

Chapter 1 : Drink Up: Taking the Salt out of Seawater - Scientific American

take (something) with a pinch of salt To consider or evaluate something, such as a statement, while keeping in mind that it may not be completely true or accurate, typically due to the unreliability of the source.

Small rock What You Do: Pour the water into the mixing bowl, add in the salt, and stir until it has dissolved. Put the cup or small bowl into the mixing bowl without letting any salt water get into the cup. Place the plastic wrap over the bowl and seal the edges. Place the small rock on top of the plastic wrap in the middle of the surface. The plastic should slant slightly toward the cup in the middle of the large bowl. Place the setup under a hot sunny area for one hour. Water drops should start to form underneath the plastic. The water drops will flow into the middle of the bowl and fall into the cup. After a few hours, remove the plastic. The cup should now have a sizeable amount of water in it. Invite your child to taste the water in the cup. The water vaporized from the sun and then returned to its liquid state. The salt stayed behind instead of evaporating. You have taken the salt out of salt water! This is a great way to demonstrate how matter can change states. In this project, water can go from liquid to gas and then back to liquid, while changing some of its chemical properties. This project allows your child to see and taste the effects. Related learning resources Worksheet Resource: What else do we use water for? Kids practice their reasoning skills as they fill out this social studies worksheet.

Chapter 2 : Epsom Salt – The Magnesium-Rich, Detoxifying Pain Reliever - Dr. Axe

What's the origin of the phrase 'Take with a grain of salt'? The idea comes from the fact that food is more easily swallowed if taken with a small amount of salt. Pliny the Elder translated an ancient text, which some have suggested was an antidote to poison, with the words 'be taken fasting, plus a grain of salt'.

Axe content is medically reviewed or fact checked to ensure factually accurate information. With strict editorial sourcing guidelines, we only link to academic research institutions, reputable media sites and, when research is available, medically peer-reviewed studies. Note that the numbers in parentheses 1, 2, etc. The information in our articles is NOT intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. Our team includes licensed nutritionists and dietitians, certified health education specialists, as well as certified strength and conditioning specialists, personal trainers and corrective exercise specialists. Our team aims to be not only thorough with its research, but also objective and unbiased. [Top 6 Essential Health Benefits by Dr. October 12, Dr. Axe on Facebook](#) [Dr. Axe on Twitter](#) [Dr. Axe on Instagram](#) [Dr. Axe on Google Plus](#) [Dr. Axe on Youtube](#) [Dr. However, in recent years, salt has come under fire and has been characterized as an unhealthy substance that we should cut out of our diets in favor of heart health. That being said, not all salt is created equal and there is definitely a difference between unrefined, mineral-rich varieties like sea salt versus salt that has been heavily processed and stripped of all of its natural nutrients. So is sea salt good for you? Does sea salt have iodine? And which types are best when it comes to your health? Keep reading for everything you need to know about this common kitchen ingredient. What Is Sea Salt? What does that mean? Sea salt is a type of salt produced from the evaporation of current seawater. It also has natural flavors and colors that make it a lot tastier and more interesting to use for cooking as well as homemade beauty products. Sea salt can be either unrefined or refined, although unrefined sea salt is generally recommended to maximize its potential health benefits. Rich in Trace Minerals High-quality sea salts typically contain upwards of 60 trace minerals and for specific types like Himalayan sea salt, that number is said to be closer to Either way, sea salts are a great source of micronutrients. At the same time, the opposite is also true: By consuming sea salt in moderation each day, you also ensure that you are maintaining sufficient sodium levels, which helps balance your sodium-potassium ratios. Loaded with Electrolytes The minimal processing of unrefined sea salt enables it to retain much of its natural mineral content. Electrolytes have so many important functions – from regulating your heartbeat to allowing your muscles to contract so that you can move. Promotes Brain, Muscle and Nervous System Function As a good source of sodium, sea salt is essential for proper brain, muscle and nervous system function. Why is this so important? Without this communication system working as it should, the brain, muscles and nervous systems are especially inclined to suffer. Both too much and too little sodium cause cellular malfunction. Supports Digestive Health Not getting enough salt in your diet can also negatively impact your digestive health. Promotes Nutrient Absorption Having enough stomach acid also helps our bodies to absorb vitamins and minerals like calcium, zinc , iron, folate and vitamin B For this reason, consuming a high-quality sea salt regularly can help your body absorb more nutrients from the foods that you eat. Types of Sea Salt There are many different types of sea salt available, each of which varies based on where it originates and the health benefits that it provides. Here are a few of the most common types of sea salt on the market today: Because of the amazing nutrient load, doctors of functional medicine report that regularly eating pink Himalayan salt can help:](#)

Chapter 3 : Epsom Salt Uses, Side Effects & Warnings - calendrierdelascience.com

Related to take with a pinch of salt: take with a grain of salt take (something) with a pinch of salt To consider or evaluate something, such as a statement, while keeping in mind that it may not be completely true or accurate, typically due to the unreliability of the source.

