

## Iron: make new with old, a virtuous circle

The exploration of iron metabolism is an old topic of interest. Indeed, this metal has a significant impact on human health.

On the one hand, iron deficiency is the most common nutritional deficiency, with nearly two Billiards individuals worldwide suffering from insufficient iron supplies. On the other hand, iron overload is one of the most common genetically inherited diseases. Finally, very rare congenital anemia may lead to diagnosis wandering.

Iron deficiency is responsible for abnormal neurodevelopment in infants. Moreover, more and more scientific reports have evidenced that iron deficiency, even without anemia, is a risk factor in various diseases and is implied in the response and recovery after surgery.

Another point to consider is the fact that iron exploration is imperfectly realized worldwide. First, the choice of biomarkers is not so simple, and other conditions such as inflammation, or the time sampling during the day, may modify this choice.

Second, the threshold for interpretation of those biomarkers may vary among sources and according to the society that has made recommendations.

Finally, the treatment of iron deficiency has evolved during the last decade.

As a sum, we thought it is interesting to overview and update the actuality of iron in human health.

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