

MEET OUR NEW RESIDENTS



We welcome our four new pharmacy residents for the 2016-2017 year.

These residents have each graduated from an accredited pharmacy school and are licensed to practice pharmacy in Pennsylvania. They will spend a year in various pharmacy practice settings at our institution, including the Anticoagulation Clinic.

When coming to the clinic, please welcome the new faces you may see. These residents staff at the 30 Hope Drive Fingerstick Clinic.

Pictured above (l-r): Mark Attilio (Wilkes University), Regis Bender, Jr. (Duquesne University), Alexandra Kibler (University of Pittsburgh), Alex Yohe (University of Pittsburgh)



WHERE DO I ORDER MY PRESCRIPTION RENEWALS?

Please call the Anticoagulation Clinic to renew your warfarin prescription.

It is best to request this of us, as we have the most up-to-date, accurate dose of your warfarin.

Please allow 48 hours to allow the local pharmacy to prepare the prescription.

Please allow at least two weeks for your mail order pharmacy to process and mail to you.

Help us to help you! Thank you!



717-531-5312

COOKING WHILE TAKING COUMADIN[®] (WARFARIN)

Vitamin K Background

Vitamin K is a fat soluble vitamin that plays an essential role in the body's blood clotting pathway. This vitamin can be found in the foods people eat as well as produced naturally by our own intestinal bacteria. Vitamin K can reduce the anticoagulant effect of warfarin; due to this, it is important for patients to be knowledgeable about the different factors that influence the vitamin K content in the food. This is a complex topic with many factors that influence it. Patients must be able to eat the food that they enjoy to maintain their quality of life. Consistency is the most important thing for patients to remember. In order to maintain consistency, patients must be aware of the vitamin K content of the food they are eating and how the preparation of the food can influence the vitamin K content.

Fresh versus Frozen Vegetables

When the vitamin K content of frozen vegetables is compared to fresh vegetables it appears that frozen foods are usually higher in vitamin K. The fat-soluble nature of vitamin K makes it unlikely the freezing process would affect the vitamin K content. A more likely source of this extra vitamin K is that some frozen vegetables are made tastier by adding oils to them. This is the likely source of the higher vitamin K since we know that certain oils can contain a surprising amount of vitamin K. The extra vitamin K found in these frozen vegetables can be hard to spot given that many companies do not openly publish the vitamin K content of these frozen veggies. This raises an important question: how do patients avoid these frozen vegetables that offer a longer shelf life, convenience, and faster prep time? One solution is to simply be a savvy shopper. It is possible for patients to look at ingredient labels and choose frozen vegetables that are raw, do not contain extra oils, and are not pre-seasoned. Another option is that patients could prepare raw vegetables themselves for freezing that would give them better portion control and a better idea of the vitamin K content.

Cooked versus Raw food

There are many things to consider when it comes to the vitamin K content of cooked vegetables versus raw vegetables. The most obvious one is that some vegetables shrink when they are cooked. The best example of this is spinach, which is significantly smaller when its cooked compared to when it's raw. A cup of cooked spinach will have much higher vitamin K content than a cup of raw spinach. A simple rule to avoid underestimating the vitamin K content of cooked vegetables is to measure out your portions **before** cooking. This allows you to estimate the vitamin K content of a meal more accurately and can be easier to make each meal with a similar amount of vitamin K. This 'raw only' measuring system makes it easier to compare the vitamin K content of a salad to cooked meals with the same ingredients.

Cooking methods

There are many different ways to cook vegetables and some of them can increase the amount of vitamin K you are actually eating. Methods such as frying can add vitamin K due to various oils used in cooking. Steaming vegetables adds no vitamin K content to vegetables. Roasting or sautéing your vegetables, as minimal amounts of oils are used can also cut back on amounts of oils used.

Selection of Cooking Oils

In today's grocery store, there is a large variety of cooking oils. Not all cooking oils have the same amount of vitamin K. Although a small amount of oil is not likely to affect your INR, a large amount will decrease the INR, depending on the choice and cooking method. To avoid this, it is important to choose foods that have lower oil or "grease" content. If you are choosing to cook with oils it is important to count the vitamin K content in the oils. Once again, the most important thing is that your vitamin K content is consistent.

