2016

Our Love Affair with Salt - Teacher's Packet



(Teachers, here are suggested props to help you teach this lesson: bag of potato chips, a large salt shaker, measuring teaspoon, table salt, different kinds of salt from a well stocked grocery store, a pad of paper to share sheets with group, a chart listing reduced sodium levels, gathered labels from food boxes, cans and bags showing name of food and its sodium level, if possible borrow items made from slabs of pink Himalayan salt. Buy some ultra-processed salty snacks. If you want, cut squares of clear contact paper to give participants to take home)

You're eating and reach for the **salt** shaker. What are you thinking as you pick up the shaker? Are your thoughts - Boy these ground up rocks sure have a rich titillating history. NO, you're muttering - this casserole needs more flavor.

Babies seem to love sweetness, but you are not born loving salt. Your enjoyment of something salty is learned one crunchy salty chip at a time. (Teachers, shake your potato chip bag.)

If I asked you where do you find salt, would you reply "on the lower shelf at my grocery store, it's in short round cardboard tubes and it's pretty cheap"? Yes, but before 1900 salt was one of the most sought after commodities. Almost no place on earth is without salt, but it took modern geology to show us where the large stashes are.

Salt comes from dead, dried-up seas or living ones. It can bubble to the surface as a salty brine or be found as natural salt licks. Below the skin of the earth salt lies in white veins, some veins thousands of feet deep. Salt can be evaporated from sea water, boiled down from brine or mined from shafts reaching half a mile deep.

Animals wore paths to natural salt licks as they needed salt. Early hunters followed these paths and ate salt-rich game, but people who grew and ate mostly grains needed to find salt.

Through the ages salt has been used as money, used as a disinfectant in wars to keep wounded soldiers alive, preserved food and dead people, set the colored dyes in woven cloth, and was exchanged pound for pound for gold. Salt, desperately search for, traded for and fought over.

Caribbean salt merchants stockpiled it in the basements of their homes. The Chinese, the Romans, the French plus numerous other governments taxed salt to raise money for wars. Mahatma Gandhi walked 240 miles across India to make his own salt from the low marshes, as a non violent protest against the British salt monopoly. He was thrown in jail for a year. The extensive world news set the stage for Gandhi and his followers to pressure England for freedom.

But is was in the Middle Ages where people gave salt mysterious properties and superstitions grew.

Made-Up or Really True Superstitions or Stories

(Teachers hand out the page titled Made-up or Really True. Make sure everyone has a pen or pencil. Allow participants 4-5 minutes to mark sayings M (made up)or RT(really true). When most are finished ask them how many are Made-Up? Then reveal only ONE was made up and can they guess which one.

Only number 5 is made up)

Page 1

What is Table Salt?

Salt is a chemical term for a substance produced by the reaction of an acid with a base. When sodium, an unstable metal that can suddenly burst into flame, reacts with a deadly poisonous gas known as chlorine, it becomes the stable food **sodium chloride**.

1 molecule Sodium + 1 molecule Chlorine = tasty table salt, the only family of rocks we eat.

By weight, sodium is only 40% of the molecule and smaller heavier chloride is 60%.

There are many kinds of salts and a number are edible but we're hooked on sodium chloride. There are salts in detergents - sodium carbonate, and baking soda is all sodium bicarbonate. Baby formula contains 3 salts, <u>magnesium chloride</u>, <u>potassium chloride</u> and <u>sodium chloride</u>.

Why You Can't Live Without Salt

That molecule of **sodium** is needed to transport nutrients or oxygen and for your nerves to move muscles including the heart. (*Teachers, put your hand over your heart.*)

The molecule of **chloride** is essential for digestion and breathing. Everyone take a deep breath!

(Teachers ask your group this question. Allow them to guess before you continue) How many grams of salt do you think are in your body right now?

Inside an adult human is about **250 grams** of salt which would fill 3 or 4 salt shakers. That is over 41 1/2 teaspoons of salt. You are constantly losing salt as almost every part of the human body contains salt. Tears are salty as well as blood, sweat, snot and semen.

