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## What not to do before a nuclear stress test

Before a stress test, you'll need to avoid food, drink, tobacco, and caffeine for a time. You may also have to stop taking some medications. Your doctor will provide information specific to you, but there are some general guidelines. Share on Pinterestistuzsek/Getty ImagesA clinician may ask you to take a stress test to determine if you have cardiac disease and assess your heart attack risk. They may either recommend a treadmill (exercise) stress test or a pharmacologic (chemical) stress test, when they give you medications to increase your heart rate. A healthcare professional typically gives you instructions specific to you based on the medications you take and your overall health. The following guidelines may help you understand what to expect if you are about to take a stress test. A healthcare professional usually recommends not eating or drinking at least 3 hours before your test, but it could be longer. Avoiding eating solid foods can help make sure you do not feel sick during the test. It also helps you exercise to your best capacity. If you have diabetes, talk with a doctor about a plan to ensure your blood sugar remains stable. You may need to adjust your insulin the day of your test. You may wish to bring a light snack with you so you can eat something after you complete your stress test. It's important to avoid caffeine before a stress test. If taking a chemical stress test, avoid caffeine for at least 12 to, ideally, 24 hours before your test. Caffeine blocks the effectiveness of adenosine, a medication that doctors commonly give during a chemical stress test. Avoid caffeinated drinks to help ensure your stress test is as accurate as possible. Also, be aware of foods that may contain caffeine, such as: chocolate cereals energy bars Some headache medications may also contain caffeine. Avoid smoking or using any tobacco products before a stress test. You should also refrain from using products that contain nicotine, such as: electronic cigarettes vapes patches Also avoid the use of any recreational drugs, including cannabis. Beta-blockers commonly end in "-ol," such as: metoprolol carvedilol propranolol CCBs commonly end in "-pine," such as: amlodipine felodipine nifedipine Other CCBs include diltiazem and verapamil. Additional medications a healthcare professional may suggest discontinuing before the test include: antiarrhythmics digoxin nitrates Tell your doctor about all the medications you take, including any over-the-counter ones. For treadmill testing, wear comfortable clothing to ensure you can participate fully. Wear running or walking shoes and clothing suitable for exercising. Wearing a button-down shirt can help your monitoring technician place electrodes on your chest easily. The following are some frequently asked questions about cardiac stress testing. But always ask your healthcare team, as they may have information specific to you. Unless otherwise directed, you can take a shower before your stress test. But avoid applying lotions, powders, or perfumes to the chest area before your test. This can keep the electrode pads from sticking well to your chest. The answer to this may depend upon your healthcare professional and overall health. While some healthcare professionals may allow you to drive yourself to and from a stress test, others may ask that you have someone to drive you home after. Because you receive medications or perform exercise in a way that stresses your heart, it's hard to predict how you will feel after the test. To travel most safely, have someone drive you home. A stress test aims to raise your heart rate to an expected value for your age. If you can do this without chest pain, you are at a lower risk of death from a cardiac event. You are at increased risk if it's difficult to raise your target heart rate or if you have chest pain before raising your target heart rate. A healthcare professional typically reviews your test results with you after your test. Cardiac stress testing is a noninvasive way to help your clinician assess your cardiovascular health and risk of death from a heart attack. You'll usually receive preparation instructions that include considerations for the medications you take. The instructions also typically tell you what and when you can eat and drink before your test. If you need clarification about any of the instructions, ask your clinician, as they want you to have the most reliable test. MeSH Heading Echocardiography. Stress Tree Number(s) E01.370.350.130.750.228 E01.370.350.850.220.228 E01.370.370.380.220.228 Unique ID D025401 RDF Unique Identifier Scope Note