

IRON SUPPLEMENTS

A guide for midwives

Oral iron supplements are available in a range of formulations. Amount of elemental iron (iron available for absorption) and rate of absorption varies by formulation. The table below lists elemental iron content for a selection of popular oral formulations and estimated cost of treatment at a standard therapeutic dose of 100 mg elemental iron per day.

Information in this handout is based on best available sources and is as complete as possible. Cost estimates are approximate and based on listed prices at major retailers (2020).

FERROUS SALTS Inexpensive and well-absorbed, but associated with gastrointestinal side-effects. All formulations have similar rates of absorption and side effect profiles.

Formulation	Brand name / Manufacturer	Dose	Elemental iron/dose	Amt needed to reach 100 mg/day	One month treatment (100 mg/day) Quantity	Cost	Notes Other vitamins and minerals	Diet considerations
Ferrous Gluconate	Iron 50 mg Timed Release / Jamieson	50 mg	50 mg	2 capsules	1 bottle	\$11.65	Enteric-coated	V GF LF
	Ferrous Gluconate / Life	306 mg	35 mg	3 tablets	1 bottle	\$4.76	Enteric-coated	V GF LF SF YF
	Floradix Iron Tablet / Salus	25 mg	10 mg	10 tablets	3.75 boxes	\$82.46	B1, B2, B3, B6, B12, C, folic acid	V DF K YF
	Floradix / Salus	10 mL	10 mg	100 mL syrup	6 x 500 mL bottles	\$239.94	B1, B2, B6, B12	V K LF
	Floravit / Salus	10 mL	10 mg	100 mL syrup	4.25 x 700 mL bottles	\$233.70	B1, B2, B6, B12	Vg YF LF K
Ferrous Sulphate	Ferrous Sulfate / Life	300 mg	60 mg	2 tablets	2/3 bottles	\$5.99	Enteric-coated	V GF LF SF YF
	Ferrotrate / Nutrichem	137 mg	27 mg	4 capsules	1.3 bottles	\$37.69	C	Vg GF SF YF
Ferrous Fumarate	Palafer / Bausch	300 mg	100 mg	1 capsule	1 package	\$32.49		
	Palafer cf / Bausch	300 mg	100 mg	1 capsule	1 package	\$39.98	C, folic acid	
	Ferrous Fumarate / Life Brand	200 mg	65.7 mg	1.5 capsules	1/2 bottle	\$3.00		GF LF SF YF
	Fera-Pro / Replete Nutraceuticals	600 mg	150 mg	1 capsule	1/3 bottle	\$16.00	B12, C, folate, glycine	Vg DF GF
	Fera-Pro / Replete Nutraceuticals	350 mg	75 mg	2 capsules	2/3 bottle	\$29.00	B12, C, folate, glycine	Vg DF GF
	Fera-Pro / Replete Nutraceuticals	300 mg	30 mg	4 capsules	1.2 bottles	\$58.80	B12, C, folate, glycine	Vg DF GF
	Iron Factors / Natural Factors	87 mg	35 mg	3 capsules	1 bottle	\$17.67	B12, C, folic acid	

FERRIC SALTS Not as well-absorbed as ferrous salts.

Formulation	Brand name / Manufacturer	Dose	Elemental iron/dose	Amt needed to reach 100 mg/day	One month treatment (100 mg/day) Quantity	Cost	Notes Other vitamins and minerals	Diet considerations
Ferric Pyrophosphate	IRONsmart / Lorna Vanderhaeghe	20 mg	15 mg	7 capsules	4 bottles	\$76.60	B2, folic acid	Vg DF GF SF
	Ortho Iron / AOR	358 mg	30 mg	4 capsules	4 bottles	\$143.80	B6, B12, C, folic acid, zinc, copper	V GF
	Ortho Iron Vegan / AOR	284 mg	30 mg	4 capsules	2 bottles	\$71.90	B6, B12, C, folic acid, zinc, copper	Vg DF GF
	Hemoplex Liquid / Nu-Life	10 mL	10 mg	100 mL	6 bottles	\$187.32	B1, B6, B12, C, folic acid, riboflavin, niacinamide	V DF GF YF

ABBREVIATIONS

V Vegetarian	GF Gluten-free	WF Wheat-free
Vg Vegan	NF Nut-free	YF Yeast-free
⓪v NOT vegetarian	LF Lactose-free	K Kosher
DF Dairy-free	SF Soy-free	H Halal

Rx: Ferrous fumarate
200 mg
100 tabs
2X daily, between meals
Refill X2
midwife signature
registration #

Prescribing iron

Writing a prescription for over-the-counter products like iron or prenatal vitamins may allow for coverage by extended benefits plans and the Ontario Drug Benefits Program.

OTHER FORMULATIONS

Most are promoted as having fewer GI side effects than ferrous or ferric salts.

