

# SKILLS FOR ANSWERING QUESTION TWO PAPER 1

## Common problems for AS Students

Need more “Why” statements	Superficial, not thinking deep enough
Content analysis is not focused on CONTENT	Stop describing/repeating the quote
Judgements are weak or not included	Conclusions are weakly supported
Needs to be two-sided	Utilize fallacies, don’t just point them out
Words need to be utilized, not just defined	Not enough pros and cons found

## Analysis and Evaluation Samples

### Analysis:

Since the author states the commendable size and conditions of the study, one can assume that the data is credible and is varied as many opinions were introduced.

Though the evidence provided conducted a lengthy study with a large sample size, it failed to acknowledge where the study occurred and only used women in the study which is generalized for the entire population.

The study used contains only information about women, therefore, making it unrepresentative of whether diet drinks are worse for the whole population (men, women, and children).

### Evaluation:

Sample 1:

Thus, as it is presently, the study is too weak to be used as a **valuable** piece of evidence because the data presented does not support the assertions given and because significant details about the study were not identified within the sample making the conclusion and overall argument **unsupported**.

Sample 1:

Thus, **in assessing** the lacking information on the inner workings of the study such as the missing author and the limited scope the implications, this study is **ineffective** as evidence to support the negativity of artificial sweeteners.

Sample 2:

In **assessing the effectiveness** of the evidence provided in Sample 2, it is **determined** that the presence of unrepresentative data and the generalization of the data outweighs the legitimacy of the information, as it does not advance the argument being made in the sample, therefore disqualifying the evidence from being **meaningful**.

### **Sample Fallacy Usage**

Sample 3 includes **unsupported assertions** because it lists two facts that are used to come to a conclusion **that is not proven** by those facts.

Sample 1 includes fallacies when explaining the correlation of drinking diet sodas and the increase risk of diabetes. **This makes the study hard to accept and useless as the lack** of timeline for when the sodas were drunk **makes the information** unreliable and untrustworthy.

The data includes a study performed by the American Journal of Clinical Nutrition, but **without expanding on the discoveries of the study**, other than that it found “some frightening facts”, the use of the study can be seen as an appeal to authority fallacy **instead of having a purpose in supporting** the author’s claims. Since the study was performed by a medical-based institution, just **including the name** of the source is an **attempt to persuade readers** that the information that is included is strong and supportive of these claims.

Sample 2 entails a fallacy of correlation, the observations that were recorded during their study would not be considered a useful tool in answering the question **because the article is drawing a direct relationship, not a cause**. This is correlation because the statement shows information that is **supportive of the point, but it cannot be used as a causation** **since** artificial sweeteners **cannot be determined as the sole cause of the issues** the rats faced.

## Paper 1 Practice

How convincing is the evidence provided?

### Sample #1

Pros:

- Large sample size
- Occurred over 14 years
- Published in the American Journal of Clinical Nutrition
- Evidence supports the conclusion

Cons:

- Only used women in the sample
- International scope of the project is missing
- Doesn't specify the ways of measurements

**Analysis:** This example is a "14-year study of 66,118 women", making length of the study and sample size. However, the subjects of the study were limited to women, which could alter the results of the experiment due to metabolic differences between men and women. The study was published by the American Journal of Clinical Nutrition, which is significant because it shows that the vested interest is centered around the nutritional aspect of the food and diet industry. The evidence stated is relevant to the conclusion because it supports the idea that the food and diet industry is insufficient for regulating foods that are addictive and drive overeating; by stating, "Diet sodas raised the risk of diabetes more than sugar sweetened sodas", the conclusion is supported. Contrarily, parameters for measuring an increase in diabetes is not specified, which leads to a vague understanding of the study. Additional unclear statements including "supported by many other previous statements" present a level of uncertainty in the evidence. Additionally, there is no mention of the international scope of the project, leading one to believe that the results of the study could be culturally and physically limited to one region. Conclusively, this evidence is convincing due to the source, relevance and sample parameters that are evident.

### Sample #2

Pros:

- Numerical data
- Animal tested specified

Cons:

- Contradictory information

- Doesn't define metabolism in the correct context
- No source provided
- Study performed on rats not humans

Analysis: In this source, a study on animals is described to investigate the effects of artificial sweeteners on rats' metabolism. It is significant that the author mentioned that the study was conducted on rats because the readers need to understand that rats and humans exhibit different metabolic functions. Additionally, the source presents some numerical data, when referencing the body fat increase due to artificial sweetener. Contrarily, the fallacy of correlation is evident because there are two unrelated premises; the author states "diet drinks are not good substitutes for sugar-sweetened drink because artificial sweeteners slowed rats' metabolism. The fact that premise 2 occurred does not ultimately lead to the conclusion of the other. Additionally, the evidence does not provide an author, which adds to the unreliability of the evidence. The author includes the idea that artificial sweeteners lead to an increase in "cravings, weight gain, and diabetes"; however, they provide no explanation of a study or quantitative support, which, one could conclude as generalized data. Ultimately, it can be concluded that this evidence is not convincing because of the over-generalized information, unrelated premises and source-less material, despite the honesty and partial numerical data.

### Sample #3

Pros:

- Relevant Information
- Supports conclusion

Cons:

- Does not state author for study
- Does not give sample size
- Hast generalization
- Does not specify length of studies

Analysis: In this sample, the author includes that, "sugar-sweetened drinks make up about 15% of out calorie intake every day", which is relevant to the conclusion because it supports the notion that unfortunately, sugar-sweetened drinks are a prominent component in our diets. However, parameters of the study are unclear; in this case, there is no length of study, sample size, sample composition, or date on the study. This is noteworthy because these details may significantly impact the strength of the evidence. Moreover, the sample follows up with two statements that explain that high caloric intake requires heavy exercise to expunge. Although this information is supported by numerical data, the data is insufficient and misinterpreted. Even though this evidence may be relevant to emphasizing the threat of artificial sweeteners, it does not reinforce the claim that there are secrets in the food and diet industry. This stray off the main idea creates a weak side to the source. Additionally, the evidence presents misconceptions of correlation between the exercise required to negate the high caloric intake and the inability to "exercise your way out of a bad diet". This is because

the significant amount of exercise required to match high calories does not necessarily prove the failure to “exercise your way out of a bad diet”. Irrefutably, this is a weak example, primarily due to its limited information and presence of fallacies.

#### Sample #4

Pros:

- Source is UN Political Declaration on NDCs
- Global

Cons:

- Does not support conclusion
- Does not state when the study was conducted
- Not dated
- Generalized information that is unrepresentative of the topic

Analysis: In this sample, the opening sentence is highly generalized and does not contain analytical data to support the claim. However, the excerpt was pulled from the UN Political Declaration on NCDs. The affiliation the source has with United Nations strengthens the reliability of the source because it is a world-renowned organization. The language in this piece is professional and doesn't contain phrases that indicate emotional ties to the subject matter. On another note, the evidence is not relevant to the claim due to insufficient data including a reference to diabetes consuming “15% of the total health budget”, which is irrelevant to the claim. Investigating the “costs of advanced cancer care” is also not related to diet and is unrepresentative of diabetes. Moreover, the example is not dated and lacks sufficient numerical data. Conclusively, this example is a not strong piece of evidence because of its lack of sufficient data, correlation faults and overall irrelevance to the claim.