A method of recording heart motion and internal structures by combining ultrasonic imaging with exercise testing (EXERCISE TEST) or pharmacologic stress. Entry Version ECHOCARDIOGR STRESS Entry Term(s) Dobutamine Stress Echocardiography Echocardiography, Stress, Dobutamine Stress Echocardiography Previous Indexing Echocardiography (1983-2001) Exercise Test (1983-2001) See Also Exercise Test Public MeSH Note 2002 History Note 2002 Date Established 2002/01/01 Date of Entry 2001/07/25 Revision Date 2010/06/25 If your cardiologist wants to learn more about how your heart is functioning, he or she may recommend a stress test — also called an exercise stress test or cardiac stress test. "A stress test is one of several cardiovascular tests that can be used to help evaluate certain types of heart conditions. This is a noninvasive test to assess a person's risk of heart disease, help determine whether additional tests are needed, as well as guide treatment," explains Dr. Kershaw Patel, cardiologist specializing in preventive cardiology at Houston Methodist. Why is a stress test done? "A stress test shows how well your heart performs while beating harder and pumping faster than usual. This information can help uncover whether issues exist with your heart's rhythm or how blood is flowing through your heart," explains Dr. Patel. There are a few reasons your doctor might recommend a stress test, including to help: Assess concerning symptoms, such as unexplained fatigue, shortness of breath and chest pain Diagnose coronary artery disease Diagnose a heart rhythm abnormality Evaluate heart valve problems Plan treatment for a heart condition Check whether your treatment plan is working How is a stress test done? During a stress test, your heart works harder to keep up with the demands of exercise. You are typically asked to either walk or run on a treadmill or pedal on a stationary bike — depending on your fitness level. The test is performed in your doctor's office or a hospital and the entire visit typically takes about an hour. Before the test, your doctor will ask you questions about your everyday activity level to determine how strenuous your exercise should be during the test. He or she will also perform a quick physical exam to rule out whether an underlying condition may affect your test results. Next, a technician will use sticky patches to position electrodes on your chest. These electrodes are connected to an electrocardiogram (ECG/EKG) machine, which monitors your heart's rhythm. A blood pressure cuff will also be attached to your arm. In certain cases, you may be asked to breathe into a tube as you exercise. As you exercise, your heart rate, blood pressure, breathing and symptoms are monitored. "Tracking these specific vitals as you progressively increase your activity level can help evaluate if there are any issues with your heart's function in a very controlled setting. Typically, you will be asked to exercise for about 15 minutes — stopping if you develop symptoms such as severe chest pain, if you feel very tired or if there are certain changes to your heart rate or blood pressure measurements," explains Dr. Patel. Your vitals will also be taken after you exercise, as your heart rate, blood pressure and breathing return to normal. If you're unable to exercise, a drug that stimulates your heart — essentially mimicking the effects of exercise — can be administered via an IV," adds Dr. Patel. What does a stress test show? As mentioned, a stress test can help determine what you and your doctor's next steps should be regarding your heart health. If your stress test results come back normal, it means your risk for coronary artery disease (blockages in the heart's blood vessels) is likely low and you may not need any additional tests. "Sometimes the electrocardiogram, or ECG, part of a stress test may not provide enough information to assess a patient's risk of heart disease. In certain cases, your doctor may recommend a more sensitive type of stress test that includes imaging — such as a stress echocardiogram or a nuclear stress test." If your stress test results are abnormal, it may suggest your risk of coronary artery disease or another heart condition is more likely. Your doctor may recommend further tests that can help make a diagnosis. The results of your stress test will also likely play an important role in establishing your treatment plan. "The major benefit of a stress test is that it's a noninvasive way to begin evaluating symptoms of heart disease and help guide treatment plans. The results, when paired with your doctor's assessment of your overall risk and potentially other tests, can be a powerful tool in assessing your heart health," adds Dr. Patel. Next Steps: Stay up-to-date By signing up, you will receive our newsletter with articles, videos, health tips and more. Please Enter Email Please Enter Valid Email Balady GJ, Ades PA. Exercise physiology and exercise electrocardiographic testing. