Iron Guide

DIETARY SOURCES of HEME IRON

Food	Milligrams of Iron
Oysters, 3 oz	8
Beef liver, 3 oz	5
Sardines, 3 oz	2
Beef, 3 oz	2
Pork, 3 oz	1
Chicken, 3 oz	0.5

Heme iron is well-absorbed and only slightly influenced by other nutrients

DIETARY SOURCES of NON-HEME IRON

Food	Milligrams of Iron
Breakfast cereals (fortified with 100% of the DV)	18
White beans,1 cup	8
Lentils, ½ cup	3
Spinach, ½ cup	3
Tofu, ½ cup	3
Kidney beans, ½ cup	2
Chickpeas, ½ cup	2
Tomatoes, ½ cup	2
Potato, flesh and skin, 1 medium sized	2
Cashew nuts, 18 nuts	2
Dark chocolate, 1 ounce	2
Egg, 1 whole	1

Non-heme iron absorption is strongly influenced by other foods and nutrients

Factors that increase non-heme iron absorption:

-co-consumption of meat/fish/poultry

-vitamin C

Factors that decrease non-heme iron absorption:

-calcium

-phytates (in rice, legume and grains)

Estimated Average Requirement (EAR) for Iron
Total number of milligrams (mg) recommended per day

	Males	Females
Birth to 6 months	**0.27 mg**	
7–12 months	**6.9 mg**	
1–3 years	**3 mg**	
4–8 years	**4.1 mg**	
9–13 years	**5.8 mg**	
14–18 years	**7.7 mg**	**7.9 mg**
19–50 years	**6 mg**	**8.1 mg**
51+ years	**5 mg**	
Pregnancy		**22 mg**
Breastfeeding		**6.5 mg**

-The numbers above reflect the amount of iron that needs to be consumed while adjusting for the low rates of iron absorption

-Typically anywhere from 15-35% of heme iron is absorbed and 2-20% of non-heme iron is absorbed

-The proportion of dietary iron absorbed is regulated by the size of the body iron store in healthy humans, if iron levels are low, absorption is markedly (several fold) increased

-The average menstruating women needs to absorb approximately 1.5 mg/day. There is marked inter-individual variation in menstrual losses, and a small proportion of women must absorb as much as 3.4 mg/day. Towards the end of pregnancy, absorption of 4-5 mg/day is necessary to preserve iron balance. Adult men need to absorb 1 mg/day to maintain iron balance.

Institute of Medicine (US) Panel on Micronutrients. Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc. Washington (DC): National Academies Press (US); 2001. 9, Iron. Available from: https://www.ncbi.nlm.nih.gov/books/NBK222309/

Monsen ER. Iron nutrition and absorption: dietary factors which impact iron bioavailability. J Am Diet Assoc. 1988 Jul;88(7):786-90. PMID: 3290310.