



MEDICAL
CONDITION

SUGGESTED SOLUTIONS

DISEASE MANAGEMENT/
SCREENING GUIDELINES
IN THE UNITED STATES

STATISTICS / RISK
REDUCTION

Blood glucose status:
Normal glucose levels (blood sugar):

Fasting glucose is less than 100mg/dl; after meals it should be less than 140 mg/dl.

(American Diabetes Association criteria)

- Continue a good diet (see grocery shopping guide)
- Aerobic exercise of moderate intensity about half an hour to an hour a day as feasible should be done (be sure you are cleared by your doctor if you have heart/lung/joint disease).
- You may need to be in a medically supervised exercise program if you have had previous heart disease, weakness or joint disease.

My fasting glucose is _____
My post meal glucose is _____

- Exercise Guidelines recommended by the Centers for Disease Control and Prevention and the National Institute of Health state that greater than or equal to 30 minutes of moderate activity daily should be done as a part of a healthy lifestyle.
- High risk patients (example: with cardiac disease) should be in a medically supervised program.
- Appropriate programs would be advisable for individuals with physical/neurological deficits.

(www.guidelines.gov)

62% of adults in the United States ages 18 or older, engage in some light/moderate/vigorous leisure time physical activity for 10 minutes or greater

(www.americanheart.org/statistics)

The Lack of physical activity may contribute to about 250,000 deaths per year in the United States. Regular exercise may increase exercise tolerance, help reduce weight, reduce blood pressure, decrease LDL, raise HDL cholesterol, and increase insulin sensitivity.

(Jonathan Meyers, PhD. Circulation. 2003; 107: e2-e5. <http://circ.ahajournals.org/cgi/content/full/107/1/e2>)

Several epidemiological, clinical, and basic scientific evidence suggest that regular physical activity lowers the risk of coronary heart disease and should be encouraged. According to the recommendations made by The Center for Disease Control and Prevention/ACSM, at least 30 minutes of moderate physical activity, 7 days per week should be pursued.

However, vigorous activity could increase the risk for acute myocardial infarction and sudden cardiac death even in exercise conditioned individuals. Therefore physically active children and adults as well as high school and college athletes, should be appropriately

			<p>evaluated before starting a regular exercise program. Athletes with known medical conditions should be evaluated prior to competition according to the published guidelines. Exercise programs will need to be modified according to an individual's exercise capacity and needs.</p> <p>(Maron BJ. et.al.. Circulation. 1998; 97: 2294 http://circ.ahajournals.org/cgi/content/full/97/22/2294) (Maron BJ. J Am Coll Cardiology 2005; 45:2-64. http://content.onlinejacc.org/cgi/content/full/j.jacc.2005.04.052v1) (Paul D. Thompson et.al.. Circulationhttp://www.circ.ahajournals.org/cgi/content/abstract/115/17/2358)</p>
<p>Pre-diabetes: Fasting glucose is between 100 to 125 mg/dl (impaired fasting glucose) or post meal or post Glucola glucose is between 140 to 199 mg/dl (impaired glucose tolerance)</p> <p>(American Diabetes Association criteria)</p>	<ul style="list-style-type: none"> Continue a good diet (see grocery shopping guide). Continue a daily exercise program: at least half an hour of moderate activity daily as feasible. (be sure you are cleared by your doctor if you have heart/lung/joint disease) Have your doctor follow you every 6-12 months (to be sure you do not develop diabetes). Consider having a glucose tolerance tests every one to two years to see if you have developed diabetes. <p>My glucose tolerance test shows</p> <hr/> <ul style="list-style-type: none"> Ask your doctor if you are a candidate for metformin (especially important if you are less than 60 years old, above ideal body weight, and are at very high risk for developing diabetes mellitus). (Have both impaired fasting blood glucose and impaired glucose tolerance). <p>(Diabetes Care, Volume 32, Supplement 1, January 2009)</p>	<p><u>CHECKING FOR DIABETES/PRE DIABETES</u> There are several tests that can be used to check for diabetes:</p> <ul style="list-style-type: none"> Fasting Plasma Glucose Test Oral Glucose Tolerance Test Random Plasma Glucose Test <p>Everyone 45 and up should consider being tested for diabetes.</p> <p>Testing for diabetes is also important for people younger than 45 who are overweight and have other risk factors for diabetes such as:</p> <ul style="list-style-type: none"> Family Members With Diabetes African, Asian, Pacific Islander, Hispanic, Or Native American Background History Of Gestational Diabetes Or Giving Birth To A Baby Weighing More Than 9 Lbs High Blood Pressure 	<ul style="list-style-type: none"> 300 million people worldwide were estimated to have Pre diabetes in 2003. That is expected to increase to 500 million by 2025 according to International Diabetes Federation estimates. Without intervention 29-55% of individuals with pre diabetes are expected to develop type 2 diabetes over three years. <p>(International Diabetes Federation. Fact Sheet: Impaired Glucose Tolerance (IGT). Available at http://www.idf.org/home/index.cfm?node=1224. Accessed on August 3, 2006.)</p> <ul style="list-style-type: none"> In 2007 an estimated 57 million people had pre diabetes in the United States. <p>(National Diabetes Statistics, 2007 http://diabetes.niddk.nih.gov)</p>

		<ul style="list-style-type: none"> • High Or Abnormal Cholesterol or Triglyceride Levels • Inactive Lifestyle • History of Cardiovascular Disease • Severe obesity and acanthosis nigricans. • Impaired Glucose tolerance or Impaired Fasting Glucose on previous testing. • Women with polycystic ovary syndrome. <p>(Source: National Diabetes Information Clearinghouse, http://diabetes.niddk.nih.gov/dm/pubs/diagnosis/#3b)</p> <p>Executive Summary: Standards of Medical Care and Diabetes - 2009 Diabetes Care Volume 32 Supplement 1/2009</p>	<p>/dm/pubs/statistics/index.htm)</p> <ul style="list-style-type: none"> • With 7% or greater weight reduction and 150 minutes per week of moderate activity there was 58% relative reduction in the progression to diabetes from the pre diabetes state in the Diabetes Prevention Program (DPP) <p>(Diabetes Prevention Research Group: Reduction in the incidence of type 2 diabetes with life-style intervention or metformin. <i>N Engl J Med</i> 346:393-403, 2002 http://www.ncbi.nlm.nih.gov/pubmed/11832527)</p>
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