

Malawi: What are the implications that aspartame is now a “possible carcinogen”?

Adamson S. Muula^{1,2}

1. Professor and Head, Department of Community and Environmental Health, Kamuzu University of Health Sciences (KUHeS), Malawi

2. Editor-in-Chief, Malawi Medical Journal

Email address: amuula@kuhes.ac.mw

Aspartame is an artificial non-saccharide sweetener 200 times sweeter than sucrose. It is commonly used as a sugar substitute in foods and beverages. Aspartame is a methyl ester of the aspartic acid/phenylalanine dipeptide category. It (aspartame) was approved by the United States Food and Drug Administration (FDA) in 1974. Its approval was revoked in 1980 before being re-instated a year later. It is one of the most studied food additives in the human food supply. Because of its low caloric value, it is often a preferred sweetener when there are concerns of weight gain, an attribute glucose and sucrose do not have (it is an ingredient of many diet drinks and chewing gum), the latter being, among other concerns, obesitogenic and diabetogenic.

Mid this year (2023), the World Health Organization (WHO) classified aspartame as ‘possibly carcinogenic’, thus placing it in the same category as red meat.¹ Twenty-five scientists meeting at the International Agency for Research on Cancer (IARC) had concluded that there was “limited evidence” for aspartame as causing cancer in humans.² Now this “tentative” conclusion needed to be understood in the context of the evidence as well as the audience, both intended and non-intended. Firstly, if we were starting from the position that aspartame had been deemed as carcinogenic and we went hunting for evidence to show or not show that this was so, suggesting that the evidence was limited, could be construed as that the evidence was insufficient to make such a conclusion. On the other hand, if we started from the stand-point that aspartame was safe and non-carcinogenic, then finding that there was limited evidence points to that we need to discard the notion that aspartame was altogether safe. What then, are the implications for this advisory for and concern vis a vis, Malawi?

Firstly, we need to agree that at present, what we have been presented with are “red flags”. We need to be cautious if we have to ingest aspartame. At the recommended acceptable daily intake level of 40 mg per kg of body weight per day however, aspartame has so far been considered safe. Secondly, scientists must go to work and sift through the existing evidence even more and at the same time collect new data that may clarify the situation. At present, things are murky. Thirdly, and this for Malawi may even be the first consideration, we may have to figure out how much aspartame do we consume after all. How much do the highest consumers take per unit time? Is it much, little or in the middle? Life is short and not all problems deserve the same amount of attention. While Malawi should benefit from scientific advancement obtained at the global scene, one must inevitably contextualize the science. It will be good to assess the use of aspartame in the country. Thereafter, we should be able to gauge how concerned we should be.

References

1. World Health Organisation. Aspartame hazard and risk assessment results released (news release. 13 July 2023. Retrieved 14 July 2023).
2. Riboli E, Beland FA, Lachenmeier DW, et al. (2023). Carcinogenicity of aspartame, methyleugenol, and isoeugenol. *The Lancet Oncology*. doi:10.1016/S1470-2045(23)00341-8.