

**TABLE 5.1** Nutrients and Their Best Food Sources

Supplement	Key Benefits for Fertility	Research Highlights	Best Food Sources	Suggested Daily Dose
<b>Vitamin E</b>	<ul style="list-style-type: none"> <li>• Protects egg and cell membranes</li> <li>• Reduces oxidative stress</li> <li>• Improves endometrial thickness and implantation potential</li> </ul>	<ul style="list-style-type: none"> <li>• Higher follicular fluid vitamin E linked to better egg quality and fertilization</li> <li>• Reduced oxidative damage in unexplained infertility</li> <li>• Improved endometrial thickness with supplementation</li> </ul>	Sunflower seeds, almonds, avocados, hazelnuts, olive oil, spinach, Swiss chard	100–200 IU/d of mixed tocopherols (avoid synthetic forms and soy oil derivatives)
<b>Nitric oxide</b>	<ul style="list-style-type: none"> <li>• Enhances blood flow to ovaries and uterus</li> <li>• Supports endometrial development</li> <li>• Improves implantation and follicular growth</li> </ul>	<ul style="list-style-type: none"> <li>• Improved endometrial thickness</li> <li>• Improved endometrial receptivity</li> <li>• Higher ovarian blood flow linked to better IVF outcomes</li> </ul>	Beets, beet juice, arugula, spinach, pomegranate, watermelon, garlic, dark chocolate, walnuts, almonds, pumpkin seeds	1–2 servings/d of nitrate-rich foods or <b>beet root extract</b> ; avoid nitrate salts or synthetic vasodilators
<b>Zinc</b>	<ul style="list-style-type: none"> <li>• Supports hormone balance (FSH, LH, estrogen)</li> <li>• Promotes oocyte development</li> <li>• Aids progesterone production and corpus luteum function</li> </ul>	<ul style="list-style-type: none"> <li>• Zinc deficiency reduces oocyte quality and fertilization, especially in women &gt;35</li> </ul>	Oysters, pumpkin seeds, grass-fed beef, lamb, lentils	15–30 mg/d of zinc picolinate or bisglycinate (avoid zinc oxide)

(continued)

**TABLE 5.1** Nutrients and Their Best Food Sources (*continued*)

Supplement	Key Benefits for Fertility	Research Highlights	Best Food Sources	Suggested Daily Dose
<b>Selenium</b>	<ul style="list-style-type: none"> <li>• Supports antioxidant defense (via glutathione peroxidase)</li> <li>• Improves embryo quality and fertilization</li> <li>• Supports thyroid and reduces miscarriage risk</li> </ul>	<ul style="list-style-type: none"> <li>• Higher follicular selenium linked to better IVF outcomes</li> </ul>	Brazil nuts (~90 mcg/nut), wild-caught fish, pastured eggs, sunflower seeds, organ meats	100 mcg/d of selenomethionine (avoid sodium selenite)
<b>Magnesium</b>	<ul style="list-style-type: none"> <li>• Regulates HPO axis and hormone production</li> <li>• Reduces inflammation and oxidative stress</li> <li>• Supports mitochondrial function and ATP in oocytes</li> <li>• Improves stress resilience and nervous system regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Supports progesterone production</li> <li>• Lower levels seen in unexplained infertility</li> </ul>	Pumpkin seeds, almonds, dark leafy greens, avocado, black beans, 72%+ dark chocolate	300–500 mg/d of magnesium glycinate, threonate, or malate (avoid magnesium oxide, aspartate, and glutamate)

ATP, adenosine triphosphate; FSH, follicle-stimulating hormone; HPO, hypothalamus-pituitary-ovarian; IVF, in vitro fertilization; LH, luteinizing hormone.