Diabetes Prevention/ Lifestyle Change Program

May & June 2009
Vol. 11 Issue 3

A, B, C’s
Activity / Balance / Control

Happy Memorial Day!!!

Embryonic Stem Cell Research; Help Advance Search for Better Treatment and a Cure for Diabetes

Continuation of March article…..

1982
The FDA approves human insulin produced by genetically altered bacteria.

1983
Second-generation sulfonylureas enter the market allowing patients to take smaller doses and potentially reduce side effects.

1985
A National Eye Institute study conclusively proves that can be successfully treated with laser photocoagulation.

1986
A series of small studies indicate that tight control of blood glucose can prevent or delay the onset of diabetes complications. These studies will lead to the development of the Diabetes Control and Complications Trial (DCCT).

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Reminding everyone to do a daily foot exam!
Walnut Quinoa Salad

Serves 10

1 ½ cups water
1 cup uncooked quinoa
3 Tbsp walnut oil
3 Tbsp lemon juice
1 tsp oregano leaves
½ tsp ground cumin
½ tsp salt
½ tsp black pepper
1 cup frozen corn
1 cucumber, quartered, seeded and thinly sliced
1 ½ cups cherry tomatoes
¾ cup walnuts, toasted and chopped
(plain or flavored with garlic and herbs)
½ cup feta cheese, crumbled
1/3 cup Kalamata olives, chopped
¼ cup parsley, chopped

Cook quinoa in the water as you would rice – for 10-12 minutes. Set aside off heat for about 5 minutes, then stir and fluff with a fork. In a large bowl, whisk together the walnut oil, lemon juice, and spices. Add remaining ingredients, including quinoa. Stir and toss to coat with the dressing. Refrigerate until serving time.

Nutrition Facts:
Servings per recipes: 10
Calories 205
Total Fat 13 grams
Total Carbohydrate 19 grams
Dietary Fiber 3 grams
Protein 6 grams

Spiced Lentils

Serves 6

2 Tbsp. olive oil                                    1/8 tsp cayenne pepper
1 onion, diced                                        3 cups chicken broth, fat free no salt added
1 clove garlic, minced                           1 14 oz. can tomatoes, diced, no salt added
2 tsp. ginger, ground or fresh grated     1 cup lentils, dry
2 tsp cumin, ground                                1/4 cup yogurt, plain low-fat
1 tsp coriander, ground                      1/4 cup cucumber, peeled/seeded shredded
1 tsp turmeric, ground                         2 tsp lime juice, fresh squeezed

Heat olive oil over medium heat in a large saucepan. Add onion and sauté until tender. Stir in garlic, and spices cooking for 1 minute. Add broth, tomatoes and lentils. Cover and bring to a boil over high heat. Reduce the heat and simmer, covered, until the lentils are tender – 10 to 15 minutes. Prepare sauce: combine the yogurt, cucumber and lime juice. To serve, ladle the lentils into individual bowls and top with 2 Tbsp of the sauce.

Nutrition Facts
Servings per Recipe: 6
Calories 294
Total Fat 8 grams
Total Carbohydrate 40 grams
Protein, 17 grams

Tickle Your Brain

1. Salts do have one thing in __1____: They ALL contain ______7__.
2. ____2_____ is a biguanide that prevents glucose production in the liver.
3. A series of small studies indicate that tight ____4____ of blood glucose can prevent delay the onset of 3 ___ complications.
4. These studies will ____5____ to the development of the Diabetes Control and Complications Trial.
5. Incretin hormones are secreted from the gut in response to food, and _______6____ the body to produce insulin.

Cut this page and send it back to:
Diabetes Prevention Lifestyle Change Program BBAHC
YOU could be the WINNER of the monthly drawing
$50.00 VEGGIE BASKET

Congratulation to our May Winner: Elia Walcott of New Stuyahok!!!
Exenatide, brand name Byetta, is approved in the U.S. as a first-in-class incretin mimetic (GLP-1) drug to treat type 2 diabetes. An injectable drug, exenatide works by increasing insulin production in response to blood glucose levels. Beinborn 2000.

Pramlintide, brand name Symlin, is approved in the U.S. as an injectable adjunct treatment for people (with type 1 or type 2 diabetes) who use insulin at mealtimes but still fail to achieve desirable blood glucose levels. Beinborn 2000.

The first inhaled form of insulin to be FDA approved for adults with type 1 or type 2 diabetes, Exubera is found to be just as effective as short-acting insulin injections in controlling blood glucose levels. FDA approves JANUVIA (sitagliptin phosphate), the first in a new class of drugs known as DPP-4 inhibitors that enhances the body's own ability to lower elevated blood sugar. DPP-4 is an enzyme that naturally blocks GLP-1 from working, so by inhibiting this enzyme, we are able to keep GLP-1 working in the gut to promote insulin secretion.

For the first time in our history an algorithm is developed for drug treatment of diabetes. This is having enormous implications for treatment, since doctors have a wide-array of treatment options.

The Action to Control Cardiovascular Risk in Diabetes (ACCORD) study sponsored by NHLBI and NIDDK, seeks to heart attack, stroke, or cardiovascular death in adults with type 2 diabetes using intensive glycemic, blood pressure, and lipid management. The HEALTHY Trial [Formerly STOPP-T2D (Studies to Treat or Prevent Pediatric Type 2 Diabetes)], an NIDDK study to test a program to lower risk factors for type 2 diabetes in middle school students by improving cafeteria lunches, vending machine offerings, and physical education and promoting behavioral change.

