Walmart’s Celtic Sea Salt
Background

- **Natural Sea Salt Industry**
  
  In his book about sea salt, Dr. Jacques De Langre identified 88 minerals. Jacques was a Belgian-American food scientist who created the natural sea salt industry in America and Celtic Sea Salt. He formed the Grain and Salt Society that is now called Selina Naturally. Selina is Jacques’s daughter.
Background

Jacques de Langre PhD, a California-based biochemist, studied Celtic Salt for over 30 years. He is the author of Seasalt’s Hidden Powers.
Background

Jacques de Langre and his daughter Selina.
Background

A short video about the origins and harvesting of Celtic Sea Salt is available at YouTube.

What is Celtic Sea Salt?
https://www.youtube.com/watch?v=m7-cH4SrFgU
Background

- **Table Salt vs. Sea Salt**
  The color of salt will reveal whether it is processed. If it’s gray, it contains trace minerals that your body desperately needs. If salt is bright white, it has been washed, bleached, heat-treated and mechanically made into uniform sodium chloride crystals.
Background

- **Anti-Caking Agents Added to Salt**

Salt companies add two anti-caking agents to commercial salt:

1. Magnesium carbonate is added to brands that large salt producers sell as “natural salt.” The Environmental Working Group that works to “fill an information gap about chemicals where companies and the government leave off,” gives magnesium carbonate an 80% rating for a “data gap” which means there is very little known about the health effects of this compound. Salt manufacturers use it as an anti-caking agent because it is about five times more powerful than talc as a water absorbent. Could a water absorbent this powerful be safe inside the body that is 55% to 78% water?
Background

- Anti-Caking Agents Added to Salt (continued)

2. Silica aluminate is an anti-caking agent that large salt producers add to brands in a category known as “grocery store” salt. Grocery store shoppers are not as aware of the health effects of metals as people who shop at natural food stores and this anti-caking agent is most likely outside their radar. Aluminosilicates have been found in the brains of people who have died of Alzheimer’s disease. Aluminosilicates exist in nature but their use in talcum powder, asbestos, cat litter, cement, asphalt and table salt has increased human exposure.
Background

• Truth About A Few of The Missing Elements
  Due to recent research in the field of nutrition, we now know the following about a few of the trace minerals that are lost in commercial salt production:

1. Selenium
   Selenium is needed by approximately 75,000 enzyme reactions in the body. A few critical functions include:
   a. Thyroid
      Scientists have studied the role of Selenium in thyroid function since the 1990s, and it is now known that the deiodinase enzymes that convert thyroid hormone T4 (thyroxine) to the more active thyroid hormone T3 (triiodothyronine) and then T3 to T2, are requiring or dependent on selenium.
Background

• **Truth About A Few of The Missing Elements (continued)**

1. Selenium (continued)

   a. **Thyroid Function (continued)**

   Selenium also plays a role in thyroid metabolism as part of a detoxifier known as glutathione peroxidase (GPX) that limits the excessive production of T4 by degrading hydrogen peroxide (H2O2) that is produced during the production of thyroid hormone. If GPX were not present to degrade H2O2, the levels of T4 would be excessively high. The degradation of H2O2 also protects the cells of the thyroid gland.
Background

• **Truth About A Few of The Missing Elements (continued)**

1. Selenium (continued)

   b. Non-Thyroid Function

   • *Selenium Protects Fats From Peroxidation*
     Peroxidation is the oxidation of fats in cellular membranes that causes fats to turn rancid.

   • *Selenium is an important component of glutathione peroxidase (GPX) that protects fats from oxididation.*

   • *When cellular membranes are damaged by peroxidation, nutrients cannot pass through. In skin cells, peroxidation causes age spots that also occur in the liver.*
Background

• **Truth About A Few of The Missing Elements (continued)**

1. Selenium (continued)
   
   b. Non-Thyroid Function (continued)
   
   • Selenium is an important part of an enzyme called sulfotransferase that breaks down estrogen

   c. Deficiency Diseases
   
   Selenium is a mineral that the body needs to make an antioxidant called glutathione. A deficiency of Selenium-dependent glutathione is associated with the development of cataracts, Parkinson’s Disease and Alzheimer’s Disease.
Background

• Truth About A Few of The Missing Elements (continued)

1. Selenium (continued)

   d. White blood cells need organic Selenium to fight viruses and bacteria.

   e. Sea salt and Brazil nuts are both sources of organic Selenium. Cucumbers are also naturally high in Selenium if Selenium is present in the soil.
2. Zinc
Zinc is needed by more than 225 enzyme reactions in the body and it’s also a co-factor in the production of fatty acids that are important for brain and nervous system functions. Without zinc, digestion is impaired because it is needed to make an important stomach acid known as hydrochloric acid (HCL).

3. Germanium
White blood cells (called lymphocytes), that kill viruses and bacteria, need free, organic germanium from a food source (Note: Besides sea salt, Korean ginseng and Hydrangea root are also sources of germanium).
4. Molybdenum
This micro nutrient is needed in the metabolism of sulfur foods such as onions, garlic, shallots, mustard, watercress, leeks, cabbage, brussel sprouts, rutabagas, asparagus turnips, broccoli, bok choy, cauliflower, nuts, kale, lettuce, seaweed, raspberries, coconut, avocado, watermelon, Swiss Chard, parsley, spinach, sweet potatoes and yams (American yams, Genus Ipomoea), tomatoes, tea, coffee, cows’ milk and whey protein.
Celtic Sea Salt

Celtic Sea Salt:
- Hand-harvested in Brittany, France near the Celtic Sea
- Artisans use a 2,000-year old Celtic method that is crucial to preserving its natural state