Animals also need salt. Wild ones foraged for a briny spring or natural salt lick. Domesticated animals need to be fed salt. A horse needs 5 times more salt that we do.

A cow needs 10 times more than humans.

Fun question - why don't the pinkish cow licks dissolve in our Oregon rain? (*Teachers pause and let group guess then continue*)

At the factory the 50# salty mixture is poured into a mold and compacted with <u>750 tons</u> of pressure making the salt lick very dense and heavy.

What Happens if You Don't Have Enough Salt?

(Teachers, ask the following question, listen to answers, then continue)

If you are starving, what does your body tell you? It cries out for food. Your stomach rumbles.

Salt deficiency causes headaches and weakness, next light-headedness, then nausea. It deprived too long, you will die. **But you will never crave salt.**

Yes, people can become deficient, either by a very restrictive diet, or working hard and sweating profusely in a hot climate or an athlete who works so hard to prevent dehydration that they actually drink too much water. Or taking more diuretic pills a day than your doctor prescribed. (A friend's husband had an adverse reaction, lost 20 pounds in 10 days & was disoriented) P 2

What Happens if You Eat Too Much Salt?

Your kidneys naturally balance the amount of sodium stored in your body for optimal health. When your body sodium is low, your kidneys essentially hold on to the sodium. When body sodium is high, your kidneys excrete the excess in urine.

But if for some reason your kidneys can't eliminate enough sodium, the sodium starts to build up in your blood. Because sodium attracts and holds water, your blood volume increases making your heart work harder and increases pressure in your arteries. (Teachers may reread this paragraph so everyone understands.) This is called High Blood pressure or Hypertension which contributes to cardiovascular disease and strokes.

TOP NUMBER

BOTTOM NUMBER

High Blood pressure = Systolic blood pressure greater than 140, diastolic greater than 90.

Normal healthy BP is less than or equal to 120/80. Check with your doctor, higher # may be okay.

What is a Healthy Amount of Daily Salt?

The Dietary Guidelines for Americans recommends limiting sodium to less than 2,300 mg a day. That is about a teaspoon of table salt which is at the upper limits. Less is best, so aim for less than 2000 mg a day. (teachers, measure out 1 teaspoon of salt, then add 1/2 teaspoon more)

2,300 mg sodium = 1 teaspoon = 6 grams

How much are we really eating - on average **3,440mg** of sodium a day= over 1/2 teaspoon more. All vegetables, dairy products, meat and shellfish naturally contain some sodium.

These veggies have 75 mg of **natural sodium** per serving - Carrots, beets, celery, turnips, sweet potatoes, spinach, artichokes, chard and collard greens plus seaweed. (dried, it wraps sushi)

To reduce sodium 40% in canned beans, fruits and vegetables, drain off liquid before serving. Salt has been added for flavor & preservation. Remember putting olives on your fingers, then eating the olives one by one? A colossal olive on all 10 fingers = 1,100mg of sodium.

Tips for cutting back on sodium

Eat more fresh fruits and vegetables. Treat processed meat like luncheon meat, bacon, hot dogs and ham as condiments to a meal not always the main course. Buy poultry or meat that hasn't been injected with a sodium-containing solution. Check the label.

Opt for low-sodium products.

Reduce salt in recipes if possible. When you start to cut back, your taste buds adjust nicely.

Limit use of sodium-laden condiments - soy sauce, salad dressings, dips, ketchup.

Use herbs, spices and other flavoring to season foods. Jazz dishes with a squirt of lemon.

Use salt substitutes wisely. When using some salt substitutes or light salts you keep sprinkling it for more flavor. Some contain potassium chloride which can be harmful if you have kidney problems or taking pills for high blood pressure that preserve potassium. Check with your doctor.

In 2003, the British were eating more salt that we did, with higher numbers of strokes and heart attack deaths. The Government wanted lower salt consumption, so **quietly** worked with food manufactures to slowly produce food with less and less salt.

No fan fare, no lower salt labels, no complaints and less deaths due to strokes and heart attacks.