The TODAY (Treatment Options for type 2 Diabetes in Adolescents and Youth) Trial, an NIDDK study to identify the best treatment of type 2 diabetes in children and teens.

What is Quinoa?

Quinoa (pronounced KEEN-wah) is a grain native to South America. It cooks much like rice. Nutritionally it stands out because it’s higher in protein than other grains, and it’s a good source of iron and magnesium. The grain itself is small, ivory in color and bead shaped. With its bland flavor, quinoa can be used in soups, salads, casserole or in any dishes that call for rice.

American Dietetic Association: Complete Food and Nutrition Guide

A rose is a rose is a rose…is it the same for salt?

Everyone is familiar with table – or iodized – salt. But recipes increasingly refer to other types of salt, like kosher, sea, seasoned, light and rock salt. How are they different from each other? Isn’t salt just…salt?

The difference between types of salt usually concerns their taste and texture. For examples, kosher salt has a coarse grain and gives a clean taste to foods. Sea salt comes in either fine or coarse grain and has a slightly different taste caused by other minerals it contains.

Salts do have one thing in common: They ALL contain sodium. So if you have hypertension or otherwise need to watch your salt intake, keep checking food labels and monitor how much salt you consume – no matter what kind it is.

American Dietetic Association Daily Nutrition Tip
1986
The National Diabetes Data Group reports that type 2 diabetes is more common among African Americans, Mexican Americans, and Native Americans than among Caucasians. Fifty percent of all Pima Indians in Arizona over the age of 35 have diabetes – the highest rate in the world.

1988
Studies show that medications known as angiotensin converting enzyme (ACE) inhibitors such as Lisinopril not only lower blood pressure but also slow progression of kidney disease. Wilkes 1986.

Clinical trials of metformin performed in the U.S. show beneficial results in treating type 2 diabetes. This drug was available since the 1950’s in Europe.

Mid-1990’s
The incretin hormone GLP-1 is discovered. Incretin hormones are secreted from the gut in response to food, and encourage the body to produce insulin. Discovery of GLP-1 will later lead to a new class of diabetes drugs such as Byetta/Symlin that can increase insulin secretion in response to glucose, and even increase the amount of beta cells in the pancreas. Habener 1987; Weir G 1988.

1995
The drug metformin becomes available in the U.S. Metformin is a biguanide that prevents glucose production in the liver.

1996
The drug acarbose, brand name Precose (Bayer Corporation) becomes available in the U.S. Acarbose is an alpha-glucosidase inhibitor that slows digestion of some carbohydrates.

Lispro (a lysine-proline analog) is introduced by Eli Lilly and Company as the world’s fastest acting insulin.

The Diabetes Prevention Trial – Type 2 (DPT-2) begins. This study will determine whether or not diet, exercise, and medications can prevent type 2 diabetes from developing in those with impaired glucose tolerance.

1998
Repaglinide, brand name Prandin (Novo Nordisk) is developed.

Repaglinide belongs to a class of drugs known as meglitinides. It stimulates insulin secretion in the presence of glucose.

The United Kingdom Prospective Diabetes Study (UKPDS) proves that people with type 2 diabetes who practice tight control of blood sugar levels and blood pressure levels reduce their risk of complications. The study also suggested that metformin could reduce the risk of cardiovascular deaths. Two small studies indicate that is as effective as injected insulin.

2000
Researchers at the University of Alberta in Edmonton, Canada report on the success of an islet cell transplant technique known as the Edmonton protocol. This technique can restore long-term insulin production and glucose control in those with type 1 diabetes and unstable control, but insulin independence is usually not sustainable.

2001
For the first time, investigators evaluate use of an insulin pump in older patients with type 2 diabetes. The study ultimately shows that both the insulin pump and multiple daily injections achieve excellent glycemic control with good safety and patient satisfaction. Raskin 2001; Herman 2001.

2001–2002
The Finnish Diabetes Prevention Study showed in 2001 that moderate diet and exercise could reduce the onset of type 2 diabetes in individuals with impaired glucose tolerance by 58%. This is followed in 2002 by the U.S. Diabetes Prevention Program (DPP) which showed identical results and also showed that metformin could reduce the incidence of type 2 diabetes by 31%.

2002
The American Diabetes Association defines pre-diabetes as impaired fasting glucose (IFG) and/or impaired glucose tolerance (IGT). IFG is defined as a fasting blood glucose of 100-125 mg/dl, and IGT is defined as a glucose level from 140 mg/dl – 199 mg/dl two hours after consuming a glucose-rich drink.

The DPT-1 study showed that neither low-dose insulin injections in people at high risk for developing type 1 diabetes, nor insulin capsules taken orally by people at moderate risk for type 1 diabetes were successful at preventing or delaying diabetes.

2003
Investigators begin to collaborate to develop basic science, clinical and translational research aimed at better understanding or preventing the onset of type 2 diabetes. Hirschhorn 2003; Hollenberg 2005. The Troglitazone in Prevention of Diabetes (TRIPOD) study treats dramatic: The drugs were apparently effective in preventing the onset of the disease.

2004
Researchers step-up efforts to find alternative sources of insulin producing cells for transplantation. The work of these researchers could lead to procedures that would ultimately restore the body’s ability to produce insulin. Burant 2004; Dong 2004; German 2004; Garfinkel 2004; Inverardi 2004; Robbins 2004; Yoon 2004.