

# Poor watering habits can kill plants; water's sodium may help kill folks

By DOUG GRAHAM  
Battalion Staff

Bryan-College Station water may parch a plant or human's thirst, but drinking it may have grave long-term effects, says a Texas A&M University professor.

Dr. Harold Wolf, an environmental engineer, has been published in various journals, advocating a look at the effects of high sodium content in water supplies. The reason is that a high sodium content in water may hurt individu-

thoroughly and less often.

"You've got to water the plant real well, and supply good drainage. Maybe even fill the pot two or three times to leach it out. The problem is that they (plant owners) don't water their plants enough. They keep the top wet, but it never soaks all the way through."

He said that the thorough watering will not be too much for the plants as long as sufficient drainage is supplied.

If the owner does not leach the

the same average American.

He found that many soft drinks, diet drinks especially, contain a lot of sodium.

He cited EPA reports that from 21 to 27 million Americans need to be concerned with sodium intake.

Wolf also suggests that high sodium content in water may contribute to hypertension because constant salt intake impairs the ability to taste it. High sodium content in drinking water can lead to the unwitting overconsumption of salt, he

functioning properly. "It is almost impossible to put a hypertensive patient on a low sodium diet in B-CS because the water contains more than the allowable amount in a rigid diet."

Texas Department of Health Resources said the most recent figures for Bryan's water supply give 183 milligrams per liter of sodium and 47 milligrams of chlorine.

Dallas' present water supply, by comparison, has a content of 11 to 25 milligrams per liter, Wolf said.

This high level of sodium seems to have contributed to solid sales of distilled and other types of bottled water in local stores. The biggest supplier in the area is Oasis Water Company, which operates out of Waco.

A company spokesman said the company sells four different lines: distilled, baby formula (which is distilled no differently), drinking, and spring water. The spring water is shipped from Hot Springs, Ark.

She said the distilled water has 0.5 milligrams per liter, while the drinking water has 9.7 milligrams.

Skaggs Albertsons alone sold 1,200 gallons of distilled water last month, said E. J. Baca, assistant grocery manager. He said 150 gallons of drinking, 24 gallons of baby formula, and 48 gallons of spring water were also sold.

An employee of Brenham Wholesale Grocery Company Inc., one of the larger area suppliers of small stores, says it has supplied 900 gallons of distilled and 450 gallons of drinking water last month.

That comes to a total of more than 2,700 gallons of bottled water sold, excluding major stores like Piggly Wiggly, Safeway, and Kroger, all of which also sell distilled water.

The water is sold both for drinking and for house plants. The total cost of the water is high: about 55 cents a gallon.

But bottled water's price isn't prohibitive. According to Runkles, only two quarts out of an approximate 165 gallons of water used each day end up in stomachs.

For those to whom price is no object, there is the continental Perrier's, water sophisticatedly priced at \$4.06 per gallon.

But for those who aren't concerned, Smith said there seems to be no problem as long as their kidneys operate properly.

But he did caution: "What I don't know is if drinking this water all your life can cause a decrease in kidney efficiency."

"I certainly think we need some study on this."



© 1979 Doug Graham

als with hypertension, he said. It can also hurt plants. But the problem is not clear-cut, and there is debate on the seriousness of the local water's high sodium content.

The issue is not about basic water purity; area water supplies are certified by the Texas Department of Health Resources. That means they are free of toxic substances, undue amounts of bacteria, or any diseases. The problem is that the water contains dissolved salt — specifically, sodium ions — and people disagree over sodium's effect on human health.

The debate is an important one. If the local water is indeed unhealthy, it costs more than the 63 cents a thousand gallons charged by Bryan. Hidden damage could make the actual cost of local water higher. Because of this, the effect of B-CS water on machines, plants, and humans should be examined.

Of all these, the water's effect on machines is generally agreed upon. Since area water is considered soft (water containing high amounts of magnesium and calcium are considered hard) less soap is needed in washing, and water softeners are unnecessary in homes.

Dr. Jack Runkles, director of the Texas Water Resources Institute at Texas A&M, said there is no problem of excessive corrosion in the area.

The one problem is that after the water dries, it leaves a white film.

But with plants the problem is different. Many students complain that the local water kills their plants. To prevent that, they collect rainwater or buy bottled water in local stores.

Nealy Maddox, certified nurseman and owner of Bob's Green Thumb Nursery, said salt build-up kills plants. As water evaporates, it leaves a residue of salt behind until the plant is finally killed. She said that many area plants die because of this.

But it isn't the water that kills plants, she says, but "not knowing what to do."