That leaves less than 1 percent of all freshwater for humans and animals to drink and for farmers to use to raise crops—and that remnant is shrinking as rising global temperatures trigger more droughts. Analysts at the investment bank Goldman Sachs estimate that worldwide water use doubles every 20 years. So the search for new water sources is on. One proved candidate is desalination technologies that extract the salt from brine drawn from the oceans or saline aquifers to create potable water. More commonly, however, desalination plants rely on RO, which is based on high-tech polymer membranes that are permeable to water, but reject the passage of dissolved salts, Elimelech says. When a saline solution sits on one side of a semipermeable membrane and a less salty solution is on the other, he explains, water diffuses through the membrane from the less concentrated to the more concentrated side. Scientists call this phenomenon osmosis, which tends to equalize the salinity of the two solutions. To counter the osmotic pressure that arises between the solutions and force water back through the membrane, desalination plants must utilize high pressures of 7, to 8, kilopascals 71 to Common RO membranes are thin-film composites that combine a mechanically robust support layer made of microporous polysulfone with a micron-thick polyamide "filter" layer through which water molecules can pass but nothing else. RO membranes have matured during the past two decades, he says, with marked improvements in water permeability, salt-rejection capability, operating life now as long as three to five years and cost. These advances, in combination with energy-recovery devices that take pressure from the concentrated brine stream and transfer most of it to the incoming water flow, have made desalination more affordable. Current RO facilities desalinate seawater for 68 to 90 cents per cubic meter. The average delivery price of municipal water in the U. Other improvements currently in the works include measures to maintain process flow. RO plants must filter seawater and inject chemicals to eliminate particles that could cause clogging, and the membranes are washed regularly to lessen scale formation and biofilm fouling, says Benny Freeman, a chemical engineer at the University of Texas at Austin. Elimelech and entrepreneur Robert McGinnis have advanced a process called forward osmosis FO that could reduce the energy needed to purify water by 90 percent. FO takes advantage of the osmotic pressure difference between a concentrated "draw" solution and a raw water stream to drive water through a semipermeable membrane. The main challenge, he adds, is to select a nontoxic draw solute that may be simply and economically removed. Oasys plans to use an ammonia and carbon dioxide mixture as a draw solute. When the solution is heated, the dissolved ammonium carbonate and related salts decompose into their precursor gases, enabling easy removal. When fully scaled up, FO desalination is expected to cost only 37 to 44 cents a cubic meter. Investigators have shown, for example, that carbon nanotubes can convey water at unexpectedly high flow rates. These so-called water wires may be able to pass a greater volume of water at a given pressure than existing membranes while still blocking out hydrated salts. Biomimetic membrane technologies are also under development, Shannon says. These materials try to imitate the ability of the minute pores in biological cell membranes to selectively allow water to flow through while preventing the passage of salt ions. The Danish firm Aquaporin, for instance, is embedding natural aquaporins water channels extracted from green plants in membranes that it hopes to market this year. Recently, the Madrid Institute for Advanced Studies agreed to collaborate with Valladolid, Spain-based engineering company, PROINGESA, to design a capacitive de-ionization process that applies an electrical potential to raw water to attract dissolved salt ions toward oppositely charged electrodes, where they are adsorbed and later removed. Some 13, desalination plants capable of producing But that is only a half a percent of global daily water use, a figure that would grow faster if process costs could be further reduced. Nevertheless, construction of desalination facilities rose at an annual clip of 17 percent since , the IDA reports. In any case, a new market analysis by Lux Research forecasts that the global desalinated water supply will grow at a compound annual growth rate of 9.

"(With) a grain of salt", (or "a pinch of salt") is an idiom of the English language, which means to view something with scepticism or not to interpret something literally. [1] History [edit].