Cooking Oils and Vitamin K

Cooking Oil	Portion Size	Vitamin K Content	Important Points
Soy/Soybean oil	1 tablespoon (15 mL)	25 mcg	
Canola oil	1 tablespoon (15 mL)	10 mcg	
Olive oil	1 tablespoon (15 mL)	8.1 mcg	
Cocoa butter oil	1 tablespoon (15 mL)	3.4 mcg	
Walnut oil	1 tablespoon (15 mL)	2.0 mcg	
Sesame oil	1 tablespoon (15 mL)	1.8 mcg	
Flaxseed oil	1 tablespoon (15 mL)	1.3 mcg	
Palm oil	1 tablespoon (15 mL)	1.1 mcg	
Safflower oil	1 tablespoon (15 mL)	1.0 mcg	
Almond oil	1 tablespoon (15 mL)	1.0 mcg	
Sunflower oil	1 tablespoon (15 mL)	0.8 mcg	
Corn oil	1 tablespoon (15 mL)	0.3 mcg	May be mixed with olive oil or canola oil
Peanut oil	1 tablespoon (15 mL)	0.1 mcg	
Coconut oil	1 tablespoon (15 mL)	0.1 mcg	



5 FOODS YOU DIDN'T KNOW CONTAIN VITAMIN K

“How many servings of vitamin K foods are you eating per week?” It’s one of the questions we ask during a phone call or point-of-care visit with a pharmacist at the Anticoagulation Clinic. Consistent vitamin K consumption is very important when you are taking warfarin because fluctuations can cause low or high INR values, which can place you at risk for clots or bleeding.

You already know the common foods like broccoli, spinach, Brussels sprouts, cabbage, etc., are **high** in vitamin K. These foods have anywhere from 100 to 500 mcg of vitamin K per serving! We routinely ask about these foods because they are more likely to interact with your warfarin.

But what about other foods? Vitamin K is found in **many** different foods, but the amount varies significantly. Even foods that have low or moderate amounts of vitamin K (see below, barring guacamole) can affect your INR if eaten in **large** quantities. Here are some examples:

Food	Serving Size	Vitamin K Content	Take Home Points
Avocado	1 cup raw	Avocado=30-50 mcg	Watch portion sizes
Guacamole	2 tbsp.	50-1500 mcg	The other ingredients in guacamole have a major influence on the vitamin K content
Asparagus	4 spears, raw	50 mcg	In large amounts, asparagus may count as 1 serving of vitamin K food
Blueberries	1 cup fresh	30 mcg	Be careful during berry season – large amounts of blueberries may lower your INR
Cauliflower	1 cup fresh or frozen	20 mcg	Although it is <i>lower</i> in vitamin K, this white veggie can be deceiving!

So what does this mean for you?

- Please talk with your pharmacist if you are concerned about specific foods.
- If your INR suddenly becomes unstable, try to think of **new** foods you’re eating.
- Watch your serving sizes! This is especially true for foods that are high in vitamin K especially large amounts of guacamole.
- Always remember that **consistency** with how much vitamin K you are eating each day is crucial!

Want to learn more? Ask your pharmacist for a list of foods that contain Vitamin K!

One helpful website is: www.cc.nih.gov/ccc/patient_education/drug_nutrient/coumadin1.pdf

WARFARIN INFORMATION NEWSLETTER (W.I.N.)

SUMMER 2016

ART HAS ARRIVED!



(l-r, counter clockwise): Frank Herrmann, Amy Foltz, BethAnn Shields, Jonathan Frazier, Terri Zimmerman, and Paul Kocis



(l-r): Jonathan Frazier and BethAnn Shields

Come see our new paintings at the Hope Dr. location. Thanks go out to Claire DeBoer, Director of Center Stage, Arts in Healthcare, who arranged funding and commissioned local artist, Jonathan Frazier for the above paintings.

Pictured above are the Anticoagulation Clinic staff and artist, Jonathan Frazier.

You can order 8x10 artist-signed prints at our Hope Dr. location for a fee of \$25 through September 2016.

COOL SUMMER RECIPE:

GAZPACHO

6 servings (13mcg of Vitamin K per serving)

2 cups	Tomato, chopped
½ cup	Bell pepper, green, finely chopped
2 cups	Tomato Juice
1 & ½ cup	Onion, finely chopped
½ cup	Basil, fresh, minced
1 tsp	Garlic cloves, minced
½ cup	Cucumber, peeled, chopped
1 tbsp	Lemon juice
¼ tsp	Ground black pepper

Combine all ingredients in a mixing bowl and refrigerate. Serve chilled.

