

## Compound in Oysters Effective in Preventing Cancer

A compound found in oysters is effective in preventing the growth of cancer cells, according to an LSU AgCenter researcher.

Ceramides are a lipid, or fat compound, found in oysters, other animals and plants. Elsewhere in the country they are in clinical trials to speed the healing process in patients undergoing chemotherapy. In a research paper recently presented at the Annual Meeting of the Institute for Food Technology, Jack Losso with LSU's Department of Food Science detailed his use of oyster ceramides to arrest breast cancer cells grown in test tubes and laboratory rats.

"This is incredibly exciting," said Losso, whose research was funded by Louisiana Sea Grant. "When we looked at cancer cells treated with ceramides, their growth had been inhibited and they were dying."

Oyster ceramides attack both hormone-dependent and hormone-independent breast tumor cells in test tubes and kill them within 48 hours. In laboratory rats treated with oyster



Jack Losso, LSU AgCenter, uses oyster ceramides to arrest breast cancer cells.

ceramides, blood vessel growth that simulates cancer cell growth and proliferation was reduced by 57 percent in seven days. No toxicity to the animals was reported.

Although the rats received concentrated ceramide injections, the compound can just as easily be taken orally in pill form, said Losso. Conceivably, an oyster-rich diet could aid in cancer prevention.

"You could eat the oysters raw or cooked," said Losso. "But you can't grill them with those popular counter-top grills that discard the fat. The ceramide is in the oil, which is lost when you use a tilted grill."

Although the cancer-fighting compound is found in a variety of plants and animals, the type of ceramide differs, depending on the species.

Oysters, which are filter feeders, apparently collect ceramides in their bodies as they ingest phytoplankton. •