High overall CRC diagnostic accuracy for home stool test

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(HealthDay)—Fecal immunochemical tests (FITs) have moderate sensitivity, high specificity, and high overall diagnostic accuracy for detecting colorectal cancer (CRC), according to research published in the Feb. 4 issue of the *Annals of Internal Medicine*.

Jeffrey K. Lee, M.D., of the University of California in San Francisco, and colleagues conducted a systematic review and meta-analysis of the literature to assess the diagnostic accuracy of FITs for detecting CRC in asymptomatic, average-risk adults.

The researchers found that, for CRC screening, the overall diagnostic accuracy of FITs was 95 percent (95 percent confidence interval [CI], 93 to 97 percent), the pooled sensitivity was 0.79 (95 percent CI, 0.69 to 0.86), and the pooled specificity was 0.94 (95 percent CI, 0.92 to 0.95).

Using a lower assay cutoff value for a positive test result, such as less than 20 µg/g, improved sensitivity to 0.89 (95 percent CI, 0.80 to 0.95) but decreased specificity.

"FITs are moderately sensitive, are highly specific, and have high overall diagnostic accuracy for detecting CRC. Diagnostic performance of FITs depends on the cutoff value for a positive test result," the authors conclude. "Health systems wishing to optimize use of a quantitative FIT should consider the tradeoff between increasing sensitivity (by lowering the cutoff threshold for a positive test) and the resulting increase in the number of positive test results, which will have a greater effect on colonoscopy resources."

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