Vitamin and mineral deficiencies are common with HIV infection and are associated with increased risk of disease progression and mortality. The following list includes micronutrients that have potential benefit for all persons living with HIV/AIDS.

<table>
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<tr>
<th>Vitamin/ mineral</th>
<th>Description</th>
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| Multi vitamin/ Mineral (1.5 tablets) | • Broad spectrum micronutrient supplement reduces the risk of deficiency.  
• Micronutrient deficiencies are common and associated with adverse outcomes. |
| Vitamin E (500iu) | • Antioxidant.  
• Protective against increased oxidative stress associated with HIV infection.  
• Protective against heart disease.  
• Deficiency associated with increased risk of disease progression and mortality.  
• Greater than 800 IU may be toxic. |
| Vitamin C (750 mg) | • Antioxidant.  
• Protective against oxidative stress.  
• Test tube studies show anti-viral activity.  
• Very high doses may cause diarrhea and increase oxidative stress. |

The following nutrients may be needed by individual with specific medical or dietary concerns.

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<tr>
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| Calcium (1250 mg) | • Important regulatory nutrient.  
• Critical for bone health.  
• Supplements required for those who cannot achieve recommended intake with diet. |  |
| Elemental Magnesium (250 mg) | • Prescribe to treat deficiency.  
• Deficiency common; associated with decreased immune function, anorexia, nausea.  
• Malabsorption, infection and alcohol use increase requirements  
• Important regulatory nutrient. |  |
| Zinc (50 mg 3 x day) | • Critical for immune function  
• Plays important role in growth, taste, and wound healing  
• Excess zinc will decrease immune function  
• Prescribe for deficiency |  |
| B vitamin complex (1 tablet) | • Additional B vitamins are important for people who use pharmaceutical or street drugs or alcohol and for people who have acute opportunistic infections and/or fevers |  |
| Selenium (150 mcg) | • Antioxidant.  
• Critical to immunity.  
• Trend to progressive depletion with disease progression.  
• Deficiency is strongly associated with increased risk of mortality. |  |
| Iron (200 mg) | • Treat iron deficiency anemia |  |
Complementary Therapies
Complementary therapies may be beneficial in treating symptoms of HIV disease or drug-related complications, and improving quality of life and sense of well-being. Although there is little documented evidence of clinical effect there is a wealth of anecdotal evidence that supports the use of complementary therapies in dealing with progressive HIV disease.

<table>
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<tr>
<th>Therapy</th>
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| Digestive Enzymes (3 x day)    | • Lactase enzyme has proven benefit in treatment of lactose intolerance.  
  • General digestive enzymes have anecdotal evidence of benefit in treatment of malabsorption/diarrhea. |
| Glutamine (10 g)               | • Amino acid.  
  • Maintains health and function of intestinal cells and immune cells.  
  • May support maintenance of body cell mass.  
  • Effective treatment for diarrhea.  
  • Potential treatment for wasting. |
| Chromium (200 mcg)             | • Co-factor in glucose metabolism.  
  • Potential benefit in treatment of hyperglycemia. |
| NAC (500 mcg)                  | • Potential to raise glutathione levels.  
  • Glutathione is a powerful antioxidant that has a trend to decline.  
  • Prevents viral replication in vitro.  
  • May have a role in prevention/treatment of wasting. |
| Carnitine (100 mg)             | • Role in metabolism of fatty acids.  
  • Deficiencies noted in HIV.  
  • May help lower triglycerides and improve myopathy  
  • Over the counter forms of carnitine are not as effective as prescription form. |
| Essential Fatty Acids (1 g)    | • Omega-3 fatty acids may help lower triglycerides and increase immunity.  
  • GLA (e.g. Evening Primrose Oil) may improve skin disorders. |
| Whey Protein Powder (approx. 1 oz) | • Ongoing research suggests potential benefit in treatment/prevention of wasting.  
  • May increase glutathione levels. |
| Alpha Lipoic Acid (thiotic acid)(100 mg) | • Antioxidant.  
  • May improve liver function and peripheral neuropathy.  
  • Regenerates glutathione.  
  • Inhibits viral replication in vitro. |
| Milk Thistle (150 mg 3x/day)   | • Promotes repair and regeneration of liver cells.  
  • Benefits for co-infection with hepatitis. |
| Kava Kava (150 mg 3x day)      | • Anti-anxiety. |
| Co enzyme Q10 (40 mg)          | • Antioxidant.  
  • May be protective in terms of cardiovascular disease.  
  • Rising incidence of cardiovascular disease in HIV infection due to medications. |
| Acidophilus (2 tablets 3 daily) | • naturally occurring intestinal microorganisms which aid digestion and produce vitamins for the body which are often deficient in HIV, often due to use of antibiotics, prophylactics and in those with candida albicans.  
  • can help to prevent candida overgrowth, digestive tract damage and malfunction, and diarrhea.  
  • may also prevent infections such as MAC, Cryptosporiorisis or CMV from taking hold in the intestines, both by competing for space with the pathogens in a way which keeps them from colonizing the intestines also by producing natural antibiotics and anti-parasitals. |