What is happening in America to lower our intense love affair with salt? The US Department of Health and Human Services and the Food and Drug Administration have drafted voluntary 10 year goals to reduce sodium in processed foods. 75% of total sodium intake comes from processed food and commercially prepared restaurant and fast food. Salty snacks are among the most popular ultra-processed foods. FDA does not focus on amount of naturally occurring sodium or the salt people add to food at home. One goal is to push for increased food choices and diverse diets in dining. The public can influence fast food and restaurants by speaking up and demanding more healthy choices.

We will stay using metric language - mg. and grams.

Food Label Terms That Indicate Reduced Sodium

(Teachers make a chart of the Food Labels and Usually Means that will be big enough for your class to read.) Read this chart aloud with your class.

Food Label	Usually Means
* Sodium Free	5mg or less per serving
* Low Sodium	35mg or less per serving
* Moderately Low Sodium	140mg or less per serving
* Reduced Sodium	Usual sodium level reduced by 75%
* Unsalted or no salt Added	No salt added during processing

Let's Read Food Labels and Check the Sodium Level

(Teachers, hand out labels from boxes, cans or bags. They should include name of food with the label. Ask participants to see if the sodium numbers are reasonable to serving size amount. Would you eat more than the suggested serving size? Is the correct sodium saying indicated on the label? Looking at the sodium level would you choose something else to buy?

Dash Diet

(Teachers, explain what DASH means and include the DASH diet if you have time and you feel the group needs to hear it.)

The Mayo Clinic promotes the DASH diet meaning Dietary Approaches to Stop Hypertension.

Grains: 6 to 8 servings a day. One slice of whole grain bread, or 1 oz. dry cereal, or 1/2 cup cooked cereal, rice or pasta is one serving. Grains are low in fat, avoid butter, cream and cheese sauces.

Vegetables: 4 to 5 serving a day. One cup leafy greens or 1/2 cup cut up raw or cooked is one serving. Full of fiber, vitamins and minerals. Try them as quickly stir fried over brown rice.

Fruits: 4 to 5 servings. Healthy meal or snack, typically low in fat except for coconuts. One serving is one medium fruit, 1/2 cup fresh, frozen or canned fruit or 4 ounces of juice.

Dairy: 2-3 servings: Choose low fat or fat-free. Go easy on cheeses, typically high in sodium.

Lean meat, poultry and fish: 6 ounces a day. Trim skin, fat, broil, grill or roast instead of fry.

Nuts, seeds and legumes: 4-5 servings a week: Full of fiber, protein, minerals and CALORIES. Serving sizes small, 1/3 cup nuts, 2 tablespoons seeds or 1/2 cup cooked beans. Page 4

Fats and oils: 2-3 serving a day: Helps body absorb vitamins. 1 serving = 1 tsp. margarine, 1 tablespoon mayo or 2 tablespoons salad dressing. Saturated fat and trans fat are the main dietary culprits in increasing your risk of coronary artery disease.

Sweets: 5 servings or fewer a week: Go easy on them. One cup lemonade, 1 tablespoon jam, graham crackers, jelly beans, 1/2 cup sorbet. Cut back on added sugar.

Drinking too much alcohol can increase blood pressure. Recommend no more that two drinks a day for men, women one drink or less.

How Many Old Sayings Include the Word Salt?

(Teachers, hand out pieces of paper to each person. Ask participants to form groups of two or three each. They have 3 to 4 minutes to jot down sayings that include the word "salt". When the time is up, have groups share their sayings. Look at the listing at the end of this lesson and what caused this saying. Did the class came up with all of them?)

Common and Uncommon Kinds of Salt

Table salt - milled to tiny cubes, contains anti-clumping calcium silicate

Iodized salt - minute amount of salts of iodine added, prevents goiters & intellectual disability which affects 2 billion people world wide. First made in 1924 by Morton Salt.

Kosher salt - larger grain, butchers used it to clean blood from meat, absorbs blood & washed off without making meat salty. No iodine, less processed. Pinches well. Using large amounts of Kosher salt, add 1 Tablespoon more for every 1/4 cup.

Sea salt - from oceans, duh. Oregon has harvester and salt maker Jacobsen at Netarts Bay.