NUTRITION PER SERVING:

Calories	57
Fat	0.3 g
Cholesterol	0
Sodium	16 mg
Protein	1.5
Carbohydrates	10.9 gm
Fiber	11 gm



FIRST AID: OVER-THE-COUNTER PRODUCTS TO CONTROL MINOR BLEEDING

Patients on warfarin have an increased risk of prolonged bleeding from minor injuries like cuts, scrapes and abrasions. While you can take precautions to limit your risk of injury, accidents do happen. Therefore, it may be helpful to have one or more of the following products (also known as hemostat agents) in your home to control minor bleeding.

As a reminder, injuries that require emergency care include falls that involve hitting the head, nosebleeds lasting more than 30 minutes, animal bites and cuts that are deep or can't be held together with gentle pressure.

In addition, use of these products does not replace the need for proper cleansing and care of the wound.

Type of Product	Product Brand Names <i>"Store brand" products may be available at retail pharmacies</i>	How It Works	Directions for Use <i>Please refer to product information for detailed instructions</i>
Gauze-to-Gel	-Curad® BloodSTOP	Gauze turns into gel to seal the wound	-Place gauze over wound & apply pressure – product will change to gel -When bleeding stops, gel dissolves in water for easy removal
Gauze Sponge	-QuikClot®	Gauze sponge accelerates clotting when it comes in contact with blood	Place gauze over wound & apply pressure for several minutes to stop bleeding
Liquid Bandage	-New-Skin® -Nexcare® Liquid Bandage -KeriCure® Natural Seal	-Dries rapidly to form a flexible, waterproof seal that lets the skin breathe -Convenient to use on hard to cover areas	-Apply or spray a small amount of product on the wound & let dry; apply more as needed -Product will wear off naturally
Powder	-WoundSeal®	Absorbs the liquid portion of your blood to form a protective seal over the wound	- <u>Tear</u> open package, <u>pour</u> powder onto the wound to completely cover it & <u>press</u> down for 30 seconds – this will activate seal formation -Seal will fall off naturally

Cancer Institute Retail Pharmacy
717-531-1272
Hours:
9:00 a.m. - 9:00 p.m. (Monday - Friday)
9:00 a.m. - 5:30 p.m. (Sat/Sun/Holidays)

UPC Retail Pharmacy 717-531-8094
Hours:
8:00 a.m. - 5:30 p.m. (Monday - Wednesday)
8:00 a.m. - 6:00 p.m. (Thursday - Friday)
8:30 a.m. - noon (Saturday)
Closed Sundays and Holidays

You can obtain a ninety-day supply of
BRAND NAME COUMADIN at either of our
pharmacies for only \$10.



CALL ANTICOAGULATION CLINIC any time at
717-531-5312 or toll-free at 1-800-243-1455,
ext. 5312

Email us any time:
anticoagulationclinic@hmc.psu.edu

EDITOR'S NOTE: Let us know of any topics
of interest for our next edition.

**The Penn State Hershey Anticoagulation Clinic
is available for fingerstick appointments
Monday through Friday.**

**A simple fingerstick will give INR results right
away!**



Shown above is Natalie Treese, PharmD, taking a
fingerstick blood sample at the Nyes Rd office.

**NYES ROAD HOURS FOR POINT OF CARE
(Fingersticks)**

**First appointment: 8:00 a.m.
Last appointment: 3:00 p.m.**

**HOPE DRIVE HOURS FOR POINT OF CARE
(Fingersticks)**

**First appointment: 7:45 a.m.
Last appointment: 4:45 p.m.
Please call us if interested.**

**Call us any time: 717-531-5312,
Toll-free: 800-243-1455, ext. 5312**



PennState Health

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Anticoagulation Clinic, EC079

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(OR 1-800-243-1455 EXT. 5312)

Monday through Friday: 9:00 a.m. - 5:00 p.m.

In case of emergency, please call 911.

HOW ARE WE DOING?

Please send your comments to Lisa Barletta, MBA, RPh
(lbarletta@psu.edu), Director of Pharmacy, Outpatient Services

Editor: Amy Foltz, RPh

Contributors: Bethany Crouse, PharmD, Tyler Kennedy, PharmD
Candidate 2016, Kimberly Tran, PharmD Candidate 2016