"We use city water to water our own plants," she said. "Certain things are sensitive to the salt, or the chlorine or fluoride."

She named certain varieties of ferns that do not do well in the area because of their sensitivity, but emphasized that watering plants properly solves the problem. "People have poor watering habits. Here you need very correct habits."

The correct way to water plants depends on leaching the soil of salt. Richard Bienski, owner of B&R Greenhouse, agreed. He said instead of watering a little bit each day, people should water more

soil, then the salt residue will eventually kill the plant, he said.

Bienski said gypsum can also be added to balance the soil pH. Maddox said care must be taken in selecting good fertilizers that won't contribute salts to the soil.

"On plants in pots without drainage, you might need distilled water, too," she said.

Though the effect of water on plants can be determined with some experimentation, what drinking B-CS water does to humans is less clear.

Wolf, at Texas A&M, said the sodium concentration in the local water is too high to be healthy. Excess sodium intake increases the possibility of heart attacks, he said.

He cited evidence gathered during a drought in which Dallas imported highly mineralized water while Fort Worth did not. The findings were interesting: during the period of water importation, heart and circulatory system-caused deaths increased much more quickly in Dallas than it did in Fort Worth.

Also significant was that after the importing of water ceased, Dallas's death rate dropped.

Wolf also analyzed per capita consumption of liquids by Americans. He found that 128.3 gallons milk, soft drinks, beer, and other drinks were consumed each year. Only 56 gallons of water were consumed by

said.

Sodium harms the body because it contributes to high blood pressure, said Dr. Elvin Smith, head of the department of physiology in Texas A&M's College of Medicine. He said sodium gets in the blood, and will retain excess moisture through osmotic pressure. The increase of fluid volume drives up blood pressure, which leads to heart strain and loss of coronary efficiency.

After that can come heart attacks and death.

But Smith is not sure B-CS water is harmful. "My opinion is that the normally functioning kidney of a healthy person will keep sodium levels the same as anyone anywhere."

"However, we don't know what the long term effects of high level ingestion of sodium are."

He did say that the water is bad for those whose kidneys are not

**SHEAR CLASS**  
FOR A CLASSY CUT, CALL  
**VERONICA**  
846-4771

Don't miss this week's special!

bring this ad to the Court Yard Emporium for:

1 FREE PEPSI  
with the purchase  
of "The World's  
Most Original"

Po-Boy

Court Yard  
Emporium

Importers & purveyors of the  
world's finest wines & foods.



Offer good Tues., Wed. & Thurs.  
Apr. 17, 18, & 19

4301 Carter Creek at E. 29th St.  
846-3761

# Phase-out program suggested for country's tobacco crop

United Press International  
WASHINGTON — A key member of Congress is proposing that the United States do for U.S. tobacco farmers what it has tried to do for poppy growers in other countries — wean them away from their hazardous crop.

Rep. Henry Reuss, D-Wis., chairman of the House Banking Committee, notes that the United States has spent more than \$37 million over the past decade on crop substitution programs in Asia and South America.

The programs are aimed at cutting off opium, heroin and cocaine at their source. The farmers who once relied for their living on narcotics producing poppy and coca plants are aided in shifting to more useful crops.

Reuss, in a recent letter to James McIntyre, director of the Office of Management and Budget, says the government should be at least as helpful to its own farmers.

"It is time to stop preaching against tobacco and to develop

economically viable ways to curtail its production.

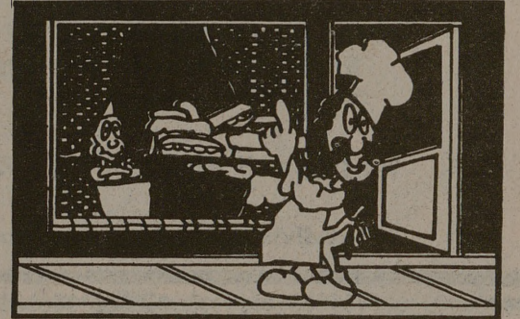
"Why can't we do for farmers in North and South Carolina, Kentucky, Tennessee, Virginia, Georgia, and other tobacco states what we already do for farmers in Thailand, Turkey, Pakistan, Bolivia, and Peru?" he asked.

He said the government is continuing to foster and protect tobacco production "despite the clear-cut health menace" of tobacco.

# FARMERS MARKET

Coupon Special

Po-Boy  
Sub THIS WEEK \$1.50 (with this coupon)



A combination of bologna, salami, mustard, mayonnaise, American and Mozzarella cheese, lettuce, pickle and tomatoes.

