

## EDCO FORUM®

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## New Immunoassay Colorectal Cancer Screening Method FOBT-CHEK® OC

Automated Fecal Occult Blood Analyzer

The FOBT-CHEK® Automated Fecal Occult Blood Analyzer from Polymedco, Inc. (Cortlandt, NY), is an immunological-based test, specifically designed to detect the presence of human hemoglobin in fecal specimens. Collecting the one required stool specimen in the propriety sample collection device is easy and once closed by the patient, the device is never reopened. Along with the OC-Auto Micro 80 automated analyzer, the FOBT-CHEK assay provides increased sensitivity and specificity over most current FOBT screen techniques, leading to the earlier detection of polyps and colorectal cancer (CRC).

CRC has the second highest death rate among cancers, with more than 55,000 deaths per year in the United States.1 Ninety percent of all CRCs, however, could be prevented if detected at an early stage.2 "Colorectal cancer screening rates in our country are abysmal," notes Ruthie Goldberg, MHA, Group Leader, Regional Outreach and Cancer Screening, Southern California Kaiser Permanente Medical Group (Pasadena, CA), "with less than 50 percent of those people recommended for screening getting screened." Ms. Goldberg explains, "Until the past decade, there was less focus on colorectal cancer than other cancers. People also find the screening tests very unappealing. There is one very important difference with CRC screening: there is not another cancer that you can



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screen yourself for at home. You cannot give yourself a pap smear or a mammogram at home. The Polymedco FOBT provides a truly easy way for people to screen, and because it's so convenient, it gets done." Published literature has shown that with the FOBT-CHEK assay, there can be as much as a 30 percent improvement in detecting early stage cancer over what is currently observed in the U.S. The American Cancer Society states that only 39 percent of colorectal cancers are detected in the early stage¹ versus 66 percent in Japan using Polymedco's methodology.³

Nieva Ladrillono, Director of Operations, Sentara Medical Group (Norfolk VA), points out that the ease of collecting the stool sample for the FOBT-CHECK assay is "nothing compared to the older guaiac-based FOBT. It takes only one small portion of one bowel movement to get a sample, unlike the three bowel movements and three samples required for Guaiac-based tests. Patients are more likely to comply based on this convenience."

The specificity of the Polymedco FOBT-CHEK test also eliminates the need for dietary or medicinal restrictions before testing. Gyorgy Abel, MD, PhD, Director of the Clinical Immunology and Molecular Diagnostics Laboratory at Lahey Clinic Medical Center (Burlington, MA), explains that the Guaiac-based test detects the perioxidase activity of heme in the stool samples. "Heme can also be found in substances other than human hemoglobin, such as myoglobin in red meat, while peroxidase is present in certain vegetables such as horseradish. Consumption of these foods prior to taking the Guaiac test might lead to false-positive results. On the other hand, certain fruits and drugs (i.e., Vitamin C) might produce false-negative results. The Polymedco
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Patients, therefore, must abstain from consuming any of these items for three days prior to taking the Guaiac test. The Polymed-co FOBT does not rely on detecting heme molecules, but instead is highly specific for identifying only the globin protein in *human* blood. This means there will be significantly fewer false-positive reactions, which directly correlates to less patient distress and fewer unnecessary procedures."

While there are benefits for the patient, there are also benefits for the laboratory, notes V.C. (Lackey) Lymperopoulos, Laboratory Manager, Scripps Clinic Medical Laboratories (La Jolla, CA). "It's an automated method. The analyzer

measures the closed specimen collection devices and the laboratory professionals never come into contact with the fecal sample in the collection container. You don't have to worry about the strong odor of the Guaiac tests. The analyzer interfaces with the laboratory computer for quick online resulting."

Ms. Goldberg closes by saying, "With proper screening and early detection, we can go a long way in preventing, detecting and treating colorectal cancer."

The American Cancer Society, along with the US Government, now recommends that everyone over the age of 50 should be screened for Colorectal Cancer. Individuals in higher risk categories such as family history of CRC or Inflammatory Bowel Disease should start regular screening.

## To Learn More

For more information about the FOBT-CHEK® OC Automated Fecal Occult Blood Analyzer, please call 1-800-431-2123, or visit the company's Web site at www.fobt-tests.com.

## **References:**

- 1. American Cancer Society, www.cancer.org.
- 2. 2006 Cancer Facts and Figures.
- 3. Nagase Medical Update October 2001.