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, eds. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Philadelphia, PA: Elsevier; 2022:chap 15. Gulati M, Levy PD, Mukherjee D, et al. 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guideline for the evaluation and diagnosis of chest pain: a report of the American College of Cardiology/American Heart Association Joint Committee on clinical practice guidelines. Circulation. 2021;144(22):e368-e454. PMID: 34709879 pubmed.ncbi.nlm.nih.gov/34709879/ Morrow DA, de Lemos JA. Stable ischemic heart disease. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, eds. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Philadelphia, PA: Elsevier; 2022:chap 40. Virani SS, Newby LK, Arnold SV, et al. 2023 AHA/ACC/ACCP/ASPC/NLA/PCNA guideline for the management of patients with chronic coronary disease: a report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. Circulation. 2023;148(9):e9-e119. PMID: 37471501 pubmed.ncbi.nlm.nih.gov/37471501/ Page 2 Bonaca MP, Sabatine MS. Approach to the patient with chest pain. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, eds. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Philadelphia, PA: Elsevier; 2022:chap 35. Brown JE. Chest pain. In: Walls RM, Hockberger RS, Gausche-Hill M, eds. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA: Elsevier; 2023:chap 22. Goldman L. Approach to the patient with possible cardiovascular disease. In: Goldman L, Cooney KA, eds. Goldman-Cecil Medicine. 27th ed. Philadelphia, PA: Elsevier; 2024:chap 39. Gulati M, Levy PD, Mukherjee D, et al. 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR guideline for the evaluation and diagnosis of chest pain: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol. 2021;78(22):e187-e285. PMID: 34756653 pubmed.ncbi.nlm.nih.gov/34756653/ Writing Committee Members; Virani SS, Newby LK, et al. 2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol. 2023;82(9):833-955. PMID: 37480922 pubmed.ncbi.nlm.nih.gov/37480922/ Page 3 Boden WE. Angina pectoris and stable ischemic heart disease. In: Goldman L, Cooney KA, eds. Goldman-Cecil Medicine. 27th ed. Philadelphia, PA: Elsevier; 2024:chap 56. Bonaca MP, Sabatine MS. Approach to the patient with chest pain. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, eds. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Philadelphia, PA: Elsevier; 2022:chap 35. Lange RA, Mukherjee D. Acute coronary syndrome: unstable angina and non-ST elevation myocardial infarction. In: Goldman L, Cooney KA, eds. Goldman-Cecil Medicine. 27th ed. Philadelphia, PA: Elsevier; 2024:chap 57. Morrow DA, de Lemos J. Stable ischemic heart disease. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, eds. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Philadelphia, PA: Elsevier; 2022:chap 40. Writing Committee Members, Gulati M, Levy PD, Mukherjee D, et al. 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guideline for the evaluation and diagnosis of chest pain: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol. 2021;78(22):e187-e285. PMID: 34756653 pubmed.ncbi.nlm.nih.gov/34756653/ Board-Certified in Internal Medicine, Pulmonary Care, Critical Care & Sleep Medicine Dr. Olusegun Oseni is board certified in internal medicine, pulmonary care, critical care, and sleep medicine. After earning his medical degree at the University of Ilorin College of Medicine in Nigeria, Dr. Oseni came to the U.S. for his postgraduate training. He completed his residency in internal medicine and fellowship in pulmonary medicine at Harlem Hospital Center (an affiliate of Columbia University) in New York City, followed by a fellowship in critical care medicine at Montefiore Medical Center (an affiliate of Albert Einstein College of Medicine), also in New York City. Dr. Oseni is a fellow of the American College of Chest Physicians (FCCP), diplomate of the American Board of Sleep Medicine (DABSM), and member of the Society of Critical Care Medicine, American Lung Association, and American Medical Association. Dr. Oseni is well loved by his patients. In the community, he is known for his thoroughness and relentless effort to help improve quality of life for his patients, no matter the severity of their condition. Outside the office, Dr. Oseni's interests include philanthropy, reading, traveling, watching movies, and playing basketball. On Health Blog — Lifestyle & Wellness In The News — Recent Press Events — Virtual & In-Person Leading Medicine Blog — For Physicians Your healthcare provider will give you specific instructions to help you prepare for the test. The instructions may include: Avoid foods, beverages and medications that contain caffeine for 24 hours before the test. Examples include coffee, tea, soft drinks and chocolate. Bring anything with you that helps you breathe, such as your inhaler. Don't smoke before the test. Fast (don't eat or drink anything but water) for a few hours beforehand. Inform your healthcare provider about any medications you take, including prescriptions, over-the-counter medicines, illegal drugs and supplements. Wear sneakers and comfortable, loose clothes. Your healthcare provider may ask you to skip certain medications before the test or change the dose. But don't change the way you take prescription medications without talking to your doctor first. What can I expect during a nuclear stress test? The test is usually performed in a hospital or clinic by a specialized technician or doctor. A healthcare provider will insert an IV into your arm to inject the tracer into your bloodstream. It may feel cold at first. Wait a few minutes for the tracer to circulate and reach the heart. Place patches called electrodes on your skin, usually on the chest, arms and legs. They may have to shave some hair so the patches stick. Connect the patches to an EKG machine to measure the heart's electrical activity. Put a cuff on your arm to monitor your blood pressure. Ask you to lie on a table and stay still so they can take pictures with a special camera. Instruct you to exercise on a treadmill or stationary bike, starting slowly and then increasing the intensity. Ask you to keep exercising until you reach a target heart rate or experience bothersome symptoms. You can stop the test anytime you aren't comfortable continuing. Inject more tracer into your bloodstream. Ask you to lie down on a table again to take a second set of images after exercise. What if I can't exercise for a nuclear stress test? If you have a medical condition that prevents you from exercising, a healthcare provider can inject a medication into your arm. The medication stimulates the heart and increases blood flow to mimic exercise conditions. How long does a nuclear stress test take? A nuclear stress test usually takes about three or four hours. What should I avoid after a nuclear cardiology stress test? Your healthcare provider will give you instructions to follow after the test. People usually can go back to normal activities immediately. You may want to drink plenty of fluids to help flush the tracer out of your body. After the test, you may feel tired or dizzy or have a headache. Those symptoms should go away with time and rest. What are the risks of nuclear stress testing? Nuclear stress tests are generally safe. But the procedure can cause a problem in about 1 in 5,000 people, such as: Arrhythmia. Chest pain. Heart attack (myocardial infarction). Low blood pressure (hypotension). The procedure involves a small amount of radiation exposure. Radiation exposure can cause cancer, but scientists believe that requires large or frequent doses. You should not have a nuclear stress test if you have certain conditions that are severe or not controlled, such as: Angina. Aortic dissection. Aortic stenosis (narrowed aorta). Arrhythmia. Congestive heart failure. Heart infection. Pulmonary embolism. Pulmonary hypertension. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. Share Alike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Before a stress test, you'll need to avoid food, drink, tobacco, and caffeine for a time. You may also have to stop taking some medications. Your doctor will provide information specific to you, but there are some general guidelines. Share on Pinterest istuzsek/Getty ImagesA clinician may ask you to take a stress test to determine if you have cardiac disease and assess your heart attack risk. They may either recommend a treadmill (exercise) stress test or a pharmacologic (chemical) stress test, when they give you medications to increase your heart rate. A healthcare professional typically gives you instructions specific to you based on the medications you take and your overall health. The following guidelines may help you understand what to expect if you are about to take a stress test. A healthcare professional usually recommends not eating or drinking at least 3 hours before your test, but it could be longer. Avoiding eating solid foods can help make sure you do not feel sick during the test. It also helps you exercise to your best capacity. 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