Ask a doctor or pharmacist if it is safe for you to take Epsom Salt if you have: It is not known whether Epsom Salt will harm an unborn baby. Tell your doctor if you are pregnant or plan to become pregnant while using this medication. It is not known whether magnesium sulfate passes into breast milk or if it could harm a nursing baby. Tell your doctor if you are breast-feeding a baby. How should I take Epsom Salt? Use exactly as directed on the label, or as prescribed by your doctor. Never use a higher dose of magnesium sulfate than recommended on the package label, or as your doctor has directed. Using too much Epsom Salt can cause serious, life-threatening side effects. Epsom Salt may be used orally by mouth or as a soak. To take Epsom Salt orally, dissolve one dose in 8 ounces of water. Stir this mixture and drink all of it right away. You may add a small amount of lemon juice to improve the taste of this mixture. Epsom Salt taken orally should produce a bowel movement within 30 minutes to 6 hours. Drink plenty of liquids while you are taking Epsom Salt. If you have rectal bleeding or if you do not have a bowel movement after using Epsom Salt as a laxative, stop using the medication and call your doctor at once. These may be signs of a more serious condition. To use Epsom Salt as an epsom salt soak, dissolve in a large amount of water in a large bowl, a bucket, a foot tub, or a bath tub. Follow the directions on the product label about how much epsom salt to use per gallon of water. Store at room temperature away from moisture and heat. What happens if I miss a dose? Since Epsom Salt is used on an as needed basis, you are not likely to miss a dose. What happens if I overdose? Seek emergency medical attention or call the Poison Help line at An overdose of magnesium sulfate can be fatal Overdose symptoms may include nausea, vomiting, flushing warmth, redness, or tingly feeling , feeling very hot, slow heart rate , extreme drowsiness, or fainting. What should I avoid while taking Epsom Salt? Epsom Salt taken orally can make it harder for your body to absorb other medications you take by mouth, especially antibiotics. Avoid taking other medicines within 2 hours before or after you take this medicine as a laxative. Epsom Salt side effects Get emergency medical help if you have any of these signs of an allergic reaction: Common side effects may include diarrhea or upset stomach. This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects. Side effects in more detail What other drugs will affect Epsom Salt? Other drugs may interact with magnesium sulfate, including prescription and over-the-counter medicines, vitamins , and herbal products. Tell each of your health care providers about all medicines you use now and any medicine you start or stop using. Drug Interactions in more detail Further information Remember, keep this and all other medicines out of the reach of children, never share your medicines with others, and use this medication only for the indication prescribed. Always consult your healthcare provider to ensure the information displayed on this page applies to your personal circumstances. Copyright Cerner Multum, Inc.

Chapter 5 : Victorian Ghost Stories: Charles Dickens, "To be Taken with a Grain of Salt"

The second stage lets the players save a maximum of 3 tokens and use the rest of the brine tokens in one of two ways: they can exchange the brine tokens for salt tokens in a ratio (every salt token scores a point) or they can gamble with the tokens by rolling the special die.

