Dear D2d participant,

On behalf of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) of the National Institutes of Health (NIH), I want to thank you for joining the very important Vitamin D and type 2 diabetes (D2d) study.

NIH is the leading supporter of biomedical research worldwide, and within NIH, the NIDDK is the major supporter of diabetes research. Our research has helped people with or at risk for diabetes lead longer and healthier lives. For example, the Diabetes Prevention Program was a ground breaking clinical trial. It showed the power of lifestyle change to reduce diabetes rates by more than half. Like you, participants in the DPP had prediabetes. However, our research found that lifestyle change delayed, but did not entirely prevent, the onset of diabetes. Over time, many of the research participants eventually developed diabetes.

Rates of diabetes continue to climb in the United States with almost one in three Americans affected. Clearly, more approaches to diabetes prevention are needed. The D2d study responds to that need by exploring if vitamin D will decrease the risk for diabetes.

Without the investment of your time, energy, and medical information, the D2d study could not be done. Your commitment to the D2d study will contribute to the health of nearly 100 million Americans at risk for type 2 diabetes. Thank you from all of us at NIH.

Sincerely,

Griffin P. Rodgers, M.D., M.A.C.P.
Director, National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Couples’ risk of developing type 2 diabetes
Is your spouse increasing your risk for type 2 diabetes?

You may know that diabetes tends to run in families due to genetic factors, but did you know that family environment also plays a role? Researchers at McGill University in Canada studied 75,498 couples and compared how many couples included two people with diabetes, a single spouse with diabetes, and two people without diabetes. Spouses are unrelated people living in the same environment which is perfect for studying the effects of family environment independent of genetics. The study found that if one spouse has diabetes, the other has a 26% greater risk of also developing diabetes. Although the study did not distinguish between type 1 and type 2 diabetes, it is reasonable to assume most participants had type 2 based on the fact that 9 out of 10 individuals with diabetes have type 2. Recognizing the shared risk couples face emphasizes the importance of couples working together to stay healthy.

Stay Healthy as a Couple:

Get in the Kitchen Together:
Find a recipe for a healthy meal you can prepare together. This way you can customize your meals to both of your likings.

Sweat Together:
One way to stay in shape and connected is by working out as a pair. Find activities you both enjoy and aim to do them together 3-4 times per week.

Start Small:
Set weekly goals for you and your partner and conquer them together. Small continuous goals provide constant encouragement and fuel long term motivation.

Share your D2d experience!

Did you enjoy reading this issue of the Participant Newsletter? Do you have a healthy recipe you’d like to share for a future issue of the newsletter?

How did your visit go? Was it what you expected?

Did the staff at your D2d site ease your worry and make you feel prepared for your visit?

Have you attended a D2d Participant Event? How did it go? Was it fun and informative?

We’d love to hear or see anything you’d like to share with us about your D2d experience so far! Please visit www.d2dstudy.org/share/ to tell us about your experience.
Why does the D2d study restrict the amount of vitamin D and calcium supplements participants can take? Isn’t more better?

The D2d study encourages participants to follow the current recommendations for vitamin D and calcium intake for healthy people.

The Institute of Medicine recommends adults up to age 70 consume 600 International units (IU) and adults over 70 years consume 800 IUs of vitamin D daily. The D2d study allows a maximum intake of vitamin D from personal supplements up to 1000 IUs per day, as this is the dosage found in common supplements.

Calcium is a mineral that is essential for bone health and function of cells in our bodies. The Institute of Medicine recommends all adults up to age 50 consume 1000 mg/day, and women over age 50 and adults over age 70 consume 1200 mg/day. The D2d study recommends that participants get their calcium primarily from food. Calcium is found in dairy products, green leafy vegetables, beans, and fortified foods. For example, if over the course of the day you ate one serving of plain low-fat yogurt, a serving of salmon, a salad of mixed greens, a handful of almonds, and a glass of skim milk, you would meet the recommendation.

The D2d study allows a maximum intake of calcium from personal supplements (non-food) up to 600 mg per day because, when combined with a healthy diet, most adults should be near the recommended amount. In addition, consuming too much calcium with vitamin D supplements may increase the risk of high blood calcium or kidney stones.

More is not always better.

---

**Featured Recipe**

**Oatmeal Pancakes**

The recipe below was contributed by Patricia Sheehan who is the Project Manager at the D2d Coordinating Center at Tufts Medical Center in Boston. This recipe is modified from a version published in Cooking Light. They are a light, healthy, yummy version of pancakes. The recipe starts with whole grains and can be enhanced with fruits and nuts. See notes below.

