



Metabolinks August 2013

Blood dots – Don't forget to do your blood dot for August. Also please make sure that you are putting a white sticker on the blood dot card and filling it out before you send it in.

Essential Fatty Acids – Taryn, Jen, Caroline and Dr Sirrs are currently conducting a study looking at essential fatty acid blood levels in the adult PKU population. Everyone will be having essential fatty acid levels drawn as part of their annual bloodwork. We will be asking you to participate in our study as there is currently no consensus among PKU clinics whether or not the levels are low, should we be consistently checking the blood levels or should we be supplementing. If you have not yet been asked to participate in the study and are interested please give us a call or send us an email.

Breath Test for PKU Adults - the purpose of this study is to gather information about how your body breaks down dietary phe. This study involves:

- 4 hour fast followed by 2 hour test (can be done first thing in the morning before breakfast, weekends are ok too).
- Drink a stable isotope (^{13}C), it is safe and normally present in our food.
- Breathe into a bag, 7 times during the 2 hour test.
- Includes 20 minutes under a clear hood to measure breathing rate.
- No blood test. Can eat snack/meal right after 2 hour test.

With your permission, we will ask the study coordinator to contact you by phone. Or if you prefer, for more information contact a study coordinator, Gaya Murthy at 604-875-2000 X 4607 or email: gmurthy@cfri.ca

Low Protein Food Coverage - CanPKU is continuing to advocate for low protein food coverage and enhanced coverage of PKU treatments here in British Columbia. If you would like to keep up to date on their efforts, feel free to participate in one of 3 calls they are holding over the summer. By joining these calls, you will receive support and guidance on how you can advocate for PKU, have your questions answered, and hear updates from fellow advocates. They are also planning a CanPKU Lobby Day at the Legislature in Victoria in the fall. As part of their strategy, Can PKU has begun a petition campaign to encourage the BC government to offer more support for the management of PKU. To learn more about this advocacy campaign and how you can be involved visit their website for all the details at www.canpku.org

Sunscreen – Sunscreen is important year round. Here are some recommendations from the Canadian Cancer Society about sunscreen.

How to choose sunscreen

Sunscreen absorbs UV rays and prevents them from penetrating the skin. Sunscreens are available with a sun



protection factor (SPF) ranging from 2 to at least 100.

- Use an SPF of 15 or higher, and if you work outdoors or are planning to be outside most of the day, use and SPF 30.
- Make sure the product offers both UVA and UVB protections (usually labelled “broad-spectrum”)
- If you’re in the water, make sure your sunscreen is water-resistant

Sun protection factor (SPF)

Sunscreens are rated by the strength of their SPF. The SPF tells you the product’s ability to screen or block out the sun’s UVB rays.

SPF 15 sunscreen blocks 93% of UVB rays. Sunscreen with SPF 30 blocks 97% of UVB rays. Make sure you use a “broad-spectrum” sunscreen, which will help protect your skin from UVA rays too. All sunscreens allow some UV rays to penetrate your skin, but broad spectrum will give you the best protection.

How to use sunscreen

- Apply a generous amount of sunscreen to clean, dry skin at least 20 minutes before you go out to allow the active ingredients to soak into your skin. Don’t forget your ears, nose, neck, any bald spots and the tops of your feet.
- Use an SPF 15 sunscreen lip balm and reapply when needed. Your lips need protection too.
- Follow the instructions for reapplying your sunscreen, especially after swimming or sweating.
- Don’t forget to apply sunscreen on cloudy days and during the winter months.
- Try different sunscreens until you find one that works best for you. Talk to your pharmacist if you need help in choosing a sunscreen.

Finding your roots - With the exception of carrots, root vegetables are not nutritional powerhouses, but they are versatile, filling, usually low in calories, and economical.