Special offer good through Sun. April 22 Only

POBOYS, PASTRIES, FRESH BREAD  
329 UNIVERSITY NORTHGATE

Across from the Post Office

# DIAMOND BROKERS

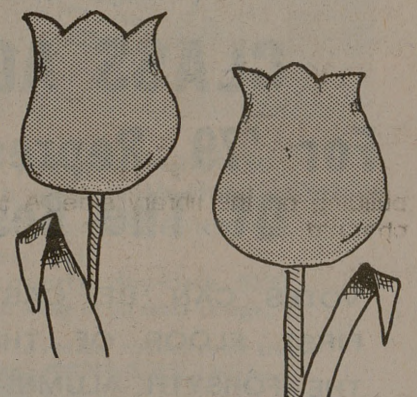
DIAMOND IMPORTERS & WHOLESALERS

## SPRING SALE

(Special offers extended till April 31, 1979)

1.38	Round	AAAA	5270
.15	Round	AAAA	145
.28	MQ	AAA	372
.36	PS	AAA	504
.32	PS	AAA	416
.46	MQ	AAA	828
.34	Oval	AAA	470
.27	Oval	AAA	270
.91	MQ	AAA	1492
.25	PS	AAA	240
.67	Heart	AA	750
.31	PS	AAA	360
.32	PS	AAA	372
.33	MQ	AAA	410
.48	MQ	AAA	864
.49	MQ	AAA	882
.44	MQ	AAA	792

SAVE!!



1-Carat  
Rubies  
300<sup>00</sup>

1/2-Carat  
Emeralds  
150<sup>00</sup>

10-pt. Aggie  
Diamonds  
70<sup>00</sup>

2.11	MQ	AAAA	9870
.43	Pear	AAA	774
.49	Pear	AAA	882
.48	Pear	AAA	864
.52	Round	AAAA+	1248
1.09	Round	AAA+	2700
.48	AA	+	680
.28	AA		223
.75	E.C.	AAAA	1224
.52	E.C.	AAA	800
2.32	Round	AAAA+	9480
1.49	Round	AAA+	2600
1.08	Round	A+	980
1.10	Round	A+	985
.50	Round	AAAA	1100
.51	Round	AAAA	1120
.28	Round	AA	210
.31	Round	AAA	409
.47	Round	A+	330
.36	Round	AAAA	576
.34	Round	AAA	470

SAVE!!

FREE 14Kt. Gold  
Engagement Ring with Any  
Diamond Over 1/2 Carat...  
Absolutely Free!!

5-point Full-Cut  
Aggie Diamond  
Just 30<sup>00</sup>!!!

5% Discount  
With Current Aggie I.D.



LAY-AWAY AND  
FINANCING AVAILABLE

DIAMOND BROKERS

Diamond Importers & Wholesalers  
College Station, Texas 77840

1-713-846-3737 Open From 10 a.m.-6 p.m.

# Wilson's

JEWELERS • CATALOG SHOWROOMS

sale 19<sup>97</sup>  
Reg. \$24.95

A.

sale 15<sup>97</sup>  
Reg. \$19.97

B.

18" YGF Swedge Chains

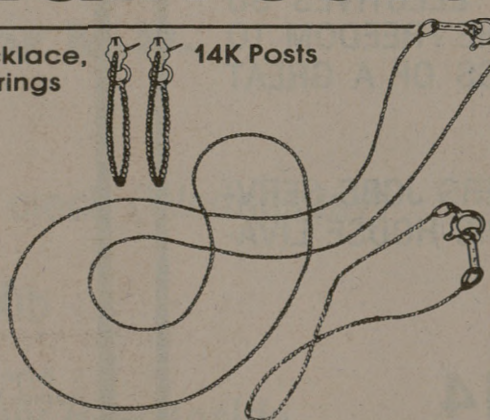
A. 18" Yellow-Gold-Filled Round Swedge Chain Necklace. 899070  
B. 18" YGF Swedge Chain. 899097

# A Chain Sale

15" Serpentine Necklace, Bracelet and Earrings  
3 Piece Set

sale 17<sup>97</sup>  
Reg. \$22.97

970999 YGF Set.  
Available separately:  
15" YGF Chain. 971006  
Reg. \$8.97 . sale \$6.97  
YGF Bracelet. 971022  
Reg. \$6.97 . sale \$5.88  
YGF Ear. MQ 771030  
Reg. \$8.4 MQ . sale \$6.88



Visa & Master Charge Welcome; Sale Prices Good Two Days

• Temple Mall; Temple, Texas  
10:00 AM - 9:00 PM Monday - Saturday

\* Watch repairs, jewelry repairs and remounts can be done on premises.