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DEVELOPMENT OF METHODS POR NAL LINE TY OF SCIENCE THE ANALYSIS OF BIOPLUS SYRUP, FOX 376 BULAWAYO THABARWE

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BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENTS FOR

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## **ABSTRACT**

The Bioplus label claim reads:

Each 30ml contains: caffeine anhydrous (trimethylxanthine) 270mg, thiamine Hcl ( $B^1$ ) 16mg, riboflavin ( $B^2$ ) 11mg, nicotinamide ( $B_3$ ) 42mg, pyridoxine Hcl ( $B_6$ ) 9mg, cyanocobalamin ( $B_{12}$ ) 26mcg, D-pantothenol 11 mg, calcium citrate 180mg, calcium gluconate 900mg, methylhydroxybenzoate 0.09% m/v

 $\overline{\mathbf{v}}$ , and alcohol 10%  $\underline{\mathbf{v}}$  v.

The study was set to develop analytical methods for the quality control of the drug. The methods which are currently being used are slow and inefficient. High performance Liquid Chromatography methods, which give simulteneous determinations of some of the actives, were developed. Simulteneous determination of actives means the methods are faster. They were also proved to be more efficient.

Main objective in HPLC methods was to prepare standards, with mixed actives, of similar composition as that of the sample. Injection of standard and then sample afterwards gave identical peaks thus enabling calculations of % OSA hence mg/30ml of each active in the sample.