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FDA-approved laxative and is commonly used to naturally relieve constipation. When taken internally, Epsom salt acts like a laxative by increasing water in the intestines and cleansing the colon of waste. Stir this mixture and drink all of it right away. You may add a small amount of lemon juice to improve the taste. Make sure to drink plenty of liquids while consuming Epsom salt to prevent dehydration. Epsom salt can also help heal cuts and reduce the swelling that accompanies sprains and bruises. Have an annoying and painful splinter stuck in your hand? Soak the problem area in warm water and Epsom salt, and the splinter should be drawn out of the skin in no time! Epsom salt can help with that, too. In general, healthy magnesium levels from Epsom salt use can help overall bodily inflammation since low magnesium has been linked with higher C-reactive protein CRP, a marker of inflammation in the body. Improves Blood Sugar Levels Healthy magnesium levels have been linked with a reduced risk of developing diabetes. Epsom salt is an excellent source of magnesium. Regular intake of Epsom salts, either orally or transdermally, can help to regulate blood sugar, lowering the risk of diabetes and improving daily energy levels. Studies continue to show how a healthy intake of magnesium is associated with a lower risk of the development of type 2 diabetes in both men and women, proving Epsom salts work as natural diabetes remedies. Volumizes Hair Adding Epsom salt to hair products can help decrease excess oil, which contributes to hair looking flat and weighed down. One easy way to create your own volumizing conditioner at home is to combine equal parts Epsom salt and conditioner example: After shampooing hair as usual, apply the volumizing conditioner mix to hair, coating it from the scalp to the ends. This is a great weekly hair treatment. One- to two-pound bags are typically in stock, but smaller sizes are available as well. You can usually find Epsom salt where you find peroxide and rubbing alcohol or in the laxative section. Once you have your Epsom salt at home, store it at room temperature away from moisture and heat this prevents it from becoming compacted. When it comes to external use of Epsom salt for health reasons, the most common recommendation is to soak the entire body in warm water containing one to two cups of Epsom salt for at least 20 minutes. A half-cup of Epsom salt can also be added to a large pan of warm water for a minute foot bath. For internal use of Epsom salt, follow the guidelines on the packaging or consult your physician. Epsom salt has a long history of use in the garden as well. For more robust vegetables, you can try adding a tablespoon of Epsom salt to the soil underneath a plant to boost growth. Epsom salt is also great for indoor gardening. For potted plants, simply dissolve two tablespoons of Epsom salt per gallon of water, and substitute this solution for normal watering once a month. Looking to get rid of slugs from your walkways and patios without using chemicals? Sprinkle some Epsom salt to keep them away! For itchy skin, bug bites or sunburn, you can dissolve a tablespoon of Epsom salt in a half cup of cool water in a spray bottle and spritz on skin as needed. Epsom salt can also be used for household cleaning. Allow the mixture to soak in for a couple of minutes, scrub away the loosened filth and rinse clean. The Epsom salt can be added to the bath or used as a compress. Heel Spur Aid Since magnesium is key to bone health, Epsom salt can be a great natural remedy for a heel spur. A heel spur is caused by displacement of calcium on the bone that forms on the underside of the heel. Heel spurs can be mildly to extremely painful. One natural solution for healing a heel spur is to soak the foot in a warm bath with Epsom salt, which helps relieve the inflammation and pain associated with the heel spur. Gallbladder Flush The gallbladder is not as well-understood or talked about as our other organs, but an optimally functioning gallbladder is something we all should strive for when it comes to our health. Some of the warning signs that you may have a gallbladder problem include gallbladder pain, poor fat digestion, rosacea of skin and leaky gut syndrome. Epsom salt can be utilized in a gallbladder and liver flush recipe. It can be used as a stand-alone salt for soaking, or it can be blended with dried botanicals and essential oils for a more decadent bathing experience. Check out my full Homemade Healing Bath Salts recipe here. Possible Side Effects of Epsom Salt Usage Never use a higher dose of Epsom salt than what is recommended on the package label or as your doctor has directed. Magnesium sulfate taken orally can make it harder for your body to absorb other medications you take by mouth, especially antibiotics. Avoid taking other medicines within two hours before or after you take magnesium sulfate as a laxative. If you have rectal bleeding or if you do not have a bowel movement after using magnesium sulfate as a laxative, stop using the medication and call your doctor at once. These may be signs of a more serious condition. Magnesium in any form, including Epsom salt, must be used with caution in patients with renal failure, since it is processed by

the kidneys and can reach toxic levels easily in those patients. Magnesium sulfate is often used to successfully treat eclampsia and pre-eclampsia in pregnant women , but pregnant or nursing women should generally exercise caution and consult their doctors being using Epsom salt. Serious side effects of magnesium sulfate overdose include the following: You should tell your doctor immediately if you experience any of these symptoms after using Epsom salt. Serious side effects of Epsom salt are rare when used in recommended dosages. As always, if you have any questions or health concerns, check with a doctor before internal or external use of Epsom salt.

Chapter 6 : How to Take a Himalayan Salt Bath: 11 Steps (with Pictures)

A Charles Dickens short ghost story that revolves around a main character who works at a bank and is haunted by the ghost of a murdered man. When the bank employee finds out that he is called to be on a local jury, he soon realizes that the trial is for the murderer of the ghost.

