### Table 3: Micronutrients of Concern in Adults Living with Obesity

<table>
<thead>
<tr>
<th>Micronutrient</th>
<th>Screen for Deficiency Risks</th>
<th>Drug or Nutrient Interactions</th>
</tr>
</thead>
</table>
| **Vitamin D** | 1. Elevated adiposity  
2. Medical conditions associated with fat malabsorption:  
• Crohn’s disease  
• Ulcerative colitis  
• Celiac disease  
• Liver disease  
• Cystic fibrosis  
• Short-bowel syndrome  
3. Previous bariatric surgery (RYGB, SG, BPD, DS)  
4. Low intake of calcium-rich foods  
5. Limited sun-light exposure (i.e. Night-shift workers, wearing long-sleeved clothing, northern climate)  
6. Darker skin pigmentation |  
• Corticosteroids  
• Orlistat  
• Cholestyramine  
• Phenobarbital  
• Phenytoin |
| **Vitamin B12** | 1. Elevated adiposity  
2. Medical conditions:  
• IBD (Crohn’s disease, ulcerative colitis)  
• Type 2 diabetes (long-term use of metformin)  
• GERD  
• Positive Helicobacter pylori  
• Pernicious anaemia  
• Alcoholism  
3. Restrictive eating patterns:  
• Vegetarian eating patterns  
• VLCD/meal replacements  
• Lower carbohydrate intake  
4. Previous bariatric surgery (LAGB, RYGB, SG, BPD, DS) |  
• Metformin  
• Proton-pump inhibitors |
| **Iron** | 1. Elevated adiposity  
2. Medical conditions:  
• Crohn’s disease  
• Ulcerative colitis  
• Celiac disease  
• Liver disease  
• Peptic ulcers  
• Chronic kidney disease  
3. Restrictive eating patterns:  
• Vegetarian eating patterns  
• Low protein intake  
• VLCD/meal replacements  
4. Frequent blood donors  
5. Blood loss (menstruation, GI tract bleeding)  
6. Previous bariatric surgery (LAGB, RYGB, SG, BPD, DS) |  
• Interactions with calcium, polyphenols (coffee/tea)  
• Excessive zinc intake (lozenges)  
• NSAIDs  
• Proton-pump inhibitors  
• H2 blockers |