tablets, in Japanese Pharmacopeia (JP), employed water as dissolution medium. Additionally, there is diversity in chromatographic analytical methods to quantification the ATV dissolved.
In this context, the aim of the present work was to compare chromatographic conditions, dissolution mediums, and release profiles of four brands of 20 mg ATV tablets.
In all experiments, 4 ml of dissolution sample was withdrawn at 2.5, 5, 10, 15, 20, 30 and 40 min without reposition of medium. The samples were assayed in two HPLC conditions.
The dissolution profiles of the innovator (RP) and drug multisource products (identified A to C) were compared using water and phosphate buffer pH 6.8 as dissolution mediums (900 ml, paddle method, at 37ºC and 75 rpm). In addition, Similarity Factor (*f2*) was determined.
The results showed not significant statistic difference between the two chromatographic conditions for each brand.
The dissolution release was similar for brands A and B in both mediums, whereas in buffer was greater than in water medium for RP and brand C. With respect to the f2 factor, all the multisource products are not similar to the RP in both mediums.

Caffeine quantification in dietary supplements by fluorescence using bovine serum albumin.

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Caffeine (1,3,7-trimethylxanthine; CF), is a substance found naturally in the leaves, beans and fruits of a variety of plants. It is regularly consumed by a large percentage of adults, although in Argentina in recent time, young people have been added to this group. Attending to the health risks, many countries have started action to establish the regulatory boundaries around CF.
A new methodology for the determination of caffeine based on the fluorescence quenching of Bovine serum albumin (BSA) is proposed. When the alkaloid CF is presents (quencher), the protein's fluorescence emission is diminished. The diminution of the signal is caffeine concentration proportional. The effects of experimental parameters were investigated by univariation assays, including buffer nature and pH, surfactants nature and its concentration. Under optimum experimental conditions, a detection and quantification limits of 1.9 and 6.4 mg l^{-1} were obtained, respectively. A linear range was achieved varying from concentrations of 6.4 to 94 mg l^{-1} (r^2 = 0.997).
Satisfactory recovery values (≥ 95%) were obtained using the method of standard addition, confirming the feasibility of this method for caffeine determination in energizing dietary supplements and energy drinks. In order to obtain the known advantages of on-line procedure, a flow injection manifold will be sketched and quality analytical parameter will be evaluated.