Grev sea salt - slight mineral taste

Smoked salt - smells like a campfire, good flavor.

Pink salt, Himalayan salt - aromatic mountain salt. Slabs used for cooking, salt lamps.

Red salt - minerals in volcanic rocks, herbal taste

Black Cypress sea salt - triangle crystals.

River salt - light like snow, woodsy

Solar salt - from the Great Salt Lake (which is 7% saltier than the ocean).

Where Does All the Salt Go?

68% of salt is used for industrial chemicals, making plastic, rubber, glass, fertilizers, dyes, bleach, feedstock, polyester and detergents.

12% of salt is used for water softening, swimming pool chemicals.

8% goes to deice roads and highways.

6% for agriculture

What does that leave us? Only 6% is used for food grade salt.

Interesting Uses for Salt

- 1. Sprinkle salt on grapefruit, it blocks the bitter compounds allowing the sweet to shine.
- 2. To quickly chill a bottle of spirits, place bottle in an ice bucket or tall container. Add a layer of ice on the bottom and add a few tablespoons of salt. Continue to layer salt and ice up to the neck of the bottle. Add water to ice level. After 10-12 minutes, pull bottle out, open, serve. Rinse bucket to remove salt.
- 3. To patch small nail holes or fine cracks in plaster or wallboard, mix 2 tablespoons salt, 2 tablespoons cornstarch and about 4 to 5 teaspoons water to make a thick, pliable paste. Fill hole, let dry, sand if necessary then paint.
- 4. Don't fret over spilled raw eggs. Just pour salt on top of the spill to cover the eggs. Wait a moment, then wipe the eggs up with a paper towel.
- 5. Remove rust from household tools by adding salt to 1 tablespoon lemon juice until it forms a paste. Apply the paste to rusted area with a dry cloth and say goodbye to the rust.
- 6. Dusty silk flowers? Place silk flowers into a large bag and pour in 1 cup of salt. Shake vigorously. Remove flowers. And voila! Your flowers will be clean.
- 7. Just for fun try painting on salt. Peel off the backing from a piece of clear contact paper. With sticky side up, cover thoroughly with salt. Gently shake off excess salt and let alone for at least 48 hours. With salty side up, place salt paper over a coloring book picture or a piece of plain paper. Use a paint brush and watercolors to paint on surface of salt paper. Use light strokes. Let dry, then remove the paper from under your design. To give design a softer look, spray with fine mist of water. Glue design to background paper with either the textured or smooth side up.

Conclusion: We do have a love affair with salt. The right amount of salt can make a humble meal divine. Too much salty food can lead us down a path of sorrow, heart disease and strokes. When choosing foods listen to your head, not always to your tongue and tummy who are like children trying to get you to buy poor food choices. Maybe once in a while listen to those children' and indulge yourself a bit - life is short - enjoy it.

Resources: The book "Salt A World History" by Mark Kurlansky.

Websites - MAYO Clinic DASH Diet/ How to tame your salt habit. Salt Sayings,

TIME A Brief History of Salt. How to convert sodium to salt. Worth one's salt - meaning and origin. Morton Salt - Salt History. Salt mining/How Stuff Works. Jacobsen Salt/Netarts Bay.

Newspapers - The Oregonian June 10,2016, "Salt substitutes", The Oregonian July 20, 2016

"Half our calories come from ultra-processed foods", The Oregonian April 13, 2016, "Shaking the Salt Habit". Jennifer Scott Registered Dietitian Nutritionist.

Anne Engen, 2016 for Oregon Association of Family and Community Education anne.n.engen@gmail.com

If all the salt in our world was dried, it would cover the earth 500 feet thick.

Made-up or Really True Superstitions or Stories

Place an M by statements that sound made-up, a RT by those sounding true.

