Women’sMV™ Formula

Goal
Fill the inadvertent nutritional gaps left from food alone to allow the body to function at full potential as opposed to down regulating as a result of often unavoidable dietary limitations in women younger than 50 years of age who are not pregnant.1 This formula specifically addresses this gender and age group who are seeking to support health by ingesting a superiorly formulated multivitamin and mineral dietary supplement (MVM) when compared to the typical under-formulated mass market MVM products. Very active females from age 12-65 should use the ActiveMV. See the previous opening section, dotFIT Multivitamin and Mineral for formulation and manufacturing differences in mass market ingredient forms, delivery systems, etc. including references.

Rationale
This formula was designed to address specific needs of non-pregnant females up to age 50.2 3 Most vitamin and mineral needs remain the same for males and females in this age group. Special needs relate more to life stage, diet type, activity level and body size. In reference to the later, the Dietary Reference Intakes (DRIs) for certain nutrients among women are slightly less than men.3 Special needs generally include slightly higher levels of iron and other common dietary shortfalls more specific to women such as calcium, Vitamins A, C, and E, folate, magnesium, fiber and Vitamin K.4 5 Therefore, this formula is designed to deliver these nutrients in proper bioavailable forms which ideally complement the dotFIT SuperCalcium formula for those not meeting calcium recommendations for bone health, including the majority of females and approximately 50% of males.6

Iron is usually adequate in U.S. diets but insufficiency can be common in females of this age group.7 This formula contains 10 mg of iron to help correct common marginal intakes especially in exercisers trying to achieve low body fat.8

B vitamins
The Women's formula contains optimal doses and forms of folate (levels associated with protective effect on cognition in women9), Vitamins B6 and B12.10 11 12 13 14

Vitamin D, K and Boron
Included are proper amounts of health and bone-building nutrients Vitamin D,15 16 and the two essential forms of Vitamin K17 18 While K1 and K2 have similar and unique properties, K2 (menaquinone) has only recently emerged as serving an important role in vascular and bone health. Calcium and Vitamin D from food and supplements are complemented with vitamin K2 due to its recognized role as a "calcium chaperone (getting dietary calcium to the right places in the body) and the facilitator of Vitamin K’s cardiovascular system protective role,“19 20 including K2's potential to improve arterial stiffness in women.21 Boron is included to support overall bone health in synergy with all other ingredients, especially in facilitating the role of Vitamin D.22

Magnesium
Magnesium is involved in more than 300 biochemical reactions of the body,23 especially those that are involved in energy metabolism and neurotransmitter synthesis.24 As mentioned, female diets are notoriously low in this important mineral.25 26 27 28 Low magnesium levels common in all U.S. diets have been associated with muscle weakness and sleep problems.29 30 In fact, magnesium supplementation in the elderly has been shown to improve both physical performance and sleep.29 30 Magnesium in this formula complements the typical American female diet to help achieve desired magnesium levels. Additionally, this formula works synergistically with the dotFIT SuperCalcium, which also contains magnesium, thus keeping total intake in the safe optimal nutrient range. The formula contains both the oxide and citrate form of magnesium for greater bioavailability as compared to other forms.31 A recent meta-analysis
showed that subjects with higher dietary magnesium intake (closest to the RDA) seem to have a protective effect for cancer, especially colorectal cancer among females.  

In line with the dotFIT position on lifetime use of a complete MVM, Regan L Bailey et.al. demonstrated that long term (>3 yrs) MVM use (as opposed to multivitamins alone) significantly reduced cardiovascular disease (CVD) mortality in women without history of CVD events. Long-term multivitamin use alone (>5yrs) has been associated with a 30-41% lower likelihood of heart attacks in women. The longer the use, the lower the risk.

**Typical Use**

- For use by women 13-50 years of age not using the ActiveMV Formula
- Non-pregnant females
- One tablet per day before or after main meal with fluid

### Supplement Facts

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A (as Beta Carotene and Acetate)</td>
<td>6,000 IU</td>
<td>120%</td>
</tr>
<tr>
<td>Vitamin C (as Ascorbic Acid and Calcium Ascorbate)</td>
<td>300 mg</td>
<td>500%</td>
</tr>
<tr>
<td>Vitamin D-3 (as Cholecalciferol)</td>
<td>1,000 IU</td>
<td>250%</td>
</tr>
<tr>
<td>Vitamin E (as D-Alfa Tocopheryl Succinate)</td>
<td>100 IU</td>
<td>333%</td>
</tr>
<tr>
<td>Vitamin K (as Phytomenadione K1 and Menaquione K2)</td>
<td>50 mcg</td>
<td>63%</td>
</tr>
<tr>
<td>Vitamin B1 (as Thiamine Mononitrate)</td>
<td>6 mg</td>
<td>400%</td>
</tr>
<tr>
<td>Vitamin B2 (as Riboflavin-5 Phosphate)</td>
<td>1.7 mg</td>
<td>353%</td>
</tr>
<tr>
<td>Vitamin B3 (as Niacinamide)</td>
<td>20 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin B6 (as Pyridoxal 5-phosphate)</td>
<td>2 mg</td>
<td>100%</td>
</tr>
<tr>
<td>Folic Acid</td>
<td>400 mcg</td>
<td>100%</td>
</tr>
<tr>
<td>Vitamin B12 (as Methylcobalamin)</td>
<td>10 mcg</td>
<td>167%</td>
</tr>
<tr>
<td>Biotin</td>
<td>100 mcg</td>
<td>83%</td>
</tr>
<tr>
<td>Vitamin B5 (D-Calium Pantothenate)</td>
<td>15 mg</td>
<td>150%</td>
</tr>
<tr>
<td>Iron (as Iron Fumarate)</td>
<td>10 mg</td>
<td>56%</td>
</tr>
<tr>
<td>Iodine (from Kelp)</td>
<td>100 mcg</td>
<td>65%</td>
</tr>
<tr>
<td>Magnesium (as Oxide and Citrate)</td>
<td>100 mg</td>
<td>25%</td>
</tr>
<tr>
<td>Zinc (as Zinc Citrate)</td>
<td>12 mg</td>
<td>80%</td>
</tr>
<tr>
<td>Selenium (L-Selenomethionine)</td>
<td>50 mcg</td>
<td>71%</td>
</tr>
<tr>
<td>Chromium (as Chromium Picolinate)</td>
<td>50 mcg</td>
<td>42%</td>
</tr>
<tr>
<td>Boron (as Boron Citrate)</td>
<td>1 mg</td>
<td>*</td>
</tr>
</tbody>
</table>

*% Daily Value not established.
References

16. Yayuan Zheng, Jianhong Zhu, Manru Zhou, Liao Cui, Weimin Yao, Yuyu Liu Meta-Analysis of Long-Term Vitamin D Supplementation on Overall Mortality 1 Department of Pharmacology, Guangdong Medical College, Zhanjiang, China, 2 Institute of Respiratory Disease, Guangdong Medical College, Zhanjiang, China
Practitioner Dietary Supplement Reference Guide 2015 Update


