

**THE POTASSIUM REFERENCE VALUE IN BLOOD IN INHABITANTS OF BRAZIL
USING EDXRF TECHNIQUE**

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In this investigation, we intend to determine potassium levels in human blood aiming to study in more details the common deficiencies in Brazilian population helping their diagnostic well as to facilitate the interpretation of data deriving from clinical practice. The potassium takes part in the human being metabolism and it is very important for preservation of the osmotic and acid-base equilibria of human fluids, so its variations are generally associated to pathological processes. The objective of this study is the establishment of reliable potassium reference value in blood, using EDXRF technique, with emphasis on the statistical treatment. The samples came from Blood Banks from different parts of Brazil. The biological samples were obtained from a select healthy group (male and female blood donors), following the procedure conventionally establish for blood donation. The influence of sex and age was evaluated considering several range for age (18-20, 21-30, 31-40, 41-50, ³ 51 years). The result is presented following a descriptive statistics procedure, which includes the evaluation of mean, standard deviation, median and mode. This statistical treatment make possible the comparison with data derived for different population groups. These results show small differences when a comparison is performed in function of age and sex emphasizing the necessity to adopt ranges.

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