Food consumption and head and neck cancer in three Brazilian capitals - InterCHANGE study

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BACKGROUND: In Brazil, it has been estimated 11,140 new cases of oral cavity cancer in men and 4,350 in women, 6.360 new cancer cases of larynx in men and 990 in women (INCA, 2016). Risk factors for oral cancers are smoking, alcohol and HPV and dietary habits. Some studies show a possible protective role of certain dietary elements on oral cancer carcinogenesis (MARCHIONI, et al, 2007).
HYPOTHESIS: Consumption of foods with antioxidant properties can reduce the risk for head and neck cancer. **METHODS:** This research is part of a multicenter study organized by the International Agency for Research on Cancer (IARC), (http://interchange.iarc.fr/). In this study, we will analyze the cases and controls recruited in three Brazilian cities: Goiania, Vitoria and Sao Paulo. This study analyzed dietary intake, socio-demographics, smoking and alcohol consumption and BMI status at diagnosis.
The foods studied were: vegetables; raw and green leafy vegetables; broccoli, cabbage, kale; carrot; fresh fruit; natural fruit juice; apples or pears; citrus fruits (orange, lemon, tangerine); fresh tomatoes; bananas; beans and rice. To learn the frequency of consumption of these foods quantitative variables were created, in which answer to these foods are: never equal to zero; less than once per month and 0.033; 1-3 times per month 0.066; once or twice a week and 0.214; on most days, but not every day 0,741; every day 1. The differences between cases and controls in the three capitals were analyzed by Pearson Chi-Square test. **RESULTS:** Most of the cases occur in men and they are aged 40 and 59, except in São Paulo than most you over 60 years old. In all centers the cases incomplete primary education, as the most frequent cases are smokers and alcohol consumption, except for Goiânia. Fresh and citrus fruits (orange, lemon, tangerine) consuming was significantly different among cases and controls in three cities. Goiânia had a diet with the highest consume of fresh food. For BMI, all cases in the three capitals found to be eutrophic (18.5 to 24.99 kg/m²) at diagnosis. These are preliminary descriptive results of these case control study, more detailed analysis will follow.