Muscle and Fat Loss May Offer Clues to Pancreatic Cancer

The study revealed that tumors interfered with the pancreas' ability to secrete enzymes that digest food

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Matthew G. Vander Heiden MD, PhD (current Fellowship Award Committee member, Fellow '06–'08, Innovator '11–'13) and colleagues at the Dana-Farber Cancer Institute and MIT's Koch Institute, Boston, have found a new reason pancreatic cancer patients lose weight. They observed in mouse models that tumors interfered with the pancreas' ability to secrete enzymes that digest food. Unable to obtain enough nutrients from food, the mice entered starvation mode in which their bodies broke down fat to survive. In an earlier study, the researchers observed tissue starts breaking down very early in pancreatic cancer patients, usually long before other signs of the disease appear. The scientists are studying this effect in humans, which may help doctors identify pancreatic cancers at an earlier stage. Difficult to detect and nearly impossible to treat, pancreatic cancer is the only major cancer with a five-year survival rate below 10 percent. This study was published in Nature.

Read more about the study in STAT.

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