



# Food and Fitness

West Virginia Bureau of Senior Services

## Interaction of Warfarin with Vitamin K

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Blood clotting is an important part of our bodies function. Blood clots are formed in order to stop bleeding when cut or injured. However, clots can form when they are not needed and can cause serious life-threatening problems. Vitamin K plays a major role in the importance

of forming a blood clot. When certain medications are introduced to help prevent the formation of clots (that are not needed), vitamin K is a topic that must be discussed.



When an issue is presented with blood clotting, medication is a common way to help prevent reoccurring blood clots. One medication that is used is called warfarin (Coumadin). Warfarin is a blood thinning medication that is often used to thin out the blood to help prevent future blood clots. When taking warfarin, the amount of vitamin K in one's diet has to be watched and monitored closely. When someone has a history of developing blood clots, action is taken to prevent the unwanted blood clots that are forming within the blood stream.

Vitamin K and medication have to be watched and monitored very closely to make sure the blood is at the right consistency. Foods highest in vitamin K are most often the dark green vegetables. Not only is vitamin K found in foods, it is also naturally produced by the bacteria in the intestines.

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## Interaction of Warfarin with Vitamin K

(Continued from Page 1)

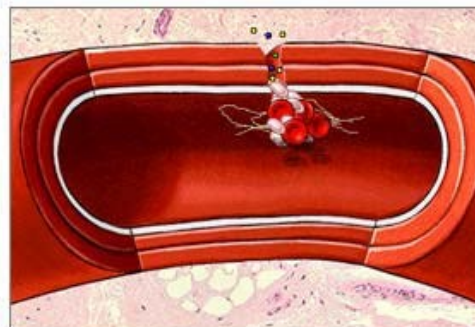
Vitamin K helps to make blood clotting factors that make blood thicker while warfarin is a blood thinning medication. Vitamin K has a crucial role to help with blood clotting. Vitamin K is used to bind calcium ions to activate the different blood clotting factors that are then used to help stop bleeding.

Two of the tests used that help determine an appropriate balance of vitamin K and warfarin are prothrombin time and international normalization ratio (INR). Prothrombin and INR tests are used to measure how long it takes for blood to clot (coagulate). Prothrombin time checks five different blood clotting factors. The prothrombin time can be used regularly to measure the effect of warfarin and for dosing purposes. It can also be used to check for low levels of vitamin K used to make blood clotting factors. The test can be taken by a vein or even from the fingertip.

When taking warfarin, it is key to maintain a consistent balance of vitamin K in your diet. A common misconception is once you start taking warfarin you should minimize the amount of vitamin K in your diet and this is not necessarily true. You will need consistency daily no matter if your typical diet is high, moderate or low in vitamin K. The first step should be to try to identify how much vitamin K you typically consume. Researching and understanding what foods are high, moderate, or low in the amounts of vitamin K is a great place to start (refer to page 3). Then, finding ways to try to keep the amount of vitamin K consistent everyday is the next step. The good news is in the event you eat too much or too little of foods with vitamin K, and you are reporting your prothrombin time or INR, your medicine can be regulated to allow for such instances. Always consult your doctor before making decision related to medication and vitamin K intake.

# Vitamin K

Vitamin K benefits blood clotting



Adult RDA:  
70 µg

Fat-soluble

ADAM.



## Vitamin K Content of Foods

\*Eating more than the serving size for a moderate or low Vitamin K food can make it a high Vitamin K food.  
 \*Unless otherwise noted, all foods are cooked; meat is roasted, fish is cooked with dry heat, vegetables are cooked from fresh, and fruit is raw.  
 \*This is a guide. Actual values may vary depending on product processing. Vegetables that are frozen then cooked may have higher Vitamin K values.  
 \*Values are rounded to the nearest whole number and may be averaged with similar foods in group.

High Vitamin K (more than 100 mcg)		
Food	Serving	mcg
Broccoli	½ cup	110
Brussels sprouts	½ cup	109
Endive, raw	1 cup	116
Greens, beet	½ cup	349
Greens, collard	½ cup	418
Greens, collard, frozen	½ cup	530
Greens, dandelion	½ cup	290
Greens, mustard	½ cup	210
Greens, turnip	½ cup	265
Greens, turnip, frozen	½ cup	425
Kale	½ cup	531
Kale, frozen	½ cup	573
Onions, spring or scallion, raw	½ cup	104
Parsley, raw	10 sprigs	164
Spinach	½ cup	444
Spinach, raw	1 cup	145

