

Consuming Chemicals:

A Controversy on Artificial Sugar

Americans consume copious amounts of sugars. The rate of obesity and chronic diseases that are linked to sugar have increased, and many people have made the switch to zero-calorie, artificial sweeteners. They can be found in everyday foods, snacks, drinks, and fast-food chains. Nowadays, many people are making the switch to artificial sweeteners because they perceive only the few benefits. However, there are many more negatives. *Sugar substitutes: Health controversy over perceived benefits*'s author utilizes his educational background for credibility and facts to inform his audience about both viewpoints in the controversy of artificial sugars. However, he wants the audience to realize that the harms of artificial sweeteners are more severe and should be more emphasized than their perceived benefits.

The author utilizes his public image, credible information, and acknowledgement of counterarguments in order to present his rhetorical argument. Dr. Kirtida R. Tandel is part of the Department of Pharmacology in the Government Medical College of Surat, Gujarat, India. His educational background and status in the medical field imposes the reader to feel obliged to believe his reasoning. His public image establishes his journal to be educated and reliable. For example, he provides limited benefits, but a lot of information about the harms of artificial sweeteners. Instead, he relies on his audience to take what he says due to his credibility in the field because most of it is sound logic which is somewhat effective; his information provided is

reliable. For instance, he does not provide specific data found in research. He says, “In a crossover design by Ralph *et al.*, they concluded that individuals with mood disorders are particularly sensitive to this artificial sweetener and its use in this population should be discouraged.” Tandal does not allow the reader to fully understand why or how the participants were sensitive to the artificial sugars. In this example, he expects the audience to just accept what he has states. This is not typically an effective strategy because there is not much of an analysis. The author only expects the audience to understand his reasoning without completely explaining himself.

Furthermore, Tandal refers to studies, but does not give much background about them or specific information. He says, “...aspartame may have modulating effects on these body responses, even resulting in the converse effect than that intended, namely obesity rather than body weight maintenance or loss.” He expects the reader to believe his claims due to his medical position. Moreover, he structures the counterargument, the perceived benefits, to contain less information than his argument, the harms of artificial sweeteners, because he wants the audience to sense his urgency that the artificial sweeteners are harmful. This structure allows the reader to hear both sides of the argument, but the audience is more inclined to believe his side of the argument because he gives more of his side. This is moving to the reader because he mentions health risks, such as, cancer-causing chemicals. This is effective because he basically persuades the audience to listen to him. His use of word choice here creates a greater interest for the reader because most people do not want to get cancer from food since they can prevent it. In a rhetorical analysis, it is best to explain and analyze more than just present the information of both sides to a

reader. Even though the author proved that the benefits were misleading, he should have more specifically stated it rather than only comparing between the two.

When informing his audience, Tandel appeals to his audience's sense of logic, for he provides a lot of historical records and expert opinions on artificial sweeteners. For instance, Tandel states that the consumption of stevia is healthy for all individuals, but it is only safe in certain amounts. Therefore, he states the Acceptable Daily Intake (ADI) that he had sourced in order to support his claim. He says, "...4 mg/kg body weight (expressed as steviol) has been established." He relies on the information to support his claims. Furthermore, Tandel utilizes studies and research to support some of his claims. In an Italian research study from 2007, researchers exposed rats to aspartame (chemical used in artificial sweeteners) in utero; they discovered that aspartame is linked to leukemias/lymphomas and mammary (breast cancer). In this example, he finally utilized information to back up his claims as opposed to using his status as a doctor like he used more often throughout his paper.

Imagine an America that only had morbidly obese people. Diabetes will be running rampant, and the demand for artificial sweeteners will be at its peak. These factors enable people to consume more zero-calorie sweeteners because of their perceived benefits. Through Tandel's rhetorical argument on artificial sweeteners, he helps the reader better understand the artificial sugar controversy. His argument was based on how people's perception of the perceived benefits outshine the harms of artificial sweeteners. He wants the reader to understand counterargument but also his argument. His rhetoric strategy was not completely effective in this manner. However, he was able to use his appeal as a doctor and some concrete evidence to support his claims without seeming completely biased.

