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Nitrite: Friend Or Foe?

Is the meat preservative sodium nitrite a cancer-causing bogeyman — or in fact, man's life-preserving friend?

Dr. F. E. Deatherage, a veteran Ohio State University bio-chemist, said evidence suggests the preservative is indeed necessary for man's well-being.

He presents this interesting view in "Man and His Food and Nitrite," now available in reprint form free-of-charge from the Pork Industry Group of the National Live Stock and Meat Board.

Deatherage says it's erroneous to finger nitrite as a harmful additive. Nitrite occurs naturally in the environment and is even manufactured in human saliva and intestines. These normally-occurring nitrites in the body work as a natural protection against botulism, Deatherage claims, just as nitrite in cured meats prevents the outgrowth of the deadly organism.

To the pork industry, for which a nitrite ban could be devastating, Deatherage's theory comes as a breath of fresh air, according to Mark W. Thomas, secretary of the Pork Industry Group.

"A nitrite ban could slam the door on up to two-thirds of the pork market, with disastrous impact on the entire industry," he said. "Continuing cancer hunts threaten to undermine confidence in the entire food industry, and perhaps Dr. Deatherage's approach will help restore scientific logic to the public about cancer.

"So it's important," Thomas said, "that every pork producer, packer and

processor read this report and then pass it along for others' enlightenment." He urged industry organizations to help distribute copies to their local civic groups, medical societies, teachers and media.

Thomas said that this type of evidence is needed by the threatened industry to support its contention that nitrite should continue to be used as an accepted meat preservative.

Nitrite is added to bacon, hams and other processed meats to prevent spoilage and oxidation and to give the products their special flavor and color. Recent testing on laboratory rats showed an inconclusive correlation between nitrite ingestion and instances of cancer. The study is now being reviewed and questioned by others in the scientific community. Prior animal studies had shown no such correlation.

To support the belief that nitrite serves as a natural chemical protection, Deatherage has examined sudden infant death syndrome, where babies die in their cribs for no apparent reason.

It has been shown that many of these deaths are due to the outgrowth in the infant's intestine of **Clostridium botulinum** spores to active vegetative bacteria which produce fatal toxins. These dangerous spores occur all around us and in our food, but natural nitrites have developed in the guts of most people to protect against them.

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"It is reasonable then to consider that normal bacterial nitrification processes producing nitrite have not been sufficiently developed in the first months of life to protect some babies," the Ohio State scientist said.

While he said the evidence merits further study, it has created enough concern to cause the Sioux Honey Association to issue warnings against feeding honey, a source of botulism spores, to young infants.

Interestingly, Deatherage points out, nitrite is consumed by eating

many foods other than cured meats. Plant cells, for example, need nitrogen in the form of sodium nitrite and sodium nitrate to produce protein, which man, in turn, eats. Nitrite and nitrate are also produced by lightning and carried by rain into the soil and rivers — and eventually into our drinking water.

Vegetables such as lettuce, celery, radishes and zucchini contain nitrate levels far in excess of the 120 parts per million of nitrite now used to cure bacon. The nitrate in vegetables is converted to nitrite when the vegetables are eaten.

The average person ingests daily in his own saliva twice the nitrite found in cured meat. "It is clear that nitrite is a normal part of the ecosystems and our own life processes as well," Deatherage said.

By standards set forth in the 1958 Delaney Amendment, cancer suspects can be found almost anywhere, according to Deatherage. But in a world requiring extended storage of food, preservatives are necessary and nitrite is perhaps "the most valuable preservative ever discovered", he said.

Since the chemical is part of nature itself, "Then why all the fuss?" he said.

For a free copy of Deatherage's reprinted report, write the Pork Industry Group, National Live Stock and Meat Board, 444 N. Michigan Avenue, Chicago, Illinois 60611.



Callison Is Idaho Association President

The Idaho Angus Association met recently for their annual meeting and election of officers. Newly elected president is Darrell Callison, Blackfoot, Idaho. Arlene Kolar, Horseshoe Bend, Idaho, will serve as secretary-treasurer.

The directors include: Dennis Boehlke, Nampa; Art Kelly, Blackfoot; Randy Noah, Cambridge; Dawson Geartner, Midvale; Duane Jensen, Blackfoot; Jim Woodworth, Rockland; and Kenyon Weeks, Minidoka.

Ace Hendricks, immediate past president, Payette, was awarded the Mr. Angus Award for his outstanding services to the American Angus Association.

Nonpareil Angus Ranch received an award from the Idaho Junior Angus Association, presented by president Leon Mecham of Firth in appreciation to Nonpareil for holding the 1978 field day.

The Idaho Angus Auxiliary award went to Alfred Boehlke & Sons, Nampa for donation of the Miss Idaho heifer auctioned off during the sale. The proceeds went to the scholarship and trophy program the Auxiliary sponsors. That heifer was purchased by Question Mark Ranch, owned by Walt and Lucy Yarbough, Grand View.

The Junior Angus Field days for this summer include: June 2, 3, 23 and 24.

