

Nutrition Needs for Older Adults: Vitamin B-6



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Introduction

Vitamin B-6 is a water-soluble vitamin that includes six different compounds. Vitamin B-6 has a role in metabolism, immune function, and is involved in over 100 different enzyme reactions in the body¹. While more research is needed, vitamin B-6 may play a role in maintaining cognition during aging².

Vitamin B-6 is very important for older adults. Approximately 24% of women and 31% of men are at risk of vitamin B-6 deficiency³. The good news is that vitamin B-6 is found in a wide variety of foods. Eating a balanced and varied diet can help older adults meet their vitamin B-6 needs.

How Much is Needed?

Adults aged 51 and older have higher vitamin B-6 needs than younger adults. Men need slightly more than women in this age group¹.

It is important to get the right amount of vitamin B-6. While vitamin B-6 deficiency is rare in the United States, some individuals may not consume the amount they need. Vitamin B-6 deficiency can cause anemia, cracks in the corners of the mouth, swollen tongue, depression, and poor immunity¹.

Toxicity is rare and does not typically come from food. When vitamin B-6 toxicity occurs, it is typically from too much supplementation. The tolerable upper limit level (UL) for vitamin B-6 in adults age 19 and older is set at 100 milligrams (mg)³.

Recommended Dietary Allowances (RDA) for Vitamin B-6¹:

| Life Stage Group | Men | Women |
|------------------|--------|--------|
| 51-70 years | 1.3 mg | 1.3 mg |
| 71+ years | 1.7 mg | 1.5 mg |

Food Sources of Vitamin B-6

Vitamin B-6 is found in a wide variety of foods, from meat to vegetables to fruits. Eating a varied diet is an ideal approach to consuming adequate vitamin B-6.

Food Sources of Vitamin B-6⁴:

| Food source | Amount per serving | mg per serving |
|-------------------|--------------------|----------------|
| Chickpeas | 1 cup | 1.1 mg |
| Beef liver | 3 ounces | 0.9 mg |
| Salmon | 3 ounces | 0.6 mg |
| Chicken breast | 3 ounces | 0.5 mg |
| Potatoes (cooked) | 1 cup | 0.4 mg |
| Banana | 1 medium | 0.4 mg |
| Cottage cheese | 1 cup | 0.2 mg |
| White rice | 1 cup | 0.1 mg |
| Onions | 0.5 cup | 0.1 mg |
| Spinach (cooked) | 0.5 cup | 0.1 mg |
| Watermelon | 1 cup | 0.1 mg |

Most older adults can get the vitamin B-6 they need through food alone. For those who cannot, vitamin B-6 is available in multivitamins, B complex vitamins, and single-vitamin supplements. It is important that older adults work with their health care team to determine whether supplementation is needed.

Strategies to Help Older Adults Optimize Intake Daily

The following strategies can help older adults optimize their intake of vitamin B-6:

When Shopping:

- Purchase foods naturally high in vitamin B-6, like meats, nuts, fruits, and vegetables
- Look for food items fortified with vitamin B-6, like cereals
- Read food labels for vitamin B-6 content

During Meal Preparation:

- Lunch and dinner are good opportunities for high vitamin B-6 foods, like meat
- Serve a variety of different foods throughout the week

At the Table:

- Offer beverages with vitamin B-6, such as milk
- Provide high vitamin B-6 snacks throughout the day



TAKE HOME MESSAGE:

Vitamin B-6 is an important nutrient for older adults. It is found in a wide variety of foods. Meeting vitamin B-6 needs can be done easily by eating a balanced and varied diet.

REFERENCES

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3. Dietary Reference Intakes (DRIs): Tolerable Upper Intake Levels, Vitamins. National Institutes of Health website. <https://www.ncbi.nlm.nih.gov/books/NBK56068/table/summarytables.t7/?report=objectonly>. Accessed November 19, 2019.
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