Charles Dickens, "To be Taken with a Grain of Salt" All the Year Round Christmas Number, I have always noticed a prevalent want of courage, even among persons of superior intelligence and culture, as to imparting their own psychological experiences when those have been of a strange sort. A truthful traveller who should have seen some extraordinary creature in the likeness of a sea-serpent, would have no fear of mentioning it; but the same traveller having had some singular presentiment, impulse, vagary of thought, vision so-called, dream, or other remarkable mental impression, would hesitate considerably before he would own to it. To this reticence I attribute much of the obscurity in which such subjects are involved. We do not habitually communicate our experiences of these subjective things, as we do our experiences of objective creation. The consequence is, that the general stock of experience in this regard appears exceptional, and really is so, in respect of being miserably imperfect. In what I am going to relate I have no intention of setting up, opposing, or supporting, any theory whatever. I know the history of the Bookseller of Berlin, I have studied the case of the wife of a late Astronomer Royal as related by Sir David Brewster, and I have followed the minutest details of a much more remarkable case of Spectral Illusion occurring within my private circle of friends. It may be necessary to state as to this last that the sufferer a lady was in no degree, however distant, related to me. A mistaken assumption on that head, might suggest an explanation of a part of my own case - but only a part - which would be wholly without foundation. It cannot be referred to my inheritance of any developed peculiarity, nor had I ever before any at all similar experience, nor have I ever had any at all similar experience since. It does not signify how many years ago, or how few, a certain Murder was committed in England, which attracted great attention. We hear more than enough of Murderers as they rise in succession to their atrocious eminence, and I would bury the memory of this particular brute, if I could, as his body was buried, in Newgate Jail. When the murder was first discovered, no suspicion fell - or I ought rather to say, for I cannot be too precise in my facts, it was nowhere publicly hinted that any suspicion fell - on the man who was afterwards brought to trial. As no reference was at that time made to him in the newspapers, it is obviously impossible that any description of him can at that time have been given in the newspapers. It is essential that this fact be remembered. Unfolding at breakfast my morning paper, containing the account of that first discovery, I found it to be deeply interesting, and I read it with close attention. I read it twice, if not three times. The discovery had been made in a bedroom, and, when I laid down the paper, I was aware of a flash - rush - flow - I do not know what to call it - no word I can find is satisfactorily descriptive - in which I seemed to see that bedroom passing through my room, like a picture impossibly painted on a running river. Though almost instantaneous in its passing, it was perfectly clear; so clear that I distinctly, and with a sense of relief, observed the absence of the dead body from the bed. It was entirely new to me. I was in my easy-chair at the moment, and the sensation was accompanied with a peculiar shiver which started the chair from its position. But it is to be noted that the chair ran easily on castors. I went to one of the windows there are two in the room, and the room is on the second floor to refresh my eyes with the moving objects down in Piccadilly. It was a bright autumn morning, and the street was sparkling and cheerful. The wind was high. As I looked out, it brought down from the Park a quantity of fallen leaves, which a gust took, and whirled into a spiral pillar. As the pillar fell and the leaves dispersed, I saw two men on the opposite side of the way, going from West to East. They were one behind the other. The foremost man often looked back over his shoulder. The second man followed him, at a distance of some thirty paces, with his right hand menacingly raised. First, the singularity and steadiness of this threatening gesture in so public a thoroughfare, attracted my attention; and next, the more remarkable circumstance that nobody heeded it. Both men threaded their way among the other passengers, with a smoothness hardly consistent even with the action of walking on a pavement, and no single creature that I could see, gave them place, touched them, or looked after them. In passing before my windows,

they both stared up at me. I saw their two faces very distinctly, and I knew that I could recognize them anywhere. Not that I had consciously noticed anything very remarkable in either face, except that the man who went first had an unusually lowering appearance, and that the face of the man who followed him was of the colour of impure wax. I am a bachelor, and my valet and his wife constitute my whole establishment. My occupation is in a certain Branch Bank, and I wish that my duties as head of a Department were as light as they are popularly supposed to be. They kept me in town that autumn, when I stood in need of a change. I was not ill, but I was not well. I am assured by my renowned doctor that my real state of health at that time justifies no stronger description, and I quote his own from his written answer to my request for it. As the circumstances of the Murder, gradually unravelling, took stronger and stronger possession of the public mind, I kept them away from mine, by knowing as little about them as was possible in the midst of the universal excitement. But I knew that a verdict of Wilful Murder had been found against the suspected Murderer, and that he had been committed to Newgate for trial. I also knew that his trial had been postponed over one Sessions of the Central Criminal Court, on the ground of general prejudice and want of time for the preparation of the defence. I may further have known, but I believe I did not, when, or about when, the Sessions to which his trial stood postponed would come on. My sitting-room, bedroom, and dressing-room, are all on one floor. With the last, there is no communication but through the bedroom. True, there is a door in it, once communicating with the staircase; but a part of the fitting of my bath has been - and had then been for some years - fixed across it. At the same period, and as a part of the same arrangement, the door had been nailed up and canvassed over. I was standing in my bedroom late one night, giving some directions to my servant before he went to bed. My face was towards the only available door of communication with the dressing-room, and it was closed. While I was speaking to him I saw it open, and a man look in, who very earnestly and mysteriously beckoned to me. That man was the man who had gone second of the two along Piccadilly, and whose face was of the colour of impure wax. The figure, having beckoned, drew back and closed the door. With no longer pause than was made by my crossing the bedroom, I opened the dressing-room door, and looked in. I had a lighted candle already in my hand. I felt no inward expectation of seeing the figure in the dressing-room, and I did not see it there. Conscious that my servant stood amazed, I turned round to him, and said: A dead man beckoning! The change in him was so startling when I touched him, that I fully believe he derived his impression in some occult manner from me at that instant. I bade John Derrick bring some brandy, and I gave him a dram, and was glad to take one myself. Reflecting on it, I was absolutely certain that I had never seen that face before, except on the one occasion in Piccadilly. Comparing its expression when beckoning at the door, with its expression when it had stared up at me as I stood at my window, I came to the conclusion that on the first occasion it had sought to fasten itself upon my memory, and that on the second occasion it had made sure of being immediately remembered. I was not very comfortable that night, though I felt a certainty, difficult to explain, that the figure would not return. This paper, it appeared, had been the subject of an altercation at the door between its bearer and my servant. I had never before been summoned on such a Jury, as John Derrick well knew. He believed - I am not certain at this hour whether with reason or otherwise - that that class of Jurors were customarily chosen on a lower qualification than mine, and he had at first refused to accept the summons. The man who served it had taken the matter very coolly. He had said that my attendance or nonattendance was nothing to him; there the summons was; and I should deal with it at my own peril, and not at his. For a day or two I was undecided whether to respond to this call, or take no notice of it. I was not conscious of the slightest mysterious bias, influence, or attraction, one way or other. Of that I am as strictly sure as of every other statement that I make here. Ultimately I decided, as a break in the monotony of my life, that I would go. The appointed morning was a raw morning in the month of November. There was a dense brown fog in Piccadilly, and it became positively black and in the last degree oppressive East of Temple Bar. I found the passages and staircases of the Court House flaringly lighted with gas, and the Court itself similarly illuminated. I think that until I was conducted by officers into the Old Court and saw its crowded state, I did not know that the Murderer was to be tried that day. I think that until I was so helped into the Old Court with considerable difficulty, I did not know into which of the two Courts sitting, my summons would take me. But this must not be received as a positive assertion, for I am not completely