- 1. Salt is often associated with fertility see how the fish living in the salty sea have far more offspring.
- 2. Ships carrying salt tended to be overrun by mice. For centuries it was believed that mice could reproduce without sex, simply by being in salt.
- 3. Celibate Egyptian priests abstained from salt because it excited sexual desire.
- 4. Salt appears in the Bible, Ezekiel 16:4 mentions rubbing newborn infants with salt to protect them from evil.
- 5. Irish fishermen told stories of mermaids made of salt from the sea and sand from the land.
- 6. An 1157 engraving titled "Women Salting Their Husbands" shows village women holding down a bare bottomed husband as they salt him. This poem accompanied the engraving. "With this salting, front and back,

 At last strong natures they will not lack"
- 7. At the end of the last Ice Age reindeer sought out tribal campsites to lick the places people peed. The urine provided them a source of salt.
- 8. The Romans called a man in love SALAX, meaning in a salted state.
- 9. In the Pyrenees mountains, bridal couples went to church with salt in their left pockets to guard against impotence.
- 10. In Germany the bride's shoes were sprinkled with salt.
- 11. A Welsh tradition a plate of bread and salt was put on a coffin and a local professional sin eater arrived to eat the salt.
- 12. In Haiti, the only way to break the spell and bring a zombie back to life is with salt.
- 13. The Masai, nomadic cattle herders in East Africa meet their salt needs by bleeding livestock and drinking the blood.

 Masai children enjoy dried blood lollipops.

Some Salt Sayings

- "Take it with a grain of salt." (something being said is not to be take seriously)
- "Salt away" (save money or something for future use. From days before refrigeration when salt was used to preserve meat and fish for later use.)
- "Ye are the salt of the earth". (Now means the most dependable or best people. But, expression comes from the Bible where Jesus describes his disciples. He meant something different as salt had purifying and preserving qualities.)
- "Salt is what makes things taste bad when it isn't in them"
- "Don't pour salt in old wounds" (salt used in wars to disinfect wounds-Ouch! here it means don't bring up old feelings or stories to further hurt someone)
- "He's an old salt" meaning sailor. Salt box house 2 story house slopes to 1 story in back. Salt licks (natural salty rocks). Salt cellar (tiny personal bowl of salt)
- "Back to the salt mines" (one was off to hard labor or a boring job.)
- "Above the salt" or "Below the salt" In Medieval England salt was expensive, only the nobility sat a table with a large salt cellar in the middle. The common people ate at lower trestle tables without salt. Nobility ate "above the salt", the less favored ate "below the salt".
- "Trust no one, until you have eaten a peck of salt with him" Latin proverb
- "Ham: 40 days in salt, 40 days hanging, in 40 days eaten."
- "Salt is born of the purest of parents: the sun and the sea"

Pythagoras 580 BC - 500 BC

- "Wit is the salt of conversation, not the food" William Hazlett 1778 1830
- "It takes four men to dress a salad: a wise man for the salt, a madman for the pepper, a miser for the vinegar, and a spendthrift for the oil."
- "Throw a pinch of spilled salt over your left shoulder, hit the devil in the eye"
- "Worth one's salt" (To be worth one's pay. Thought to be from Roman times when slaves were bought and sold. BUT no it is not mentioned in writings of that time or even middle ages. Similar to 13th century "Worth one's weight in gold" or "worth one's while (time)". Worth one's salt first written in 1805.)Our word salary derives from the Latin Salarium. Money allowed Roman soldiers to purchase salt.

2018

Our Love Affair with Salt - Participant's Packet

You're eating and reach for the **salt** shaker. What are you thinking as you pick up the shaker? Are your thoughts - Boy these ground up rocks sure have a rich titillating history. NO, you're muttering - this casserole needs more flavor.

Babies seem to love sweetness, but you are not born loving salt. Your enjoyment of something salty is learned one crunchy salty chip at a time.

If I asked you where do you find salt, would you reply "on the lower shelf at my grocery store, it's in short round cardboard tubes and it's pretty cheap"? Yes, but before 1900 salt was one of the most sought after commodities. Almost no place on earth is without salt, but it took modern geology to show us where the large stashes are.

Salt comes from dead, dried-up seas or living ones. It can bubble to the surface as a salty brine or be found as natural salt licks. Below the skin of the earth salt lies in white veins, some veins thousands of feet deep. Salt can be evaporated from sea water, boiled down from brine or mined from shafts reaching half a mile deep.

