Cellular pathway could provide evidence of how cancer and obesity are linked

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The link between obesity and disease has been well documented. There's evidence now that obesity and cancer have a strong link, as they've shown in the United States at least 90,000 cancer deaths a year can be attributed to obesity. University of Alberta researcher Richard Lamb is on his way to understanding the correlation and it's a good example of how the scientific process works.

Lamb is studying a cell pathway in the human body that regulates cell growth. In their most recent work, Lamb and his research group have found that this pathway can be affected by sources not within the cell, specifically amino acid nutrients. Amino acids are the building blocks of tissues and muscle in the human body.

What makes this interesting is that these amino acids are found to be elevated in obese people. That means this signalling pathway, called mTOR, could be hyper-activated by these heightened amino acid nutrients and this could affect how human cells respond to stress and disease among a number of other things. Lamb and his team will now investigate if cancer cells are aided by this potential hyper-activity of the pathway.

Lamb's work is published in the prestigious journal *Molecular Cell*, and as is normal scientific process, this will elicit calls from researchers around the world who could have other ideas on why this pathway is relevant to disease.