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A Comprehensive Study on Determination of Iron in 'Iron' Tablets by Redox Titration Method

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Abstract: *This study on determination of iron in iron tablet by redox titration is investigates the iron content in an iron tablet using a redox titration method, where the ferrous ions within the dissolved tablet are oxidized to ferric ions by a standardized potassium permanganate solution, allowing for the precise quantification of iron based on the volume of titrant required to reach the endpoint, as indicated by a persistent pink colour change; this method provides a reliable assessment of the actual iron content in the tablet compared to the label value Iron is an essential trace element, required for haemoglobin formation and the oxidative process of living tissues. A comparative study of the determination of iron in iron tablets was carried out using Redox titration on five samples of capsule containing iron. The capsules were analyzed using Redox titration on five of the samples containing iron content inform of ferrous fumarateBase on the results for the analysis of all the sample it can be concluded that Maxiron have the highest percentage of iron which is best supplements for adult lacking high percentage of iron. However, Astyfer has the lowest amount of iron which is the best supplement for infants who require very low amount of iron supplements.*

Keywords: Iron, Tablet, Redox, Supplement.

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