satisfied in my mind on either point. I took my seat in the place appropriated to Jurors in waiting, and I looked about the Court as well as I could through the cloud of fog and breath that was heavy in it. I noticed the black vapour hanging like a murky curtain outside the great windows, and I noticed the stifled sound of wheels on the straw or tan that was littered in the street; also, the hum of the people gathered there, which a shrill whistle, or a louder song or hail than the rest, occasionally pierced. Soon afterwards the Judges, two in number, entered and took their seats. The buzz in the Court was awfully hushed. The direction was given to put the Murderer to the bar. And in that same instant I recognized in him, the first of the two men who had gone down Piccadilly. If my name had been called then, I doubt if I could have answered to it audibly. As I stepped into the box, the prisoner, who had been looking on attentively but with no sign of concern, became violently agitated, and beckoned to his attorney. Both on the ground already explained, that I wish to avoid reviving the unwholesome memory of that Murderer, and also because a detailed account of his long trial is by no means indispensable to my narrative, I shall confine myself closely to such incidents in the ten days and nights during which we, the Jury, were kept together, as directly bear on my own curious personal experience. It is in that, and not in the Murderer, that I seek to interest my reader. It is to that, and not to a page of the Newgate Calendar, that I beg attention. I was chosen Foreman of the Jury. On the second morning of the trial, after evidence had been taken for two hours I heard the church clocks strike , happening to cast my eyes over my brother-jurymen, I found an inexplicable difficulty in counting them. I counted them several times, yet always with the same difficulty. In short, I made them one too many. There was no appearance - no figure - to account for it; but I had now an inward foreshadowing of the figure that was surely coming. The Jury were housed at the London Tavern. We all slept in one large room on separate tables, and we were constantly in the charge and under the eye of the officer sworn to hold us in safe-keeping. I see no reason for suppressing the real name of that officer. He was intelligent, highly polite, and obliging, and I was glad to hear much respected in the City. He had an agreeable presence, good eyes, enviable black whiskers, and a fine sonorous voice.

Take a novice's advice with a grain of salt. Anything free should be taken with a grain of salt (there's no such thing as a free lunch) by philihp September 24,

