

TABLE 11.6 Supplements for Managing Celiac Disease and Non-Celiac Gluten Sensitivity

Supplement	Why It Helps	Typical Dose	When to Take
L-glutamine	Supports gut lining repair and reduces intestinal permeability ("leaky gut"), which is common in CD/NCGS and affects immune regulation	5–10 g/d	On an empty stomach or between meals
Zinc (picolinate or citrate)	Often deficient in CD; critical for immune function, hormone balance, and gut repair	15–30 mg/d	With meals (avoid taking with calcium or iron)
Vitamin D ₃ and K ₂	Essential for immune modulation and endometrial receptivity; deficiency is common in both CD and NCGS	2,000–5,000 IU/d D ₃ and 90–180 mcg K ₂ (MK-7)	With your largest fat-containing meal
Iron (if deficient)	CD often leads to iron deficiency anemia due to malabsorption	25–65 mg elemental iron/d (ferrous bisglycinate preferred for absorption)	Away from calcium, best with vitamin C
Magnesium (glycinate or citrate)	Depleted with chronic gut inflammation; supports hormone production, stress resilience, and blood sugar balance	200–400 mg/d	In divided doses, with or without food
Omega-3 fatty acids (EPA/DHA)	Anti-inflammatory; supports hormone signaling, immune balance, and endometrial health	2,000–3,000 mg/d combined EPA/DHA	With meals containing fat
Probiotic (high-quality, broad-spectrum)	Restores gut flora disrupted by gluten exposure and modulates immune tolerance	10–50 billion CFU/d	On empty stomach or as directed

(continued)

TABLE 11.6 Supplements for Managing CD and NCGS (*continued*)

Supplement	Why It Helps	Typical Dose	When to Take
Digestive enzymes (with DPP-IV)	Helps break down gluten peptides in accidental exposures; reduces symptom severity	1–2 capsules before meals (look for DPP-IV enzyme)	Prior to meals containing protein/gluten risk (these are not a replacement for a gluten-free diet in those with CD, but may help reduce symptoms after accidental exposure)
NAC	Boosts glutathione, reduces oxidative stress, and supports detoxification—key for women with chronic inflammation from gluten	600–900 mg 2×/d	Away from meals or midmorning/afternoon
B-complex (methylated)	B vitamin deficiencies (especially folate, B ₆ , B ₁₂) are common in CD; essential for methylation and fertility	1 capsule/d (with methylfolate and methylcobalamin)	With breakfast or lunch

CD, celiac disease; CFU, colony forming unit; DHA, docosahexaenoic acid; DPP-IV, dipeptidyl peptidase-4; EPA, eicosapentaenoic acid; MK-7, menaquinone-7; NAC, *N*-acetyl cysteine; NCGS, non-celiac gluten sensitivity.