Some of these can be lower phe alternatives to potatoes. They have anywhere from 9 calories (radishes) to 60 calories (parsnips and taro) in one-half cup, with one exception – yucca, which is calorie-dense. They’re all fair to moderate sources of fiber (2 to 5 grams per cup) and also provide some iron, potassium, and vitamin C.

If the bulbous roots still have the green tops attached when you buy them, cut these off before you store the roots in the refrigerator. This will prolong their life. Some of these greens, such as turnip and beet, are delicious when cooked and very nutritious.

Root veggies, notably carrots, turnips and radishes, are better when small; large ones may be tough, pithy, or starchy. The deeper the color, the more nutritious.

Beets: ½ cup cooked or canned beets = 41mg phe

These contain more sugar than any other root vegetable, but still only about 35 calories in one-half cup. Good source of phytochemicals and some iron.

Carrots: 1 raw medium carrot = 29mg phe

One of the best sources of beta-carotene.

Parsnips: ½ cup cooked, chopped = 40mg phe

Relatives of the carrot (without beta carotene), these are a fair source of vitamin C, folate, and potassium.

Radishes: 2 radishes = 2mg phe

While not outstanding nutritionally, they're a source of vitamin C and phytochemicals, and make a good, low-calorie snack. Usually eaten raw (slices are good in sandwiches), but can be cooked in soups and stews, or heated and eaten whole as a side dish. Peeling reduces the sharp taste.

Rutabagas: ½ cup cooked, chopped = 28mg phe

Sometimes called yellow turnips, these are the best source of vitamin C of all root vegetables.

Turnips: ½ cup cooked, chopped turnips = 10mg phe

These relatives of the cabbage are cruciferous vegetables. They come in an astonishing range of shapes and sizes. Most have white flesh. Young ones are small and tender; older ones have a thick skin and keep better. Good pureed, mashed with potatoes, or added to stews and soups.

Jicama: ½ cup raw, chopped = 10mg phe

Often served with salsa in Mexican restaurants. Sweet, crisp, and juicy. Add to green salads and fruit salads. Peel and then cut into slices or sticks for dipping. Just 25 calories in one-half cup, sliced. Fairly good source of vitamin C and potassium.

Taro: ½ cup raw, slices = 44 mg phe

Found all year in Latin American and Asian markets, taro tastes like a cross between chestnuts and potatoes. Contains some potassium and iron. Add to stews, or else stir-fry, boil, or puree for soups. Don't refrigerate; simply store in cool place.

Yuca: (cassava): 1 root (raw) = 106mg phe

Found in Latin American markets. Higher in calories than other root vegetables – 160 per half cup. Contains some vitamin C, potassium, calcium, and iron. Boil and serve with a sauce, or add to stews.

For comparison...

Potatoes: ½ cup raw chopped = 75mg phe

(Taken from the Berkeley Wellness Letter, August 2004, page 7 – phe content info added)

Spicy Noodle Salad – A great summer salad

	Phe	Calories
2 tbsp. Soy Sauce	96	20
2 tbsp. White Wine Vinegar	0	4
1 tbsp. Chili Sauce	6	17
1 tbsp. White Sugar	0	48
1 tbsp. Sesame Oil	0	120
½ inch chunk fresh ginger (peeled and finely chopped)	3	3
2 garlic cloves	10	8
1 tsp Chili Flakes	6	4
Fresh ground black pepper		



2 tbsp. Vegetable oil	0	240
½ cup shredded carrot	18	24
¼ cup green onion – chopped	16	8
6 cups low protein spaghetti – cooked (about 8oz dry pasta)	68	800
	223	1296

Instructions: Whisk first 10 ingredients together. Pour over cooked low protein pasta that has been rinsed in cold water. Stir in carrot and green onion. Makes 6 x 1 cup servings.

Nutritional Analysis (whole recipe): 223 mg phe and 1296 calories

Nutritional Analysis for 1/6 of a recipe (approx 1 cup of pasta salad): 37mg phe and 216calories