People use it to ease health problems such as muscle soreness and stress. Epsom salt is also known as magnesium sulfate. It gets its name from the town of Epsom in Surrey, England, where it was originally discovered. Despite its name, Epsom salt is actually a completely different compound than table salt. It was most likely termed "salt" because of its chemical structure. It has an appearance similar to table salt and is often dissolved in baths, which is why you may also know it as "bath salt. Epsom salt is quite bitter and unpalatable. Some people still consume it by dissolving the salt in water and drinking it. There are many different ways of manufacturing and packaging Epsom salt, but the contents are all exactly the same, chemically speaking. For hundreds of years, this salt has been used to treat ailments such as constipation, insomnia and fibromyalgia. Unfortunately, its effects on these ailments are not well researched. Most of the reported benefits of Epsom salt are attributed to its magnesium, which is a mineral that a lot of people do not get enough of. You can find Epsom salt at most drug stores and grocery stores. It is typically located in the pharmacy or cosmetic area. Epsom salt, otherwise known as bath salt or magnesium sulfate, is a mineral compound believed to have many health benefits. How Does It Work? When Epsom salt is introduced to water, it dissolves and releases magnesium and sulfate ions. The idea is that these particles can be absorbed through the skin, providing the body with magnesium and sulfates. These are minerals that have important functions in the body. The most common use for Epsom salt is in baths, where it is simply dissolved in bath water. However, it can also be applied to the skin as a cosmetic product or taken by mouth as a laxative. Epsom salt dissolves in water, so can be added to baths and used as a cosmetic. It can also be taken by mouth as a laxative. Many people, including some healthcare professionals, claim Epsom salt is therapeutic and use it as an alternative treatment for several conditions. Better Magnesium Absorption Magnesium is the fourth most abundant mineral in the body, the first being calcium. It is involved in more than biochemical reactions that benefit the heart and nervous system. Many people do not consume enough magnesium. Even if you do, factors such as dietary phytates and oxalates can interfere with how much your body absorbs 1. Some people claim that magnesium may be better absorbed via Epsom salt baths than when taken by mouth. This claim is based on a study that was conducted on 19 subjects, in which all but three showed higher blood magnesium levels after soaking in an Epsom salt bath 2. Average blood magnesium levels went up about 10 ppm after the first salt bath. When subjects took baths for the next seven days, average magnesium levels increased from ppm to ppm. While this study is promising, it is important to take it with a grain of salt since it is the only one of its kind and has several limitations. More research is necessary to determine the effectiveness of using Epsom salt to increase magnesium levels. Promotes Sleep and Stress Reduction Adequate magnesium levels are essential for sleep and stress management , likely because magnesium helps the brain produce neurotransmitters that induce sleep and reduce stress 3. Magnesium may also help the body produce melatonin, a hormone that promotes sleep 4. Low magnesium levels may negatively affect sleep quality and stress. Many report that taking Epsom salt baths can reverse these issues by allowing the body to absorb magnesium through the skin. Unfortunately, there is not any formal research to confirm whether enough magnesium can be absorbed from salt baths to affect sleep and stress. Additionally, the calming effects of Epsom salt baths could simply be due to the relaxation caused by taking hot baths. Helps With Digestion Magnesium is often used to treat digestive issues, such as constipation. It appears to be helpful because it draws water into the colon, which promotes bowel movements 5 , 6. Most often, magnesium is taken by mouth for constipation relief in the form of magnesium citrate or magnesium hydroxide. However, taking Epsom salt is also said to be effective, although it is not well studied. Nevertheless, the FDA lists it as an approved laxative. It can be taken by mouth with water, according to the directions on the package. Adults are usually advised to take 2â€”6 teaspoons 10â€”30 ml of Epsom salt at a time, dissolved in at least 8 ounces ml of water and consumed immediately. You can expect it to have a laxative effect in 30 minutes to six hours.

You should also know that consuming Epsom salt may produce unpleasant side effects, such as bloating and liquid stool 6. It should only be used occasionally as a laxative and not as a long-term solution.

Exercise Performance and Recovery

Some claim that taking Epsom salt baths can reduce muscle soreness and relieve cramps – both important factors for exercise performance and recovery. Like the digestive effects of Epsom salts, this effect is also attributed to magnesium. It is well known that adequate magnesium levels are helpful for exercise because magnesium helps the body use glucose and lactic acid 7. Magnesium deficiency is more common in athletes, so health professionals often recommend they take magnesium supplements to ensure optimal levels. While magnesium is clearly important for exercise, the use of Epsom salt to enhance fitness is not well researched. At this point, the benefits are anecdotal.

Reduced Pain and Swelling

Another common claim is that Epsom salt helps reduce pain and swelling. Many people report that taking Epsom salt baths improves symptoms of fibromyalgia and arthritis. Again, the magnesium is deemed responsible for these effects, since many people with fibromyalgia and arthritis are deficient in the mineral. One study on 15 women with fibromyalgia concluded that applying magnesium chloride to the skin may be beneficial for reducing symptoms 8. The participants applied magnesium to their lower limbs every day for four weeks. After using the solution, women reported less pain and tenderness, as well as increased quality of life. Most of the benefits of Epsom salt are anecdotal and attributed to its magnesium content. It may be beneficial for sleep, stress, digestion, exercise and pain.

