



Prediabetes and Type 2 Diabetes: Prevention and Management

Prediabetes

Prediabetes is a condition in which blood sugar is higher than normal, but not high enough for type 2 diabetes. It is very common – more than 1 in 3 adults in the US has prediabetes, and 9 out of 10 of them don't know they have it. Without intervention, 15-30% of prediabetes will become type 2 diabetes within 5 years.



Prediabetes put you at a higher risk for

- Diabetes
- Heart disease
- Stroke

Type 2 Diabetes

Type 2 diabetes occurs when the body cannot properly use insulin, leaving blood sugar levels high. It is increasingly common with over 9% of adults in the US diagnosed with type 2 diabetes, but that number is expected to climb to 1 in 3 by 2050 if present trends continue.

Risk Factors

- Being overweight
- Being 45 or older
- Having a family history of type 2 diabetes
- Sedentary lifestyle— being physically active less than 3 times a week
- History of gestational diabetes or delivery of a baby weighing more than 9 pounds
- Race and ethnicity: African Americans, Hispanics and Latinos, American Indians, Pacific Islanders, and some Asian Americans are at higher risk than Caucasians.

Symptoms of Diabetes

- Frequent urination
- Excessive thirst or hunger
- Extreme fatigue
- Blurry vision
- Tingling or numbness in hands or feet
- Slow healing wounds

What Do Your Results Mean?

Fasting Blood Sugar (mg/dl)	Recommendation
<100	Get checked at least every 3 years if >45 years old
90-99	Keep a close eye on your levels and compare to previous results
100-125	See your doctor
125-299	See your doctor within a week (or immediately if symptomatic)
300+	Call your doctor now

Reducing Your Risk

Weight Loss
Moderate weight loss (just 5-7% of your current weight) is one of the most effective ways to reduce your risk of type 2 diabetes and keep blood sugar under control.
Physical Activity
Aerobic exercise and strength training help your body utilize insulin more effectively, which lowers blood sugar levels. This can also help with weight loss and maintenance of muscle mass.
Healthy Eating
Emphasizing whole, minimally processed and plant-based foods (especially non-starchy vegetables) can help with weight loss and blood sugar management. Refined grains, added sugar, and alcohol can worsen blood sugar control.
Sleep
Poor sleep, especially if caused by sleep apnea, may increase your risk of diabetes and other serious health conditions. Aim to sleep enough to feel refreshed in the morning (7-9 hours for most people) and if you snore loudly or wake up tired after a full night's sleep, talk to your doctor about sleep apnea.

Physical Activity

- Aim for 30 minutes most days of the week
- Start small – even 10 minutes of walking or strength training can make a difference
- Walk throughout the day, especially after meals
- Join Berkeley Walks Walking Group every MWF on campus and/or WorkFit (onsite in depts)
- Walk, bike, or take the bus or BART to work
- Wear a pedometer for motivation to walk 10,000 steps a day



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Vegetables and Fruit

A healthy plate is half non-starchy vegetables (or combination of veggies and fruit). Selecting a variety of colors provides a variety of nutrients and makes a meal more appealing. Avoid fruit juices and smoothies, high in calories and low in fiber, and choose whole fruit instead.

Healthy Fats and Proteins

Olive and canola oils, nuts and seeds, nut butters, hummus, avocado, tuna, and salmon are sources of heart-healthy, unsaturated fats. Limit saturated fats, found in red meat, processed deli meats, butter, cheese and other high-fat dairy products. Avoid trans fats, found in some processed foods, fried foods, and baked goods made with “partially hydrogenated” oils.

Choose plant-based protein options more often, such as tofu, beans, lentils, nuts, nut butters, and seeds. Other healthy protein options include skinless poultry, seafood, lean cuts of meat, eggs, and plain yogurt. Try adding beans to salads, vegetable side dishes, chili, soups, brown rice, burritos, or tacos. Start with small portions and rinse beans to reduce intestinal gas.

Right-Sized Portions

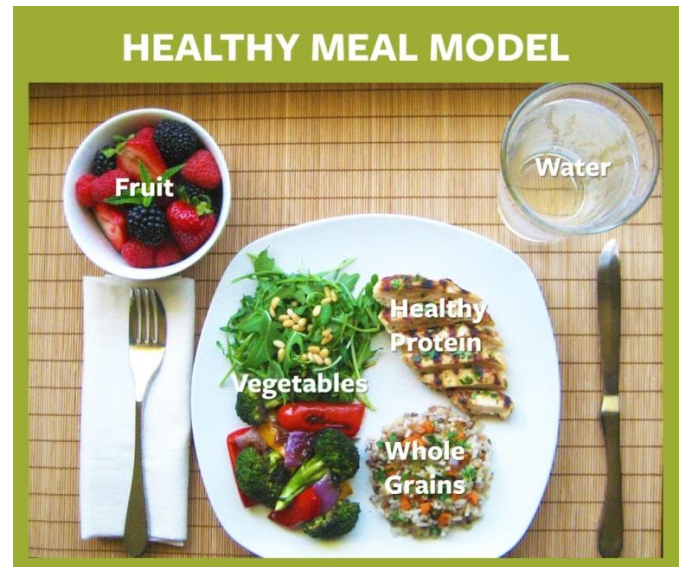
Eat half or smaller portions since many prepared and restaurant portions are excessively large, providing more than one serving.

Water

Tap water, sparkling water, water infused with fruit and/or herbs, and unsweetened coffee or tea are good choices. Limit or eliminate sweetened beverages such as soda, smoothies, sports drinks, energy drinks, fruit drinks, sweetened coffee drinks and teas, and even diet sodas.

Whole Grains

Whole grains are more filling and nutritious than refined grains, and can positively impact weight control and energy levels. The best choices are whole, intact grains such as brown rice, buckwheat, quinoa, and steel cut oats, as well as whole grain varieties of breads, pasta, tortillas, and other baked goods.



Sugar and Salt Limits

The average person consumes more than double the recommended added sugar limit. Besides obvious sources to reduce or eliminate, some surprising sugar sources include fat-free salad dressings, snack bars, and flavored yogurts. Also, limit salt because we consume too much from restaurant and processed foods.



More on Carbohydrates

Sources of carbohydrates include grains, fruit, dairy products, vegetables, and sugar. These foods all affect blood sugar, but refined carbohydrates (white bread, white rice, white pasta) and added sugars cause a more dramatic spike in blood glucose levels, putting a strain on our body’s ability to use insulin. Choose slower digesting carbohydrates more often, such as whole grains, vegetables, and fruit, and avoid eating large portions of refined carbs or sugar-sweetened foods or drinks at one sitting. Aim to eat consistent amounts of carbohydrates at regular intervals to keep blood glucose levels steady throughout the day.