

**PERUBAHAN SENSASI RASA PENGECAP ASAM, ASIN,  
MANIS, PAHIT, UMAMI, PEDAS DAN PENINGKATAN  
KADAR MALONDIALDEHID (MDA) SERUM  
PADA PEKERJA RADIOGRAFI**

***CHANGES IN TASTE SENSATION OF SOUR, SALTY, SWEET,  
BITTER, UMAMI, SPICY AND INCREASING LEVELS OF  
MALONDIALDEHYDE (MDA) SERUM ON RADIOGRAPHERS***

**ABSTRACT**

**Background.** Radiation used for any purpose would certainly contain the potential danger to humans. Radiographers are given the task, authority and responsibility by the competent authority to conduct radiography and imaging in Health Services unit. In a study on the effects of radiation on cancer patients is known to cause an increase in bitterness and metal taste [in cancer patients] which leads discomfort in the oral cavity. **Purpose.** Determine the effect of radiation on radiographers to changes in the sensation of sour, salty, sweet, bitter, umami, spicy and levels of malondialdehyde (MDA) serum. **Method.** This type of research is observational research laboratory using Post Test Control Study. The sample was selected by simple random sampling of 7 peoples who have been working for 5 years in the laboratory and radiographic hospital in Surabaya. **Result.** Based on the results of statistical tests, showed that there was no differences in the sensitivity of all taste between the group tested and shown with significance value for the sour taste of 0.550, the saltiness of 0.775, the sweetness of 0.294, the bitter taste of 0.065, umami taste of 0.705, and a sense of spicy amounted to 0.319 ( $p > 0.05$ ), but there is a significant increase in levels of serum MDA and shown with significance value of 0.065 MDA levels ( $p > 0.005$ ). **Conclusion.** There is no changes in taste sensitivity for sour, salty, sweet, bitter, umami and spicy; but there are significant increased level of MDA serum in the radiographers compared to the control group.

**Keyword:** radiographers, taste sensations, serum MDA levels.