MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

Lab Tests and Results

Fecal elastase 1 level

What is this test?

This test measures the amount of elastase 1 (a pancreas enzyme) in a stool sample. This test is used to diagnose certain pancreas disorders related to not producing enough digestive enzymes[1].

What are other names for this test?

Faecal elastase 1 level

Why do I need this test?

Laboratory tests may be done for many reasons. Tests are performed for routine health screenings or if a disease or toxicity is suspected. Lab tests may be used to determine if a medical condition is improving or worsening. Lab tests may also be used to measure the success or failure of a medication or treatment plan. Lab tests may be ordered for professional or legal reasons. The following are possible reasons why this test may be done:

CF - Cystic fibrosis Chronic pancreas inflammation Diabetes mellitus

When and how often should I have this test?

When and how often laboratory tests are done may depend on many factors. The timing of laboratory tests may rely on the results or completion of other tests, procedures, or treatments. Lab tests may be performed immediately in an emergency, or tests may be delayed as a condition is treated or monitored. A test may be suggested or become necessary when certain signs or symptoms appear.

Due to changes in the way your body naturally functions through the course of a day, lab tests may need to be performed at a certain time of day. If you have prepared for a test by changing your food or fluid intake, lab tests may be timed in accordance with those changes. Timing of tests may be based on increased and decreased levels of medications, drugs or other substances in the body.

The age or gender of the person being tested may affect when and how often a lab test is required. Chronic or progressive conditions may need ongoing monitoring through the use of lab tests. Conditions that worsen and improve may also need frequent monitoring. Certain tests may be repeated to obtain a series of results, or tests may need to be repeated to confirm or disprove results. Timing and frequency of lab tests may vary if they are performed for professional or legal reasons.

How should I get ready for the test?

Before giving a stool sample, tell the healthcare worker if you have diarrhea or are using antibiotics, barium, bismuth, oil, iron, magnesium, or medication to stop diarrhea.

How is the test done?

For a stool sample, you will be asked to have a bowel movement into a special container. Avoid adding urine, water, tissues, or toilet paper to the stool sample.

How will the test feel?

The amount of discomfort you feel will depend on many factors, including your sensitivity to pain. Communicate how you are feeling with the person doing the test. Inform the person doing the test if you feel that you cannot continue with the test.

This test usually causes no discomfort.

What should I do after the test?

After giving a stool sample in a healthcare facility, close the container if it has a lid, and place the container where

the healthcare worker instructed. Clean your hands with soap and water. If you have been asked to collect the stool sample while at home, follow the directions provided.

What are the risks?

Stool: Giving a stool sample is generally considered safe. Talk to your healthcare worker if you have questions or concerns about this test.

What are normal results for this test?

Laboratory test results may vary depending on your age, gender, health history, the method used for the test, and many other factors. If your results are different from the results suggested below, this may not mean that you have a disease. Contact your healthcare worker if you have any questions. The following is considered to be a normal result for this test:

Adults and children: >200 mcg pancreatic elastase/g stool [2]

What might affect my test results?

Results decreased in nonpancreatic diarrhea due to alterations in stool composition or water content[1].

What follow up should I do after this test?

Ask your healthcare worker how you will be informed of the test results. You may be asked to call for results, schedule an appointment to discuss results, or notified of results by mail. Follow up care varies depending on many factors related to your test. Sometimes there is no follow up after you have been notified of test results. At other times follow up may be suggested or necessary. Some examples of follow up care include changes to medication or treatment plans, referral to a specialist, more or less frequent monitoring, and additional tests or procedures. Talk with your healthcare worker about any concerns or questions you have regarding follow up care or instructions.

Where can I get more information?

Related Companies

National Pancreas Foundation
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

References

- 1. Lankisch PG: Now that fecal elastase is available in the United States, should clinicians start using it?. Current Gastroenterology Reports 2004; 6(2):126-131.
- 2. Hardt PD, Marzeion AM, Schnell-Kretschmer H, et al: Fecal elastase 1 measurement compared with endoscopic retrograde cholangiopancreatography for the diagnosis of chronic pancreatitis. Pancreas 2002; 25 (1):e6-e9.