

## Salt, Humble Seasoning, Sustains Life, Industry

By DONALD J. FREDERICK

Salt once was traded ounce for ounce with gold. As the Roman statesman Cassiodorus observed, "Some seek not gold, but there lives not a man who does not need salt."

The Romans knew what they were talking about. The humble saltshaker on the modern dinner table contains the very essence of life.

A blend of sodium and chlorine, salt regulates the exchange of water between human cells and the surrounding fluid which carries food in and wastes out. Sodium is involved in muscle contraction, including heartbeats; in nerve impulses; in the digestion of body-building protein.

### Keeps Body Stable

Without salt the body goes into convulsions, paralysis, death. Blood cells in a salt-free fluid burst.

The salt that keeps man alive does the same for industry as the most essential of all raw materials, reports Gordon Young in the National Geographic.

Only a pinch of salt, perhaps 5 percent of the world's annual production, ends up as a seasoning on the dinner table. Most of it pours into chemical plants where it leads the five major raw materials used by industry: salt, sulfur, limestone, coal and petroleum. Salt has some 14,000 industrial uses, more than any other mineral.

Salt pickles cucumbers—and metals; helps pack meat, can vegetables, cure leather, make glass, bread, butter, cheese, rubber, wood pulp.

As salt—or broken down into sodium and chlorine—it goes into gargles, textiles, and rocket fuels; cosmetics, paints, pharmaceuticals, and photography; soaps, dyes, ceramics, batteries, adhesives, and explosives.

The freezing point of a saturated solution—21 degrees C lower than that of fresh water—makes rock salt an excellent refrigerant, snow melter, and freezer of ice cream. And liquid sodium cools nuclear reactors.

### May Store Wastes

The wastes from nuclear reactors may ultimately be stored in salt beds deep beneath the surface of the earth. Their dryness ability to withstand earthquakes, and a melting point of 800 degrees C make salt deposits the safest nuclear graveyards, scientists contend.

Salt already serves as a valuable storage facility. The world's biggest warehouse near Hutchinson, Kan., was carved from a worked-out portion of a salt mine. Owned by the Underground Vaults and Storage Company, its 300 acres of storage bays reach 650 feet below the surface of the earth.

A seed company sends down a bag or two of each new strain it develops so no surface light may annihilate the strain. Corporations store vital papers, microfilm documents, product formulas. One also keeps folding cots and a food supply, for use in case of nuclear war.

Other treasures salted away include more than 100,000 reels of classic films such as "Gone With the Wind," Bibles, furs, paintings, stamp and coin collections, and wedding dresses.

"For a flat fee," says one of the company's executives, "we'll store a bride's wedding gown for 21 years. The salt air will preserve it—perennial 50 percent humidity and 68 degree temperature. Her daughter can get married in it. Then, who knows, it may go underground again for the next generation."

Men have credited salt with qualities far beyond price for many generations. It betokens wit, wisdom, virility, hospitality, sanctity. Homer dubbed it "divine." Plato hailed it as "a substance dear to the gods." And "Ye are the salt of the earth," the Bible says.

### Priced at Pennies

With salt among the earth's most abundant minerals and priced today at pennies per pound, it's difficult to believe it was once so precious and created so many legends.

But ancient man had only limited access to it in the form of brine that bubbled up, scarce surface deposits, and some bay salt. Rising sea levels—ten feet in the first millennia B.C. and A.D.—drowned coasts and solar salt pans, causing salt famines.

Drilling—55 percent of U. S. production comes from brine wells 750 to 7,000 feet deep—had to wait for technology.

Even then it was unpredictable. To their disgust, early salt drillers sometimes brought up nasty-smelling, sticky black stuff "of no conceivable use whatever."

The "worthless" goo was oil.

### CROSSWORD PUZZLE

- ACROSS  
1 Rodgers' partner  
5 Procrastinate  
10 "Essays of —"  
11 Incentive  
12 "The — Is Low"  
13 Balanced  
14 Come before  
16 Gold (Sp.)  
17 Watchful  
19 Black eye  
22 Encouragement  
26 Puerto Rican city  
27 Long for  
28 Princess of note  
29 Cain was one  
30 Mature  
32 Curtsy  
35 Disorderly  
38 King Arthur's abode  
41 Forearm bone  
42 Tranquil  
43 (Had) reclined  
44 Mortal or bitter  
45 Room or chamber  
DOWN  
1 Beatles' movie  
2 Winglike  
3 Frost

TODAY'S ANSWER

1 ANTE  
2 ENEMY  
3 LAIN  
4 AVALON  
5 LUNA  
6 RIBEN  
7 ANNE  
8 SLAYER  
9 SHINER  
10 ABELT  
11 ALBERT  
12 PREDATOR  
13 LAMP  
14 EVENED  
15 HART  
16 DELAY  
17 HOSPICE  
18 KIND OF  
19 RUM  
20 NIGHT  
21 THRICE  
22 (Lat.)  
23 ROLE FOR LIZ  
24 BACKBONE  
25 SATIRE  
26 ARMY POST  
27 MICROWAVE  
28 WORD WITH GLASS OR TABLE  
29 "THE GOOD EARTH"  
30 HEROINE  
31 COMPONENT  
32 SENSIBLE  
33 MAN'S NICKNAME

