- ARTHRITIS RHEUMATOLOGY TREATMENT.

The Dead Sea Can Come to Your Home Land Through ZOAR Company Specialized in Their Unique & Diversified products.
Objectives

- Covering every possible international market in order to achieve our goal

"We want the whole world to bath in the DEAD SEA".

- Complementing our range with more unique health and beauty products.

- Creating more serious awareness about the importance of the DEAD SEA and related products.