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## **Supplementary material**

**Supplementary table 1:** Contents of iron  $(\mu g/g)$  in rat erythrocytes as bounded to hemoglobin (F2).

Results expressed as mean  $\pm$  standard deviation, n = 4.

Group	Erythrocytes*
G1: non-fortified	158 ± 2
G2: FeSO <sub>4</sub>	$104 \pm 43$
G3: <sup>57</sup> Fe(III)-NPs	$^{\text{nat}}\text{Fe: }55 \pm 3$
	$^{57}$ Fe: $76 \pm 16$

**Supplementary table 2:** Contents of iron  $(\mu g/g)$  determined in rat serum as bounded to transferrin (F5). Results expressed as mean  $\pm$  standard deviation, n = 4.

Group	Serum*
G1: non-fortified	$0.45 \pm 0.02$
G2: FeSO <sub>4</sub>	$0.97 \pm 0.01$
G3: <sup>57</sup> Fe(III)-NPs	<sup>nat</sup> Fe: $0.24 \pm 0.07$
G3. Tre(III)-NTS	$57$ Fe: $0.62 \pm 0.28$

**Supplementary table 3:** Contents of iron  $(\mu g/g)$  determined in rat serum as bounded to ferritin-like species (F1 and F2). Results expressed as mean  $\pm$  standard deviation, n = 4.

Liver*	
F1	F2
30 ± 3	83 ± 7
$123 \pm 30$	132 ± 17
$^{\text{nat}}\text{Fe: }45 \pm 9$	natFe: 70 ± 15
$^{57}$ Fe: $117 \pm 5$	$57$ Fe: $84 \pm 3$
	F1 $30 \pm 3$ $123 \pm 30$ $and Fe: 45 \pm 9$