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FRESH, LEAN GROUND 3 LBS PKG. OR MORE

## BEEF..... 53¢ LB

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GAME JACKPOT \$250,000 CASH  
\$5000 CASH

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BONELESS TOP ROUND STEAK..... LB \$1.69  
BONELESS BOTTOM ROUND STEAK..... LB \$1.59  
BONELESS TOP SIRLOIN STEAK..... LB \$1.89  
BONELESS SIRLOIN TIP STEAK..... LB \$1.59  
BONELESS NEW YORK STRIP STEAK..... LB \$2.39



WHOLE HINDQUARTERS..... LB \$1.09  
ROUNDS..... LB 99¢ LOINS..... LB \$1.49

HOLLY FARMS MIXED FRYER PARTS. 39¢ LB  
BACKS..... LB 19¢ WINGS..... LB 59¢

BE SURE TO CHECK OUR STORES FOR SPECIAL FREEZER BEEF PRICES. RIGHT NOW QUALITY IS HIGH AND PRICES ARE LOW. THERE IS NO BETTER TIME TO FILL YOUR FREEZER!

ROUND STEAK... LB 99¢  
SIRLOIN STEAK... LB \$1.69  
T-BONE STEAK... LB \$1.99  
PORTERHOUSE STEAK... LB \$2.09

EVERYDAY LOW PRICE

GREEN CABBAGE... 12¢ lb.  
LEMONS..... 6/39¢

YELLOW ONIONS 3 lb. Bag 43¢

IGA LOWFAT OR HOMOGENIZED MILK... \$1.59  
CRISCO SHORTENING..... 3 LB CAN \$1.75  
QUAKER QUICK GRITS..... 1 LB BAG 39¢  
KELLOGG'S RICE KRISPIES..... 6 OZ. 47¢  
BEECHNUT BABY FOOD..... STRAINED - 2/27¢

IGA ORANGE JUICE..... 12 OZ. CAN 65¢  
KELLOGG'S SUGAR POPS..... 10 OZ. 81¢  
WESSON OIL..... 16 OZ. 75¢  
FAB DETERGENT..... GT. SIZE \$1.43

IGA CREAM CHEESE..... 8 OZ. 63¢  
IGA TOMATO SOUP..... NO. 1 CAN 18¢  
CHERRIOS..... 10 OZ. 73¢  
HI "C" DRINKS..... 46 OZ. CAN 49¢  
CHARMIN TISSUE..... 4 ROLL PKG. 87¢

BIG VALUES FOR YOU!

CHEF-BOY-AR-DEE ASSORTED FROZEN PIZZAS 69¢ 14 OZ. PKG. "SUPER SPECIAL"

NABISCO OREO CREMES OR DOUBLE STUFF COOKIES 98¢ 15 OZ.

BIRDSEYE TINY PEAS 48¢ 10 OZ.

IGA VAL-U-BUY OF THE WEEK! IGA BROWN AND SERVE ROLLS 3/\$1 1 1/2 LB BREAD 3/\$1.00

IGA TABLETITE 1 LB PKG MARGARINE 39¢ lb. "EVERYDAY LOW PRICE"

FLOUR 25-LB. BAG \$2.69 "EVERYDAY LOW PRICE"

IGA VAL-U-BUY OF THE WEEK! IGA BUTTERMILK "REBATE PRICE" BISCUITS 4 PAK 55¢

KRAFT REAL Mayonnaise "SUPER SPECIAL" Qt. Jar 99¢

IGA SALTINE "EDLP" CRACKERS 1 LB BOX 49¢

JIF SMOOTH OR CRUNCHY 12 OZ JAR PEANUT BUTTER 79¢ "REBATE PRICE"

MAXWELL HOUSE REG. - DRIP - E. PERK - OR A.D.C. COFFEE 1 lb. Bag \$3.89

IGA VAL-U-BUY OF THE WEEK! DUNCAN HINES CAKE MIX 19 OZ. BOX - ALL "EVERYDAY LOW PRICE" 2/\$1

IGA MACARONI AND CHEESE "SUPER SPECIAL" DINNERS 7 1/2 OZ. PKG. 4/\$1

IGA VEGETABLES "SUPER SPECIAL" 3/\$1 No. 303 CANS

1 SVE. SMALL PEAS  
2 SVE. SMALL PEAS  
PEAS & CARROTS  
DICED CARROTS

MIDGET LIMAS  
MIXED VEGETABLES  
4 SVE. CUT BEANS  
RED KIDNEY BEANS

IGA VAL-U-BUY OF THE WEEK! VIVA DECORATIVE OR ASSORTED NAPKINS 140 COUNT 59¢ "REBATE PRICE"

REBATE PRICES  
TABLETITE SLICED AMERICAN CHEESE 12 OZ. 1.23  
PINE CONE CATSUP..... 32 OZ. 79¢  
SUE BEE HONEY..... 16 OZ. 1.04  
Royal Guest Sliced PEACHES Irreg. No. 2 1/2 Can 55¢  
Pillsbury Ready-To-Serve FROSTINGS. All 16 1/2 OZ. 95¢  
POP-TARTS..... ALL 7 OZ. 61¢  
SCOTT LIQUID GOLD..... 16 OZ. 1.69  
CHAMP DOG FOOD..... 25 LB. \$2.99