

## ***J20 DNA Stool Test for Colorectal Cancer***

May 2009

Intro: Research shows that screening for colorectal cancer saves lives. That's because screening can catch cancer early, while it's still curable. But let's face it, having a colonoscopy to look for cancer or precancerous polyps is not fun. Doctors at Mayo Clinic have studied and improved upon a non-invasive screening test that requires no preparation or procedure. The test detects cancer or precancerous polyps by measuring DNA in your stool.

### **Video**

**Total running time 1:49**

**CG :08 to :17**

**David Ahlquist, M.D.**

**Mayo Clinic**

### **Audio**

IN THIS LAB, A RESEARCH TEAM AT MAYO CLINIC LED BY DR. DAVID AHLQUIST SCREENS STOOL SAMPLES FOR EVIDENCE OF COLON CANCER.

“IF A CANCER IS DETECTED BY SCREENING IN SOMEONE WITH NO SYMPTOMS. THE MAJORITY OF THOSE CANCERS ARE COMPLETELY CURABLE.”

DR. AHLQUIST'S TEAM IMPROVED EXISTING STOOL TEST TECHNOLOGY TO MAKE IT HIGHLY EFFECTIVE AT DETECTING EARLY STAGE COLON CANCER AND

PRECANCEROUS POLYPS. IT'S CALLED STOOL DNA TESTING. UNLIKE STANDARD COLONOSCOPY, WHICH REQUIRES A BOWEL PREP, SEDATION AND AN INVASIVE PROCEDURE, DNA STOOL TESTING IS NON-INVASIVE. ALL PATIENTS HAVE TO DO IS SEND A STOOL SAMPLE TO THE LAB. HERE'S HOW IT WORKS: COLON POLYPS AND CANCERS SHED DNA THAT ENDS UP IN YOUR STOOL. IN THE LAB, TECHNICIANS EXTRACT DNA FROM THE STOOL. FROM THAT DNA, THEY IDENTIFY MUTATED GENES FROM NORMAL GENES. AN INCREASED AMOUNT OF MUTATED DNA INDICATES THE PRESENCE OF CANCER OR PRECANCER.

“THAT TELLS ME THERE'S A PERCENTAGE OF DNA ON MY PCR PLATE HERE THAT HAS

**CG 1:01 to 1:14**  
**Fareeda Taher**  
**Mayo Clinic**

**Standup**  
**CG 1:15 to 1:27**  
**Vivien Williams**  
**Reporting**

MUTATIONS. THE PATIENT HAS A POSSIBLE CANCER BECAUSE OF THE NUMBER OF MUTATIONS WE FIND IN HIS STOOL.”

MOST CANCERS SHED MUTATED DNA. SO DR. AHLQUIST SAYS THIS TECHNOLOGY MAY ALSO BE AN EFFECTIVE SCREENING TOOL FOR CANCER IN OTHER AREAS OF THE DIGESTIVE TRACT SUCH AS THE MOUTH, ESOPHAGUS, PANCREAS AND BILE DUCT. DR. AHLQUIST’S RESEARCH TEAM IS ACTIVELY EXPLORING THESE EXPANDED TARGETS.

**David Ahlquist, M.D.**  
**Mayo Clinic**

“I THINK THE REAL VALUE OF DNA STOOL TESTING IS THAT IT DETECTS THE PREMALIGNANT POLYPS FOR THE FIRST TIME WITH A NON-INVASIVE TEST, THEREBY PROMISING TRUE CANCER PREVENTION.”

FOR MEDICAL EDGE,  
I'M VIVIEN WILLIAMS.

Anchor tag:

Dr. Ahlquist says more research needs to be done to confirm his research findings. But he suspects stool DNA testing will become a widely used, cost effective way to screen for colon cancer.

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