Animals were paths to natural salt licks as they needed salt. Early hunters followed these paths and ate salt-rich game, but people who grew and ate mostly grains needed to find salt.

Through the ages salt has been used as money, used as a disinfectant in wars to keep wounded soldiers alive, preserved food and dead people, set the colored dyes in woven cloth, and was exchanged pound for pound for gold. Salt, desperately search for, traded for and fought over.

Caribbean salt merchants stockpiled it in the basements of their homes. The Chinese, the Romans, the French plus numerous other governments taxed salt to raise money for wars. Mahatma Gandhi walked 240 miles across India to make his own salt from the low marshes, as a non violent protest against the British salt monopoly. He was thrown in jail for a year. The extensive world news set the stage for Gandhi and his followers to pressure England for freedom.

But is was in the Middle Ages where people gave salt mysterious properties and superstitions grew.

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1 molecule Sodium + 1 molecule Chlorine = tasty table salt, the only family of rocks we eat.

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Why You Can't Live Without Salt

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How many grams of salt do you think are in your body right now?

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A cow needs 10 times more than humans.

Fun question - why don't the pinkish cow licks dissolve in our Oregon rain?

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What Happens if You Don't Have Enough Salt?

If you are starving, what does your body tell you? It cries out for food. Your stomach rumbles.

Salt deficiency causes headaches and weakness, next light-headedness, then nausea. It deprived too long, you will die. But you will never crave salt.

Yes, people can become deficient, either by a very restrictive diet, or working hard and sweating profusely in a hot climate or an athlete who works so hard to prevent dehydration that they actually drink too much water. Or taking more diuretic pills a day than your doctor prescribed. (A friend's husband had an adverse reaction, lost 20 pounds in 10 days & was disoriented) P 2

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But if for some reason your kidneys can't eliminate enough sodium, the sodium starts to build up in your blood. Because sodium attracts and holds water, your blood volume increases making your heart work harder and increases pressure in your arteries.

This is called High Blood pressure or Hypertension which contributes to cardiovascular

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How much are we really eating - on average **3,440mg** of sodium a day= over 1/2 teaspoon more. All vegetables, dairy products, meat and shellfish naturally contain some sodium.

These veggies have 75 mg of **natural sodium** per serving - Carrots, beets, celery, turnips, sweet potatoes, spinach, artichokes, chard and collard greens plus seaweed. (dried, it wraps sushi)

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Tips for cutting back on sodium

Eat more fresh fruits and vegetables. Treat processed meat like luncheon meat, bacon, hot dogs and ham as condiments to a meal not always the main course. Buy poultry or meat that hasn't been injected with a sodium-containing solution. Check the label.

Opt for low-sodium products.

Reduce salt in recipes if possible. When you start to cut back, your taste buds adjust nicely. Limit use of sodium-laden condiments - soy sauce, salad dressings, dips, ketchup. Use herbs, spices and other flavoring to season foods. Jazz dishes with a squirt of lemon. Use salt substitutes wisely. When using some salt substitutes or light salts you keep sprinkling it for more flavor. Some contain potassium chloride which can be harmful if you have kidney problems or taking pills for high blood pressure that preserve potassium. Check with your doctor.

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Page 3

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Let's Read Food Labels and Check the Sodium Level

Participants check to see if the sodium numbers are reasonable to serving size amount. Would you eat more than the suggested serving size? Is the correct sodium saying indicated on the label? Looking at the sodium level would you choose something else to buy?

DASH Diet From the Mayo Clinic

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Grains: 6 to 8 servings a day. One slice of whole grain bread, or 1 oz. dry cereal, or 1/2 cup cooked cereal, rice or pasta is one serving. Grains are low in fat, avoid butter, cream and cheese sauces.

Vegetables: 4 to 5 serving a day. One cup leafy greens or 1/2 cup cut up raw or cooked is one serving. Full of fiber, vitamins and minerals. Try them as quickly stir fried over brown rice.

Fruits: 4 to 5 servings. Healthy meal or snack, typically low in fat except for coconuts. One serving is one medium fruit, 1/2 cup fresh, frozen or canned fruit or 4 ounces of juice.

