

Cancer is one of the major causes of death in the present world. As the research of this disease has progressed, the attention of some scientists has been focused on a metabolism of iron and how it can be used to fight these rapidly proliferating invasive cells and stop their spreading. This work should serve as a brief review of iron metabolic processes from the iron absorption from dietary resources and recycled cell iron, to its usage in heme- or Fe/S clusters-proteins and storage in a form of ferritin, while highlighting the points that differ in cancer cells. It also gives a modest overview on the regulatory pathways of iron uptake and use, and mentions iron metabolism disorders such as iron-depletion and overload. Simultaneously it is denoting possible differences that could be targeted in tumor treatment, and, at least but not last, the perspectives and future work that could bring a new methods and approaches to this matter.

Keywords: iron metabolism, iron, cancer, hepcidin