Moderate Vitamin K (25–100 mcg)		
Food	Serving	mcg
Asparagus	4 spears	30
Asparagus, frozen	½ cup	72
Blackeye peas, frozen	½ cup	31
Broccoli, raw	½ cup	45
Cabbage, chinese	½ cup	29
Cabbage, green	½ cup	82
Cabbage, raw	½ cup	27
Kiwi fruit	1 medium	31
Lettuce, green leaf	1 cup	97

Lettuce, romaine	1 cup	57
Noodles, spinach	½ cup	81
Okra, frozen	½ cup	44
Prunes, dried	5 each	25
Pickles, cucumber, dill or kosher dill	1 pickle	25

Low Vitamin K (less than 25 mcg)		
Food	Serving	mcg
Artichoke	1 medium	18
Avocado, raw	1 oz.	6
Beans, green or yellow	½ cup	10
Blackberries or blueberries	½ cup	14
Carrots	½ cup	11
Cauliflower, raw	½ cup	8
Celery, raw	½ cup	18
Cucumber, with peel	½ cup	9
Dried beans and peas, most types	½ cup	5-9
Grapes	½ cup	12
Lettuce, iceberg	1 cup	13
Mango	1 medium	9
Margarine-blend, tub, or stick	1 tbsp.	13-15
Mayonnaise	1 tbsp.	6
Nuts, cashews	1 oz.	10
Nuts, pine	1 oz.	15
Oil, olive	1 tbsp.	8
Oil, canola	1 tbsp.	10
Papaya	1 medium	8

Parsley, dried	1 tbsp.	18
Pear	1 medium	8
Peas, green	½ cup	19
Salad dressings	1 tbsp.	8-19
Sauerkraut	½ cup	15
Seeds, pumpkin	1 oz.	13
Soy milk	1 cup	7
Soybeans	½ cup	16
Sauce, pasta, spaghetti/marinara, ready-to-serve	½ cup	17
Tomato, raw	1 medium	10

Vitamin K Free (less than 5 mcg)		
Food	Serving	
Bread and cereal products	1 oz. or ½ cup	
Cheese, all types	1 oz.	
Eggs	1 large	
Fish and shellfish	3 oz.	
Fruit: whole, canned, or juice, not previously listed	1 each or ½ cup	
Meat and poultry, all types	1 oz.	
Milk and dairy products, all types	1 cup	
Nuts, not previously listed	1 oz.	
Seeds, sunflower	2 tbsp.	
Vegetables and vegetable juice not previously listed	½ cup	

Source: U.S. Department of Agriculture, Agricultural Research Service. 2008. USDA National Nutrient Database for Standard Reference, Release 21. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/ba/bhnr/nd/>; accessed September 2, 2009.

Source: Nutrition Data.com: Nutrition Facts and Information, <http://www.nutritiondata.com>; accessed September 2, 2009.



## Mineral—Fluoride

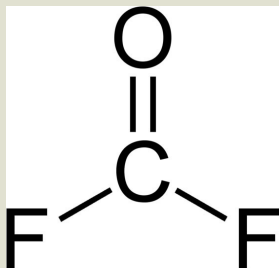
### Functions

Fluoride is created from the element fluorine. Fluoride is used for both bone and tooth formation. It is also important for helping to prevent dental carries (cavities) and tooth decay. Fluoride works by increasing the tooth's resistance to acid and inhibits the process where bacteria promotes cavities.

### Recommendations

Dietary References Intakes for 50 years and older are not determined.

Adequate intake (AI) for 50 and older is: 3 mg/d



### Food Sources

Teas

Seafood

Fluoridated Water

\*Some non food source for fluoride are fluoride gel, toothpaste, and certain mouthwashes.



### Deficiency

Dental carries (cavities) and tooth decay

### Toxicity

Toxicity to fluoride can cause fluorosis, vomiting, diarrhea, nausea, chest pain, itching, and pineal gland calcification.





## Green Bean Casserole

### Ingredients

- 3 tablespoons canola oil, divided
- 1 medium sweet onion, (half diced, half thinly sliced), divided
- 8 ounces mushrooms, chopped
- 1 tablespoon onion powder
- 1 1/4 teaspoons salt, divided
- 1/2 teaspoon dried thyme
- 1/2 teaspoon freshly ground pepper
- 2/3 cup all-purpose flour, divided
- 1 cup low-fat milk
- 3 tablespoons dry sherry, (see Ingredient Note)
- 1 pound frozen French-cut green beans, (about 4 cups)
- 1/3 cup reduced-fat sour cream
- 3 tablespoons buttermilk powder, (see Ingredient Note)
- 1 teaspoon paprika
- 1/2 teaspoon garlic powder



