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New soybean oil eliminates need for hydrogenation and cuts trans fats

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On the other hand, the federal estate tax paid in the top five states in 2001 averaged $887,437 in Georgia, $842,200 in the District of Columbia, $829,823 in Connecticut, $772,066 in New Hampshire and $708,458 in Nevada.

**Who would benefit from repeal**

The top 469 estates (those with taxable estates exceeding $20,000,000) paid an average of $10,374,200 each in federal estate tax in 2001. The top 1337 (those with taxable estates exceeding $10,000,000 of taxable estate) paid an average of $5,982,049 each. The top 3502 (those with estates exceeding $5,000,000 in taxable estate) paid an average of $3,515,461 each in federal estate tax. That is a measure of tax benefit had the federal estate tax been repealed in 2001. It is obvious what is really driving federal estate tax repeal.

**In conclusion**

Possible repeal of the federal estate tax and generation-skipping transfer tax is being played out against a backdrop of striking increases in concentration of wealth in recent years. Much of that increase in wealth has bypassed the farming sector.

The revenue loss from federal estate tax repeal would result in a shift of burden to other taxes, most notably the federal income tax. The income tax is a concern to a far greater segment of agriculture than the federal estate tax.

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**New soybean oil eliminates need for hydrogenation and cuts trans fats**

by Walter Fehr, Charles F. Curtiss Distinguished Professor in Agriculture, (515) 294-6865 or 294-4779, wfehr@iastate.edu

New soybean varieties developed at Iowa State University hold promise for food manufacturers scrambling to remove unhealthy trans fats from their products. The new soybeans produce oil that doesn’t need to be hydrogenated.

The new soybean varieties developed at Iowa State University hold promise for food manufacturers scrambling to remove unhealthy trans fats from their products. The new soybeans produce oil that doesn’t need to be hydrogenated.

The food passed critical laboratory tests for frying and flavor stability last year, and is being made available this month to many major food companies for evaluation in various products.

The Food and Drug Administration has given food manufacturers until 2006 to include trans fat information on package labels. Trans fats may raise blood cholesterol levels and contribute to heart disease. Most trans fats in the nation’s food supply are created in the hydrogenation process, which is used to extend shelf life and stabilize flavor in countless baked, fried and processed foods, including chips, snack crackers, cookies, candies and salad dressings.

Manufacturers hydrogenate soybean oil to reduce its content of unsaturated fatty acids, particularly linolenic acid, the primary culprit responsible for causing food to become stale or rancid. Soybeans typically produce oil with seven percent linolenic acid. Iowa State’s new soybean oil has only one percent linolenic acid.

The new soybean was developed through conventional breeding practices. We started working on the project in the late 1960s. By the early 1990s, we had isolated the three soybean genes that control the one percent linolenic acid trait.

The Iowa State University Research Foundation holds the patent for the one percent linolenic acid soybean.

This year, the one percent linolenic soybeans were planted and harvested in Michigan by Zeeland Farm Services Inc., Zeeland, Mich. In early November, 210,000 pounds of crude oil were extracted from the harvested soybeans. Loders Croklaan, a producer of specialty and nutritional oils and fats in Joliet, Ill., will refine about 70,000 pounds of the oil for distribution to oil suppliers and food companies that have purchased it for testing. The remaining crude oil will be kept in Michigan until more refined oil is needed.

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Interest in the new oil is growing. A major supplier of frying oil this week requested oil for testing. In addition, Fehr will travel to Japan next week to discuss the new oil with representatives of their vegetable oil industry.

To cut trans fats in their products by 2006, the food industry could switch from soybean oil to alternative oils that don’t contain linolenic acid. However, the supply of alternative oil is limited.

“There aren’t enough acres of alternative vegetable oil crops, like canola or sunflower, to meet the industry’s oil needs.

More than 73 million acres of soybeans are grown in the United States. Soybeans supply 81 percent of the U.S. food industry’s needs for edible oils and fats.

I am working with Iowa grower groups, including Innovative Growers and the Iowa Quality Agriculture Guild, that will plant the one percent linolenic acid soybean next spring.

This is a special opportunity for growers who already are getting a premium for their non-GMO soybeans. The current premium applies only to the value of the non-GMO protein obtained from the soybeans. The one percent linolenic acid soybeans will make it possible to get an additional premium for the oil.

Growers will plant about 40,000 acres of the one percent linolenic acid varieties in 2004 to obtain the seed needed for large-scale oil production in 2005. We’ll need one million acres in 2005 to meet the demand that the food industry estimates it will have for this oil.

The Agricultural Marketing Resource Center for value-added agriculture
by Christa Hartsook, communications specialist, Agricultural Marketing Resource Center, hartc@iastate.edu

The Agricultural Marketing Resource Center (AgMRC) is a national virtual resource center for value-added agricultural groups. The purpose and mission of the AgMRC is to provide independent producers and processors with critical information to build successful value-added agricultural enterprises.

The Web site, www.AgMRC.org contains links and AgMRC developed materials on everything from networks of ethanol cooperatives to organic beef producers to value-added worm businesses. This extensive collection of resources and tools can help anyone involved in value-added agriculture develop and improve any aspect of their business.

Content
The content portion of the AgMRC Web site is divided into four main sections:
• Commodities and Products
• Markets and Industries
• Business Development
• Directories and State Resources

The **Commodities and Products** section provides information on adding value to the commodities and products traditionally produced on the farm. Examples are adding value to corn, beef, fruits, etc. Information is provided along the supply chain from production, processing and marketing for each commodity/product, focusing on marketing.

The **Markets and Industries** section provides information on the major markets and industries (food, energy, etc.) that producers will participate in during the process of adding value to their farm products.

The **Business Development** section focuses on information needed to create and operate a viable value-added business. The information is provided sequentially for use during the business analysis, creation, development and operation process.