

New food technologies reviewed in Washington

WASHINGTON, D.C. - American housewives may get more nutritious food faster and more conveniently with the aid of technologies that are or will soon be adopted. These emerging technologies may also help stem rising food prices by reducing the cost of marketing food products, according to a report released recently by the Office of Technology Assessment (OTA). Included on the Board of OTA are Senators Edward M. Kennedy, chairman; Clifford Case, Adlai Stevenson, Morris Udall, Orrin Hatch, and Ernest Hollings.

As with all technological change, new technologies may have undesirable or unanticipated consequences, OTA warns. Examining those technologies now will help ensure that we properly plan for dealing with their impacts.

"While there are many benefits to be derived for farmers, marketers, and housewives from achievements in food technologies," OTA Director Dr. Russel W. Peterson said, "This report shows how important it is to examine, early and closely, possible unforeseen consequences of these advances."

OTA identified seven emerging technologies likely to be adopted in the near future which need further study. The seven are:

- Texturing, binding, and flavoring processes that modify existing foods or produce new ones, (such as meat and dairy substitutes).

- Improved means of transporting food to ensure its quality, such as freight cars designed for food shipment only.

- New packages capable of keeping food safe and nutritious longer, such as the retortable pouch, a multilayered plastic bag in which food can be stored

without refrigeration and in which the food can be cooked prior to opening.

- Electronic checkout in retail food stores, including the use of universal product codes currently printed on about 80 percent of food packages in grocery stores.

- Technologies to reduce food loss in transportation, packaging, and retailing.

- Electronic food shopping systems such as warehouse-to-door delivery, automated minimarkets, and mobile automated markets.

- Recyclable and returnable food containers that would extend current technology from beverages to other food products.

While these technologies may save money, produce more nutritious foods, and provide more food by cutting losses, their impacts need further study, according to the OTA report. For instance, electronic checkout may improve labor productivity and inventory control, but could cost many workers their jobs. Also, with a cost of \$200,000 to install, electronic checkout may make it more difficult for small grocery stores to compete with larger chains.

The delivery of safe and wholesome foods to consumers requires improved transportation technologies. Now, food may be spoiled or contaminated by being shipped in railroad cars infested with rats or insect pests, or that have previously carried toxic or otherwise dangerous substances.

"There are documented

cases of pets dying from pet foods whose ingredients were contaminated with toxic substances during shipment," the report states. Further,

"food ingredients are frequently rejected by the processor because they have become contaminated during shipment."

Specific improvement

could include railroad cars designed to carry food exclusively, new techniques for cleaning freight cars, and better tracking systems capable of identifying cars by what freight they have carried. However, OTA says the railroads may need financial assistance or incentives to make these changes.

Retirement course available

UNIVERSITY PARK - Since the nature of retirement forces major readjustment in lifestyles, education for this readjustment cannot be effective at, or after, retirement. Specialists say that most people tend to consider financial arrangements and where-to-live options just before retirement. This is too late because retirement planning must take place as you grow older, not when you have grown old. Critical for many people is a drastic drop in retirement income. This makes income preparation vitally important since financial arrangements must be adequate for an extended period for nonwork.

Available from The Pennsylvania State University is a new correspondence course to aid you in making plans for your nonworking years. Titled, Planning Your Retirement, the course discusses: financial planning, including new worth, inflation factor, health care

expenses, and total sources of income needed; nutrition, including food fads, get full return from your food dollar, labeling, and nutritional services. Other lessons discuss housing options, transportation, support, and social services.

You can get a copy of the course by sending \$3.50, plus 25 cents postage, to RETIREMENT, Box 5000, University Park, Pa. 16802. Make check payable to Penn State.

Cattle numbers up

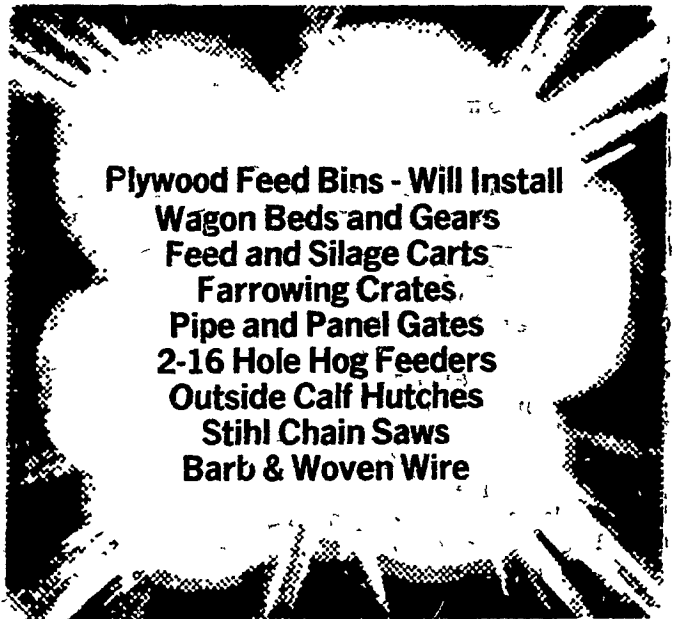
WASHINGTON, D.C. - Cattle on feed in the seven major feeding states on Nov. 1 totaled 9.3 million head, USDA reported last week. That's up 14 pct. from a year earlier, 27 pct. more than the Nov. 1, 1976 total - and the highest for the month since 1973. It's also the highest for any month since Feb. 1974.

In another area, fabricated foods offer the possibility of more food at lower costs produced using less energy. However, OTA warns that use of fabricated foods raises issues concerning their effect on overall nutrition and proper labeling to identify them without prejudicing consumer acceptance. Further, official standards are either incomplete or in disagreement on the use of food additives and unconventional ingredients.

OTA examined emerging food marketing technologies for their current state of development, their probability of being adopted by 1985 or sooner, the extent

to which they will be used, their expected impacts, and the policy issues they raise. They were also examined assuming, first, a continuation of recent socioeconomic trends and, second, major changes in the social and economic environment for technological change.

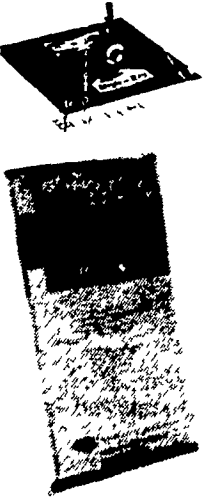
The OTA report, "Emerging Food Marketing Technologies: A Preliminary Analysis," is available from the U.S. Government Printing Office. The GPO stock number is 052-033-00612-0; the price is \$2.75. Write: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.



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