### Directions

- 1 Preheat oven to 400° F. Coat a 2 1/2-quart baking dish with cooking spray.
- 2 Heat 1 tablespoon oil in a large saucepan over medium heat. Add diced onion and cook, stirring often, until softened and slightly translucent, about 4 minutes. Stir in mushrooms, onion powder, 1 teaspoon salt, thyme and pepper. Cook, stirring often, until the mushroom juices are almost evaporated, 3 to 5 minutes. Sprinkle 1/3 cup flour over the vegetables; stir to coat. Add milk and sherry and bring to a simmer, stirring often. Stir in green beans and return to a simmer. Cook, stirring, until heated through, about 1 minute. Stir in sour cream and buttermilk powder. Transfer to the prepared baking dish.
- 3 Whisk the remaining 1/3 cup flour, paprika, garlic powder and the remaining 1/4 teaspoon salt in a shallow dish. Add sliced onion; toss to coat. Heat the remaining 2 tablespoons oil in a large nonstick skillet over medium-high heat. Add the onion along with any remaining flour mixture and cook, turning once or twice, until golden and crispy, 4 to 5 minutes. Spread the onion topping over the casserole.
- 4 Bake the casserole until bubbling, about 15 minutes. Let cool for 5 minutes before serving.

# Brain Exercise

Don't Just Exercise Your Body, Workout Your

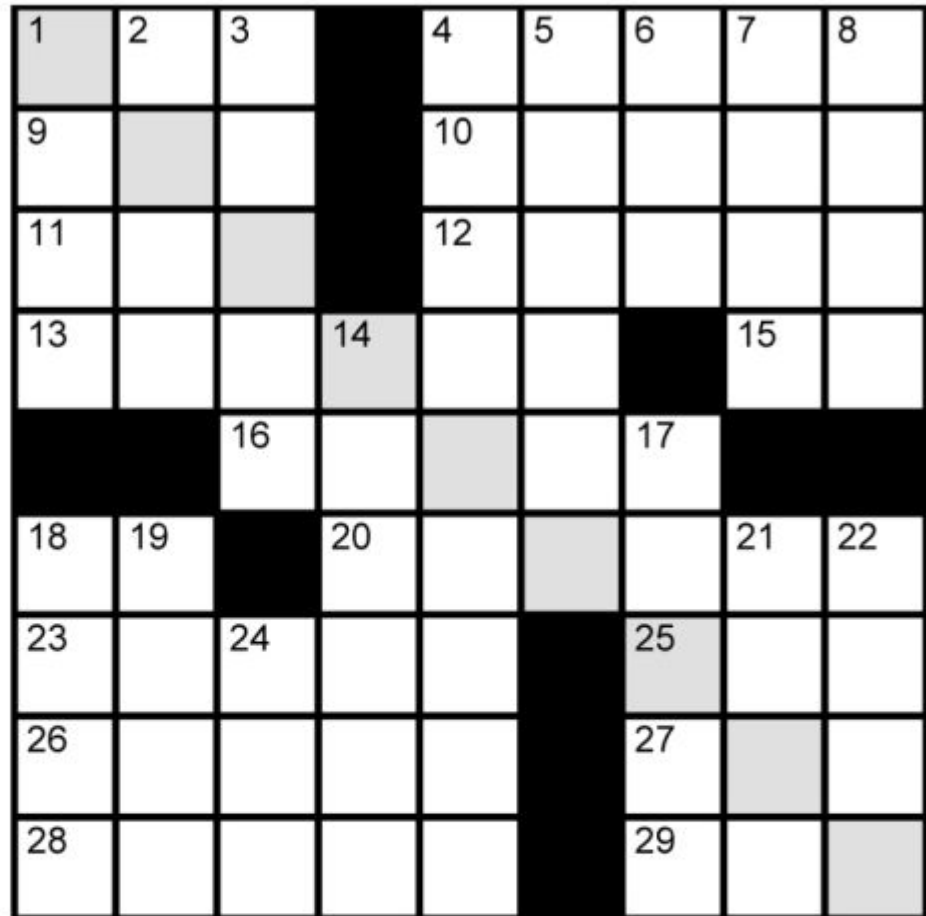
## Thanksgiving Guest Crossword

### Across

1. Wharton grad
4. Amount of hair
9. "Dig in!"
10. Devastation
11. "\_\_\_ Doubtfire"
12. Swelling
13. Texas oil city
15. Indefinite article
16. Not together
18. "\_\_\_ You Like It"
20. Boozers
23. Type of scallop
25. Neighbor of Wash.
26. "Farewell, mon ami"
27. Chill
28. Stands for
29. Acquire