Formulation	Brand name / Manufacturer	Dose	Elemental iron/dose	Amt needed to reach 100 mg/day	One month treatment (100 mg/day) Quantity	Cost	Notes Other vitamins and minerals	Diet considerations
Chelated Iron / Iron Bisglycinate	Sisu Gentle Iron / Sisu	25 mg	25 mg	4 capsules	2 bottles	\$22.98	Enteric coated, folic acid	V DF GF SF
	Iron Bis-Glycinate 20 / CANPrev	~387 mg	20 mg	5 capsules	1.6 bottles	\$41.58	B6, B12, C, folic acid, magnesium, copper	VG DF GF SF WF
	Mild Iron / Life	~100 mg	28 mg	4 capsules	1.3 bottles	\$12.65	B12, C, folate	GF LF SF
	EasyIron / Platinum Naturals	~100 mg	18 mg	6 capsules	1.5 bottles	\$62.28	B6, B12, C, folate	DF GF YF
	Gentle Iron / Nature's Bounty	~100 mg	28 mg	4 capsules	1.3 bottles	\$12.72	B12, C, folate	
	Chelazome Iron / Trophic	125 mg	25 mg	4 caplets	1.3 bottles	\$16.18		VG DF GF SF WF YF
Carbonyl Iron	Ferro-C / Douglas Laboratories	~270 mg	27 mg	4 capsules	2 bottles	\$52.24	B6, B12, C, E, folate, riboflavin, thiamine, niacinamide	
	Carbonyl Iron/Pure Lab Vitamins	~122.5 mg	22.5 mg	5 capsules	1.7 bottles	\$39.02	C	V DF GF WF YF
Polysaccharide-Iron Complex	Bio-Ferra / Cyto-Matrix	5mL	20 mg	25 mL	2.5 bottles	\$73.73		VG
	FeraMAX 150 / BioSyent Pharma	150 mg	150 mg	1 capsule	1 package	\$34.00		VG
Combinations								
<i>ferrous fumarate iron citrate iron bisglycinate</i>	Iron Therapy/Nu-Life	145 mg	35 mg	3 capsules	1.5 bottles	\$42.53	B2, B6, B12, C, folic acid, lactobacillus acidophilus	VG DF GF NF SF YF
<i>ferrous succinate 250 mg liquid liver fractions (heme iron)</i>	Enzymatic Therapy Ultimate Iron Complex / Nature's Way	~335 mg	25 mg	4 capsules	1.3 bottles	\$25.99	B12, C, folate, liquid liver fractions	
Heme Iron	Proferrin / Colorado Biolabs	11 mg	11 mg	9 tablets	3 bottles	\$245.85	Derived from bovine hemoglobin	⊖v
Heme Iron	Opti-fer Alpha / Volo Healthcare	11 mg	11 mg	9 tablets	4.5 bottles	\$215.96	Derived from bovine hemoglobin, no gelatin	GF H
Non-heme Iron	Blood Builder / MegaFood	~166 mg	26 mg	4 tablets	1.3 bottles	\$72.27	B12, C, folate, beet root	VG DF GF SF K
Non-heme iron	Vitamin Code RAW Iron / Garden of Life	~417 mg	22 mg	5 capsules	5 bottles	\$112.45	B12, C, folate, organic fruit and vegetable blend, probiotics	VG GF K
Non-heme iron	Nova Scotia Organics Iron + Vitamin C / Naturally Nova Scotia Organics	~79 mg	9 mg	11 caplets	5.5 bottles	\$186.23	C, curry leaf and acerola berry extract	V

Maximizing iron tolerability

- Offer clients a lower starting dose (50-80 mg/day). Build to a higher dose (100-200 mg/day) over five days OR offer two weeks at lower dose and test for response. Increase dose PRN.
- While iron absorption is best when taken on an empty stomach, GI side-effects are reduced when taken with food.
- Taking iron before bed may reduce GI upset.

Maximizing iron absorption

- Take 200 mg of vitamin C for 30 mg of iron. Vitamin C is often added to iron supplements, but rarely in amounts sufficient to aid iron absorption.
- Avoid calcium within one to two hours of taking iron supplements (dairy, antacids, or other supplements).
- Avoid coffee and black tea for one to two hours after taking iron.
- Avoid enteric-coated supplements. Enteric coating decreases GI side-effects but also interferes with absorption.

Sources

Comparison of oral iron supplements. Pharm Lett. 2008;24(8):240811. | Fei C. Iron deficiency anemia: a guide to oral iron supplements. Clinical Correlations. 2015. Available from: <http://www.clinicalcorrelations.org/?p=8405>. | Guidelines and Protocols Advisory Committee. Iron Deficiency - Investigation and Management. British Columbia Medical Association, editor. British Columbia Ministry of Health Services; 2010. | Pavord S, Myers B, Robinson S, Allard S, Strong J, Oppenheimer C, et al. UK guidelines on the management of iron deficiency in pregnancy. Br J Haematol. 2012 Mar;156(5):588-600. | MIDIRS. Anemia in pregnancy, birth and afterwards for professionals. 2010.