Safety and Side Effects of Epsom Salt

While Epsom salt is generally safe, there are a few negative effects that can occur if you use it incorrectly. This is mostly a concern if you take it by mouth. First of all, the magnesium sulfate in it can have a laxative effect. Consuming it may result in diarrhea, bloating or upset stomach. If you use it as a laxative, make sure to drink plenty of water, which may reduce digestive discomfort. Furthermore, never take more than the recommended dosage without consulting your doctor first. Some cases of magnesium overdose have been reported in which people took too much Epsom salt. Symptoms of this include nausea, headache, lightheadedness and flushed skin 1, 9. In extreme cases, magnesium overdose can lead to heart problems, coma, paralysis and death. This is unlikely as long as you take it in appropriate amounts as recommended by your doctor or listed on the package 1, 9. Contact your doctor if you experience signs of an allergic reaction or other serious side effects. The magnesium sulfate in Epsom salt can produce side effects when taken by mouth. You can prevent these by using it correctly and talking with your doctor before increasing your dosage. Here are a few of the most common ways to use Epsom salt. To do this, add 2 cups about ml of Epsom salt to the water in a standard size bathtub and soak your body for at least 15 minutes. You can also put the Epsom salt under running water if you want it to dissolve more quickly.

Beauty

Epsom salt may be used as a beauty product for skin and hair. To use it as an exfoliant, just place some in your hand, dampen it and massage it into your skin. Simply combine it with your own cleansing cream and massage onto the skin. It can also be added to conditioner and may help add volume to hair. For this effect, combine equal parts conditioner and Epsom salt. Work the mixture through your hair and leave for 20 minutes, then rinse. These uses are entirely anecdotal and not backed up by any research studies. Remember that it works differently for everyone and you may not notice all the reported benefits.

As a Laxative

Epsom salt can be taken by mouth as a magnesium supplement or as a laxative. Most brands recommend taking 2 – 6 teaspoons 10 – 30 ml per day, dissolved in water, as a maximum for adults. Approximately 1 – 2 teaspoons 5 – 10 ml is generally enough for children. Consult with your doctor if you need a more individualized dosage, or if you want to increase the dose to more than what is listed on the package. Unless you have the consent of a doctor, never ingest more than the upper limit of intake stated on the package. Taking more than you need could lead to magnesium sulfate poisoning. If you want to begin taking Epsom salt by mouth, start slowly. Try consuming 1 – 2 teaspoons 5 – 10 ml at a time and gradually increase the dose as needed. You may need more or less than the recommended dose, depending on how your body reacts and what exactly you are using it for. Additionally, when consuming Epsom salt, make sure to use pure Epsom salt that does not have any added scents or coloring. Epsom salt can be dissolved in baths and used as a beauty product.

Chapter 8 : Sea Salt: Top 6 Health Benefits & Himalayan vs. Celtic - Dr. Axe

They say my book of minute meals, like Southern Rail's timetable, ought to be taken with a large pinch of salt. After all, I add salt to everything else. To cap it all people say I'm a prima donna, visiting the palace in casual to pick up my gong, whereas I just did it to put Lizzie at ease.

There is increasing regional scarcity, though. The problem is that the desalination of water requires a lot of energy. Salt dissolves very easily in water, forming strong chemical bonds, and those bonds are difficult to break. Energy and the technology to desalinate water are both expensive, and this means that desalinating water can be pretty costly. But switch the source to a river or an aquifer, and the cost of a cubic meter of water can plummet to 10 to 20 cents, and farmers often pay far less. This price gap, however, is closing. For example, meeting growing demand by finding a new source of water or by building a new dam in a place like California could cost up to 60 cents per cubic meter of water. As such, this cost figure is expected to continue to rise, which is why California is now seriously considering desalination and why the city of Tampa, Fla. The International Desalination Association says that as of there were about 13, desalination plants operating around the world. They pumped out approximately A lot of these plants are in countries like Saudi Arabia, where energy from oil is cheap but water is scarce. So how is energy used to separate salt from water? There are two basic methods for breaking the bonds in saltwater: Thermal distillation involves heat: Boiling water turns it into vaporâ€”leaving the salt behindâ€”that is collected and condensed back into water by cooling it down. The most common type of membrane separation is called reverse osmosis. Seawater is forced through a semipermeable membrane that separates salt from water. There are environmental costs of desalination, as well. Sea life can get sucked into desalination plants, killing small ocean creatures like baby fish and plankton, upsetting the food chain. Pumping this supersalty water back into the ocean can harm local aquatic life. Reducing these impacts is possible, but it adds to the costs. Despite the economic and environmental hurdles, desalination is becoming increasingly attractive as we run out of water from other sources. We are overpumping groundwater, we have already built more dams than we can afford economically and environmentally, and we have tapped nearly all of the accessible rivers. The Pacific Institute is an Oakland, Calif. This sentence has been modified since the original posting.

Chapter 9 : Grain of salt - Wikipedia

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