### Down

1. Exec's note
2. Poet
3. Bewildered
4. Synonym finder
5. Navigation aids
6. "The Three Faces of \_\_\_"
7. Body



8. Diagnostic test
14. Ire
17. Flip-flop
18. Sandler of "Big Daddy"
19. Pro or con
21. Cleveland's lake
22. Aug. follower
24. By way of

*The title is a clue to the word in the shaded diagonal.*

# November 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		<b>1</b> <i>All Saint's Day</i>	<b>2</b> <i>Deviled Egg Day</i>	<b>3</b> <i>Men Make Dinner Day</i>	<b>4</b> <i>King Tut Day</i>	<b>5</b> <i>Guy Fawkes Day</i>
<b>6</b> <i>Saxophone Day</i>	<b>7</b> <i>Bittersweet Chocolate with Al-</i>	<b>8</b> <i>Cook Something Bold Day</i>	<b>9</b> <i>Chaos Never Dies Day</i>	<b>10</b> <i>Forget-Me-Not Day</i>	<b>11</b> <i>Veteran's Day</i>	<b>12</b> <i>Chicken Soup for the Soul</i>
<b>13</b> <i>Caregiver Appreciation Day</i>	<b>14</b> <i>World Kindness Day</i>	<b>15</b> <i>Clean Your Refrigerator Day</i>	<b>16</b> <i>Button Day</i>	<b>17</b> <i>Homemade Bread Day</i>	<b>18</b> <i>Occult Day</i>	<b>19</b> <i>National Adoption Day</i>
<b>20</b> <i>Universal Children's Day</i>	<b>21</b> <i>World Hello Day</i>	<b>22</b> <i>Go For a Ride Day</i>	<b>23</b> <i>Eat a Cranberry Day</i>	<b>24</b> <i>Thanksgiving Day</i>	<b>25</b> <i>National Parfait Day</i>	<b>26</b> <i>Shopping Reminder Day</i>
<b>27</b> <i>Pins and Needles Day</i>	<b>28</b> <i>French Toast Day</i>	<b>29</b> <i>Square Dance Day</i>	<b>30</b> <i>Stay At Home Because You Are</i>			

## NOVEMBER MONTHLY OBSERVATIONS

- Aviation History Month
- Child Safety Protection Month
- International Drum Month
- National Adoption Awareness Month
- National Caregivers Appreciation Month
- National Diabetes Awareness Month
- National Epilepsy Month
- National Model Railroad Month
- National Novel Writing Month
- Native American Heritage Month
- Peanut Butter Lovers Month
- Real Jewelry Month

# Talking Turkey

Portion  
Control

Gobble Gobble

Substitute

Dance It Off!



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## Health Motivator Talking Points

Did you know . . . ?

- Many traditional Thanksgiving foods are high in carbs. Have a small portion of your favorites and pass on the rest.
- Avoid sugary drinks. Don't drink your carbs and calories!
- Non-starchy vegetables (green beans or carrots) will fill you up and keep you from eating other foods high in calories and fat.
- Conversation is calorie-free. Spend time with relatives, reminisce with old friends and enjoy the company of others.
- Don't overeat. Eat slowly, mindfully and savor the flavors.
- Look for ways to cut down on fat and calories without sacrificing taste. Try swapping out ingredients in your recipes:
  - Use low-sodium, fat-free chicken broth in your mashed potatoes to add flavor and cut back on added butter or margarine.
  - Substitute applesauce for oil, margarine or butter in muffins and breads.

## Quick Club Activity

In honor of the holidays, let's dance the Mashed Potato and the Turkey Trot:

**The Mashed Potato:** Begin with feet slightly apart and turned inward. Turn feet outward as if mashing a potato with your feet. Repeat steps rapidly for 15 to 20 seconds.

**The Turkey Trot:** Take eight steps forward. Then, take one step forward, one step backwards. Repeat two times. Hop, kick, hop, kick. Stick your bottom out like a turkey with your wings flapping and close. Repeat these steps for 15 to 20 seconds.

## Sources

Academy of Nutrition and Dietetics. [www.eatright.org](http://www.eatright.org)

Turkey Trot. (2014, November 26). Retrieved June 5, 2015, from <http://www.adventuresindance.com/blog/tag/turkey-trot>

Instructional Video: How to do the Mashed Potato. (September, 2007). Retrieved June 5, 2015 from YouTube <http://www.youtube.com/watch?v=nzGPpPUMl94>.

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*Happy Thanksgiving!  
 To You And Your Family*

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## Brain Exercise Answers

