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# Basic Metabolic Panel (Blood)

## Does this test have other names?

BMP, chemistry panel, chem 7, electrolyte panel

## What is this test?

This blood test gives information about your body's metabolism, or how your body uses food for energy. It gives a snapshot of the health of your kidneys, your blood sugar levels, and the levels of key electrolytes, such as potassium and sodium. A basic metabolic panel test measures the levels of eight important things in your blood:

- **Calcium.** Calcium plays a role in keeping your cells working the way they should. It also helps blood clot normally.
- **Carbon dioxide.** This can be a measure of how well your kidneys and lungs are working.
- **Chloride.** This is a measure related to how your body manages fluids.
- **Creatinine.** This is a byproduct of your kidneys' normal functioning, and levels can tell how well your kidneys are working.
- **Glucose.** Glucose, or blood sugar, is a key source of energy for your body, but too much or too little can be a problem.
- **Potassium.** This mineral plays a leading role in cell health.
- **Sodium.** This mineral plays a key role in making sure cells, tissues, and blood have enough water to work well.
- **Urea nitrogen, or BUN.** This is another byproduct of kidney function that shows how well your kidneys are working.

## Why do I need this test?

You may need this test if your healthcare provider needs to look at how well your body is working. It may be done as part of a workup for a problem, in an emergency situation, before surgery, or as part of a regular checkup.

## What other tests might I have along with this test?

Your healthcare provider may order other blood tests, depending on your symptoms and what they need to know.

## What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

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Results are given in milligrams per deciliter (mg/dL), milliequivalents per liter (mEq/L), or millimoles per liter (mmol/L). The normal adult range of each individual measure within the test can vary among labs.

A number of health conditions may cause out-of-range results. These include dehydration, diabetes-related complications, lung problems, and kidney or liver problems. If a test result is abnormally high or low, your provider will usually order one or more follow-up tests to find the problem.

## **How is this test done?**

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand.

## **Does this test pose any risks?**

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

## **What might affect my test results?**

Various prescription and over-the-counter medicines can affect the results of this test. Be certain to give your healthcare provider a complete health history that includes the medicines you use.

## **How do I get ready for this test?**

Your healthcare provider may ask you to not eat or drink anything but water for 6 to 8 hours before the test. Be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illicit drugs you may use.