Dairy: 2-3 servings: Choose low fat or fat-free. Go easy on cheeses, typically high in sodium.

Lean meat, poultry and fish: 6 ounces a day. Trim skin, fat, broil, grill or roast instead of fry.

Nuts, seeds and legumes: 4-5 servings a week: Full of fiber, protein, minerals and CALORIES. Serving sizes small, 1/3 cup nuts, 2 tablespoons seeds or 1/2 cup cooked beans.

Fats and oils: 2-3 serving a day: Helps body absorb vitamins. 1 serving = 1 tsp. margarine, 1 tablespoon mayo or 2 tablespoons salad dressing. Saturated fat and trans fat are the main dietary culprits in increasing your risk of coronary artery disease.

Sweets: 5 servings or fewer a week: Go easy on them. One cup lemonade, 1 tablespoon jam, graham crackers, jelly beans, 1/2 cup sorbet. Cut back on added sugar.

Drinking too much alcohol can increase blood pressure. Recommend no more that two drinks a day for men, women one drink or less.

How Many Old Sayings Include the Word Salt?

Participants have 3 to 4 minutes to jot down sayings that include the word "salt".

When the time is up, have groups share their sayings. Look at the listing at the end of this lesson

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Sea salt - from oceans, duh. Oregon has harvester and salt maker Jacobsen at Netarts Bay.

Grey sea salt - slight mineral taste

Smoked salt - smells like a campfire, good flavor.

Pink salt, Himalayan salt - aromatic mountain salt. Slabs used for cooking, salt lamps.

Red salt - minerals in volcanic rocks, herbal taste

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Solar salt - from the Great Salt Lake (which is 7% saltier than the ocean).

Where Does All the Salt Go?

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Interesting Uses for Salt

- 1. Sprinkle salt on grapefruit, it blocks the bitter compounds allowing the sweet to shine.
- 2. To quickly chill a bottle of spirits, place bottle in an ice bucket or tall container. Add a layer of ice on the bottom and add a few tablespoons of salt. Continue to layer salt and ice up to the neck of the bottle. Add water to ice level. After 10-12 minutes, pull bottle out, open, serve. Rinse bucket to remove salt.
- 3. To patch small nail holes or fine cracks in plaster or wallboard, mix 2 tablespoons salt, 2 tablespoons cornstarch and about 4 to 5 teaspoons water to make a thick, pliable paste. Fill hole, let dry, sand if necessary then paint.
- 4. Don't fret over spilled raw eggs. Just pour salt on top of the spill to cover the eggs. Wait a moment, then wipe the eggs up with a paper towel.
- 5. Remove rust from household tools by adding salt to 1 tablespoon lemon juice until it forms a paste. Apply the paste to rusted area with a dry cloth and say goodbye to the rust.
- 6. Dusty silk flowers? Place silk flowers into a large bag and pour in 1 cup of salt. Shake vigorously. Remove flowers. And voila! Your flowers will be clean.
- 7. Just for fun try painting on salt. Peel off the backing from a piece of clear contact paper. With sticky side up, cover thoroughly with salt. Gently shake off excess salt and let alone for at least 48 hours. With salty side up, place salt paper over a coloring book picture or a piece of plain paper. Use a paint brush and watercolors to paint on surface of salt paper. Use light strokes. Let dry, then remove the paper from under your design. To give design a softer look, spray with fine mist of water. Glue design to background paper with either the textured or smooth side up.

Conclusion: We do have a love affair with salt. The right amount of salt can make a humble meal divine. Too much salty food can lead us down a path of sorrow, heart disease and strokes. When choosing foods listen to your head, not always to your tongue and tummy who are like children trying to get you to buy poor food choices. Maybe once in a while listen to those children' and indulge yourself a bit - life is short - enjoy it.

Resources: The book "Salt A World History" by Mark Kurlansky.

Websites - MAYO Clinic DASH Diet/ How to tame your salt habit. Salt Sayings,

TIME A Brief History of Salt. How to convert sodium to salt. Worth one's salt - meaning and origin. Morton Salt - Salt History. Salt mining/How Stuff Works. Jacobsen Salt/Netarts Bay.

