

Analysis of sources three and four: Persuasive articles (one supporting, one opposing)

“Scientists Spent Years Studying the Connection between Sugar and Cancer, and What They

Found Was Horrifying.” *The Independent*, Independent Digital News and Media, 17 Oct.

2017,

www.independent.co.uk/life-style/sugar-cancer-tumours-aggressive-stimulation-growth-study-a8002701.html.

Tontonoz, Matthew. “No Sugar, No Cancer? A Look at the Evidence.” *Memorial Sloan Kettering*

Cancer Center, 1 Dec. 2016, www.mskcc.org/news/no-sugar-no-cancer-look-evidence.

Comparing sources (v1) -- opposing (97)

Comparing sources (v1). One reason Matthew Tontonoz disagrees with Dr. Daniels is that he believes Americans eat a lot of sugary foods which then leads to Obesity. Being obese leads to inflammation which is a natural response to infection or injury to the body. Then it is inflammation which makes it more likely to damage the DNA of cells, and damaged DNA cells increase the chances that a cell might turn cancerous. Another reason Tontonoz disagrees with Dr. Daniels Warburg’s Theory is that even if a person tries to eliminate sugar from their diet, he proposes that the body uses its remaining resources to produce glucose on its own. He believes that a person’s biology has been naturally selected for at least 600 million years to make sure that no matter what they eat, they keep enough glucose in their system to not become deficient. So it’s very hard for a person to disrupt this system by changing their diet.

Interpret. In my view, the main strength of Dr. Tontonoz case is inflammation from eating poorly does damage DNA which leads to cancer, and difficulty removing glucose from the body is difficult because the body does tend to store glucose and convert

Assess evidence. Dr. Tontonoz cites Craig Thomson the President of Memorial Sloan Kettering as an expert on the metabolic approach of looking at cancer. Thomson says, “There is no question that obesity is associated with an increased risk of cancer and that the abundance of carbohydrates in our diet is one of the major foundations on which the worldwide epidemic of obesity is built.” However, I question this proposition because many thin people also get cancer.

Detect bias. It seems Dr. Tononoz might be biased in that he only looks to one side of the equation and that is the obesity side. He must question why cancer affects all people regardless of their shape and size, and in fact, many people who are obese do not get cancer.

Comparing sources (v2) -- supporting (98)

Understand. Young raises another issue regarding cancer and that is, that sugar increases the rate of growth for cancer. Young cites “a nine-year research project” which had a huge impact in cancer research and explained the Warburg effect, “...as a phenomenon in which cancer cells rapidly break down sugars”. It was found that cancerous tumors converted significantly higher amounts of sugar into lactate for cancer to grow and healthy cell tissues did not. Therefore, this provided evidence for a positive correlation between sugar and increased amounts of cancerous cells in tumor growth.

Interpret. The research Young discusses to support her case that sugar increases tumor growth provides a foundation for future research and creates an argument for research in nutrition as it relates to cancer formation. It seems that sugarless diets for cancer patients is appropriate.

Compare and contrast. Dr. Thomas would likely concede that sugar does influence cancer cell growth and this study does explain the correlation between the strength of the Warburg effect and tumor growth. Young might, however, point out sugar doesn’t cause cancer, it only influences and increases cancer cells that are already in the body.

Analysis of source two: Informative and credible chart or graph about your topic

“Public Health England Recommends Halving Sugar Consumption Targets.” *Cancer Research*

UK - Science Blog, 31 July 2020,

scienceblog.cancerresearchuk.org/2015/07/17/giving-sugar-its-fix-public-health-england-recommends-halving-sugar-consumption-targets/.

Comparing sources v3 (100) → use for visual

Understand. This visual emphasizes that people who eat diets high in sugar gain weight and subsequently get cancer. This infographic shows different parts of the human body and the respective cancers which were caused by sugar. According to the infographic 1 in 20 UK cancers are linked to weight.

Interpret. Although the visual does not discuss the idea that circulating tumor and stem cells live off of glucose found in sugar, it does demonstrate that eating sugar not only increases weight gain but it also increases the risk of getting many different types of cancer.

Compare and contrast. Dr. Daniel Thomas would interpret this visual as proof that weight gain from sugar is linked to many cancers but his opponents might argue that although people gain weight from diets rich in sugar, there is no connection to that sugar causing cancer.

Analysis of primary source: Informative & unbiased anchor text about your topic

Thomas, Daniel. "How to Win the War on Cancer." *THOMAS HEALTH BLOG*, 2019.

www.thomashealthblog.com/?p=8268. Accessed 19 Jan. 2021.

Understanding [primary source]'s argument (95-6) → use for primary source that provides your foundational understanding

Understand. In Thomas Health Blog, Dr. Daniel Thomas makes the central claim that there is a "... metabolic distinction between normal cells and cancer cells.", even when oxygen is present, cancer cells metabolize glucose and can thereby be starved and weakened through diet, meal timing, natural compounds, and repurposed medicines.

Assess evidence. One way Dr. Thomas supports his position is through the research of Otto Warburg, a renowned Noble Prize Laureate, who discovered that cancer cells can metabolize glucose outside of the mitochondria, and these cancer cells can conserve nutrients to support the growth and spread of cancer. Another point Dr. Thomas raises as evidence for his argument is that "... damaged mitochondria send signals to the nucleus to activate cancer-promoting genes and deactivate cancer-suppressing genes."

Identify counterarguments. Dr. Thomas addresses several counterarguments, including the idea that death from cancer is quickly surpassing heart disease in the US. Statistics indicate that as high as 50% of Americans may get a cancer diagnosis. Most doctors feel that the conventional treatments of chemotherapy, radiation, surgery, targeted therapy, and immunotherapy alone work the best but this is incorrect because the death rates from cancer are increasing.

Form an opinion. I agree with Dr. Thomas that conventional therapy alone is not sufficient to save lives. For example, in my experience, my mom uses many different resources to survive her cancer. On the other hand, I have doubts/reservations about the opposing beliefs that a person should only use conventional treatments. Specifically, I feel death rates from cancer are high in the United States and people should look at cancer from many different angles to understand how to recover and become healthy after a cancer diagnosis.

McClelland, Jane. *How To Starve Cancer: Without Starving Yourself*. Agenor Publishing, 2020.

Comparing sources (v3) -- supporting (99)

Understand. McClelland, cancer survivor and physical therapist, cites her own experience to argue that cancer can be managed or cured by taking repurposed medicine, lifestyle changes and starving cancer of the nutrients it needs to survive. She survived Stage IV Cervical Cancer after being sent home to die because her chemotherapy wasn't working.

Interpret. In my view, McClelland's experience relates to Dr. Thomas because he also advocates a metabolic approach to starving cancer. One of the pathways to starve cancer is through eliminating sugar which raises glucose and cancer stem cells survive off of glucose.

Compare and contrast. I think that McClelland is effective in raising the question about the strength of Dr. Thomas' argument that cancer is metabolic and can be controlled or reversed through repurposed medicine, lifestyle changes and a cancer starving diet. McClelland has spent years researching the metabolic approach to cancer, cured herself of a stage IV cancer, and helped thousands of people with her research. Dr. Thomas hasn't had cancer, but has worked with McClelland as an MD in her CareOncology practice. He has also worked with thousands of patients over the years, researched the metabolic approach and advocates for patients to rely on more than the primary four repurposed drugs that McClelland proposes.