

# A CASE OF A WEIGHT LOSS “FOOD SUPPLEMENT” ADULTERED WITH SIBUTRAMINE

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**INTRODUCTION:** According to ANVISA, food supplements are not medicines, that is why they are not recommended to treat, prevent or heal any pathology. Documents like RDC N° 240/2018 and IN N° 28/2018 regulate the sale and distribution of this products without the need of health registration. However, it has been common to see food supplement advertisements to help the treatment of some health conditions, like obesity. **OBJECTIVE:** The aim of this work was to analyze the composition of three samples of a so-called “slimming” supplement, sold in the state of Santa Catarina. **MATERIAL AND METHODS:** The samples analyzed were NF Traditional, NF Turbo and NF Action. 20 capsules from each sample were used to determinate the mean weight (MW) and relative standard deviation (RSD) and 10 capsules were subjected to methanol dynamic maceration 1:10 (m/v), three times for 30 minutes. The analytical techniques applied were thin layer chromatography (TLC) using standards for Sibutramine, Fluoxetine and Bupropion. TLC was revealed with Dragendorff. As a more sensitive analyses, HPLC-DAD was used. **RESULTS AND CONCLUSION:** Regarding the result obtained in TLC, it was observed a spot in the R<sub>f</sub> near to 0,85 for NF Traditional, what was related to sibutramine standard spot. To confirm the results, HPLC-DAD analyses were made. Evaluating retention time and UV profile, it was possible to infer the presence of sibutramine in the sample. Sibutramine is a special control medicine from serotonin reuptake inhibitors (SSRIs) group. This compound identification in a food supplement so-called “natural”, violates Brazilian health law and go against article 273 of the Penal Code which describes the act of adulterating products intended to therapeutic or medicinal purposes, being a practice that injures customers health and safety.

**Key words:** Chromatography, Food supplement, Sibutramine.

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