Newspapers - The Oregonian June 10,2016, "Salt substitutes", The Oregonian July 20, 2016

"Half our calories come from ultra-processed foods", The Oregonian April 13, 2016, "Shaking the Salt Habit". Jennifer Scott Registered Dietitian Nutritionist.

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If all the salt in our world was dried, it would cover the earth 500 feet thick.

Made-up or Really True Superstitions or Stories Place an M by statements that sound made-up, a RT by those sounding true.

- 1. Salt is often associated with fertility see how the fish living in the salty sea have far more offspring.
- 2. Ships carrying salt tended to be overrun by mice. For centuries it was believed that mice could reproduce without sex, simply by being in salt.
- 3. Celibate Egyptian priests abstained from salt because it excited sexual desire.
- 4. Salt appears in the Bible, Ezekiel 16:4 mentions rubbing newborn infants with salt to protect them from evil.
- 5. Irish fishermen told stories of mermaids made of salt from the sea and sand from the land.
- 6. An 1157 engraving titled "Women Salting Their Husbands" shows village women holding down a bare bottomed husband as they salt him. This poem accompanied the engraving. "With this salting, front and back,

 At last strong natures they will not lack"
- 7. At the end of the last Ice Age reindeer sought out tribal campsites to lick the places people peed. The urine provided them a source of salt.
- 8. The Romans called a man in love SALAX, meaning in a salted state.
- 9. In the Pyrenees mountains, bridal couples went to church with salt in their left pockets to guard against impotence.
- 10. In Germany the bride's shoes were sprinkled with salt.
- 11. A Welsh tradition a plate of bread and salt was put on a coffin and a local professional sin eater arrived to eat the salt.
- 12. In Haiti, the only way to break the spell and bring a zombie back to life is with salt.
- 13. The Masai, nomadic cattle herders in East Africa meet their salt needs by bleeding livestock and drinking the blood.

 Masai children enjoy dried blood lollipops.

Some Salt Sayings

- "Take it with a grain of salt." (something being said is not to be take seriously)
- "Salt away" (save money or something for future use. From days before refrigeration when salt was used to preserve meat and fish for later use.)
- "Ye are the salt of the earth". (Now means the most dependable or best people. But, expression comes from the Bible where Jesus describes his disciples. He meant something different as salt had purifying and preserving qualities.)
- "Salt is what makes things taste bad when it isn't in them"
- "Don't pour salt in old wounds" (salt used in wars to disinfect wounds-Ouch! here it means don't bring up old feelings or stories to further hurt someone)
- "He's an old salt" meaning sailor. Salt box house 2 story house slopes to 1 story in back. Salt licks (natural salty rocks). Salt cellar (tiny personal bowl of salt)
- "Back to the salt mines" (one was off to hard labor or a boring job.)
- "Above the salt" or "Below the salt" In Medieval England salt was expensive, only the nobility sat a table with a large salt cellar in the middle. The common people ate at lower trestle tables without salt. Nobility ate "above the salt", the less favored ate "below the salt".
- "Trust no one, until you have eaten a peck of salt with him" Latin proverb
- "Ham: 40 days in salt, 40 days hanging, in 40 days eaten."
- "Salt is born of the purest of parents: the sun and the sea"

Pythagoras 580 BC - 500 BC

- "Wit is the salt of conversation, not the food" William Hazlett 1778 1830
- "It takes four men to dress a salad: a wise man for the salt, a madman for the pepper, a miser for the vinegar, and a spendthrift for the oil."
- "Throw a pinch of spilled salt over your left shoulder, hit the devil in the eye"
- "Worth one's salt" (To be worth one's pay. Thought to be from Roman times when slaves were bought and sold. **BUT no** it is not mentioned in writings of that time or even middle ages. Similar to 13th century "Worth one's weight in gold" or "worth one's while (time)". Worth one's salt first written in 1805.)Our word salary derives from the Latin Salarium. Money allowed Roman soldiers to purchase salt.