**Ingredients**

- 1/4 cup all-purpose flour
  
  *(Note: I mix half whole wheat, half all-purpose flour)*
- 1 cup quick-cooking oats
- 1 tablespoon sugar
- 1/2 teaspoon baking powder
- 1/2 teaspoon baking soda
- 1/4 teaspoon ground cinnamon
- 1/8 teaspoon salt
- 1 cup nonfat buttermilk
  
  *(Note: I never have buttermilk, so I add a tablespoon of white vinegar to regular skim or 1% milk and let it sit for 5 minutes to make "buttermilk")*
- 2 tablespoons butter, melted
- 1 large egg
- Optional: consider adding chopped apple, blueberries, finely chopped nuts, flax, bananas, coconut…
- Cooking spray

**Preparation**

1. Combine the first 7 ingredients in a medium bowl, with a whisk.
2. Combine buttermilk, butter, and egg in a small bowl. Add to flour mixture, stirring just until moist. It will look soupy but after a few minutes the oats will absorb some of the liquid. Add any additions (see ideas above).
3. Heat a nonstick griddle or cast iron pan over medium heat. Coat pan with cooking spray. Spoon about 2 1/2 tablespoons batter per pancake onto griddle. Turn pancakes over when tops are covered with bubbles; cook until bottoms are lightly browned. Adjust the heat as needed.
Please Keep in Touch!

D2d Clinical Sites

California
Stanford University CTRC
Palo Alto, CA
(650) 427-0785
jhau@stanford.edu

University of Southern California
Los Angeles, CA
(323) 980-8446
D2d@usc.edu

Florida
Florida Hospital Translational Research Institute
Orlando, FL
(407) 303-7193
TRI@fihosp.org

Georgia
Atlanta VA Medical Center
Atlanta, GA
(404) 321-6111 ext. 7368
rincy.varughese@va.gov

Illinois
Northwestern University
Chicago, IL
(312) 503-3413
d2d@northwestern.edu

Kansas
University of Kansas Medical Center
Kansas City, KS
(913) 588-6052
d2dstudy@kumc.edu

Louisiana
Pennington Biomedical Research Center
Baton Rouge, LA
(225) 763-3000
clinicaltrials@pbrc.edu

Maine
Maine Medical Center
Scarborough, ME
(207) 661-7624
D2d@mmc.org

Maryland / District of Columbia
MedStar Good Samaritan Hospital
Baltimore, MD
(443) 444-6137 / (443) 444-6136
D2d.Baltimore@MedStar.net

MedStar Health Research Institute
Hyattsville, MD
(301) 560-2943
studies@medstar.net

Massachusetts
Tufts Medical Center
Boston, MA
(617) 636-2842
tufts@d2dstudy.org

Minnesota
Health Partners Research Foundation
Minneapolis, MN
(612) 341-1950

Nebraska
Omaha VA Medical Center & University of Nebraska Medical Center
Omaha, NE
(402) 995-3924 / (402) 559-6244
jeff.newcomb@unmc.edu

New York
Beth Israel Medical Center
New York, NY
(202) 420-3450
kmantha@chpnet.org

North Carolina
Duke University Medical Center
Durham, NC
(919) 668-7863
D2dstudy@dm.duke.edu

Ohio
Cleveland Clinic
Cleveland, OH
(216) 444-3955 / (216) 444-8942
Cleveland@d2dstudy.org

Oregon
Kaiser Permanente
Portland, OR
(866) 356-0211

South Carolina
Medical University of South Carolina
Charleston, SC
(843) 792-5427
kuker@musc.edu

Tennessee
University of Tennessee Health Science Center
Memphis, TN
(901) 448-8405

Texas
Baylor College of Medicine
Houston, TX
(713) 798-3741
VitDstudy@bcm.edu

University of Texas Southwestern Medical Center
Dallas, TX
(214) 648-2971
brenda.brightman@utsouthwestern.edu

REMINDERS

• Please notify your research team immediately (see above) if you are told you have diabetes and before starting any medication for diabetes.

• At your next visit, please remind your primary care doctor that you are participating in D2d.

• Please notify your research team if you plan to take more vitamin D or calcium than what D2d allows (vitamin D - 1,000 units per day, calcium - 600 mg per day).

• The next Participant Event will be held in the spring. The topic for this event will be Physical Activity.