

## Middletown Medical Laboratory Update: Fecal Immunochemical Test and Fecal Occult Blood Test now being offered

The American Cancer Society recommends screening for colon cancer between the ages of 45 and 75 annually. The two recommended test for annual screen are the FIT (which is preferred) and the FOBT. Both of these test are designed to evaluate stool samples for blood that is not visible to the naked eye. There are several possible causes of blood in the stool, one important cause is the presence of polyps or cancer in the digestive track. As people age polyps can develop, most do not cause health problems but can turn cancerous and metastasize.

The FIT and FOBT are designed to detect a specific part of the hemoglobin in the stool.

## Hemoglobin has two essential parts: a chemical part called heme and a protein part called globin. FIT Test:

- Tests for the globin or protein part of hemoglobin.
- This test is designed to specifically detect Human Globin.
- Non-human blood such as what is found in beef and other meats will not be detect using the FIT method, making it the superior to the other test.
- Hemoglobin from bleeding in the upper digestive tract is broken down before it reaches the lower digestive tract and **upper GI bleeds are not usually detected by the FIT test**.
- No particular restriction prior to testing
- Uses antibodies to detect only human blood from the lower digestive tract (colon)
- More sensitive
- Single sample is considered acceptable

## FOBT testing (Guaiac):

- Test for the Heme or non-protein part of hemoglobin
- Heme is common to blood from all sources
- Identifies the presence of blood from any source causing it to not only measure your heme but the heme from dietary sources such as red meat
- Heme is resistance to degradation in the intestine causing a detection of blood from other areas such as from other areas of the digestive tract, bleeding stomach ulcers, bleeding gums and nosebleeds
- Less specific for the detection of bleeding from the colon
- Preparation: includes avoiding certain medications and to follow certain dietary restriction for several days before collecting the stool samples including avoiding red meat and dental procedures.
- Avoid non-steroidal anti-inflammatory drugs 7 days before collection to prevent stomach bleeding that can be trigged by these drugs
- Avoid broccoli, turnips, cauliflower, apples and colchicine that can cause a false-positive
- Avoid Vitamin C and fruit juices that contain Vitamin C that causes a false-negative
- Help with the determination of unexplained anemia from the loss of blood from the GI tract, indicated by a low Hemoglobin, Hematocrit, dark stools and fatigue