

**Colorectal cancer knowledge,  
perceived barriers to and benefits of  
screening, stage of readiness for screening,  
and screening behaviors among urban  
church-attending African Americans:**

**Findings from and feasibility of a  
self-administered church-based survey**

Chastity Roberts, PhD, MPH  
Division of Preventive Medicine  
The University of Alabama at Birmingham

# Racial/ethnic disparities in colorectal cancer (CRC)

- African Americans have higher CRC incidence and mortality than do Whites<sup>1</sup>
- Pattern true for males & females
- Lifestyle factors may play a role
- Screening rates differ, 41% of AA ever had blood stool test, 46.7% Whites<sup>2</sup>
- 46.8% AA ever had sigmoidoscopy or colonoscopy, 49.9% Whites<sup>2</sup>

# CRC Screening is key

- Screening for early detection
- Prevention through identifying and removing polyps before they turn to cancer

# Screening guidelines

➤ **Based on US Preventive Task Force (2005 Pocket Guide):**

- Annual Fecal Occult Blood Test (FOBT)
- Colonoscopy every 10 years
- Flexible sigmoidoscopy or double-contrast barium enema every 5 years

\* for normal risk patient, beginning at age 50

\* Start younger for those at higher risk

# Interventions to Increase Screening

- CRC screening is underutilized
- Particularly by African Americans
- Community-based interventions
- Church-based interventions

# Church-based CRC interventions

- A few church-based programs
- WATCH program uses lay health advisors to encourage screening<sup>16</sup>
- “church-based” vs. spiritually-based

# Role of Culture

- Role of cultural beliefs in health behaviors
- Movement toward culturally-appropriate health communication interventions
- Cultural variables appropriate to African Americans and health context:
  - racial pride, collectivism, time orientation, religiosity<sup>5</sup>

# Religiosity in the Black Community

- Plays a central role in lives of many African Americans<sup>6</sup>
- Especially for those who are older<sup>8-12</sup>



# What is Spiritually-based Health Communication?

- Conducted within church setting
- Uses existing held spiritual themes to support the health message
- Selected scripture to reflect/support the health message
- May also include more general cultural content
- Spiritual content is identified and pre-tested by community members

# Study Specific Aims

- Develop and pilot test a spiritually-based cancer communication intervention to increase CRC screening among African Americans age 50+
- Implement intervention among 480 African Americans recruited through 16 local churches
- Evaluate efficacy of intervention for CRC screening and Health Belief Model-based outcomes, using a randomized controlled trial

# Intervention Structure

- **2 Educational sessions led by Community Health Advisors (CHAs)**
  - Spiritually based vs. secular content
- **1 “Booster” telephone call by CHAs**
  - Address barriers, decision making, CRC risk factors
  - Personalized “counseling” for participants

# Primary Outcome

- CRC screening, based on American College of Gastroenterology & USPTF guidelines
- Measured through self-report
- Validated through medical record verification

# Secondary Outcomes

- Knowledge of CRC (e.g., risk factors, screening methods & recommendations)
- Perceived benefits of screening
- Perceived barriers to screening
- Self-efficacy for screening
- Behavioral intention for screening

# Measurement

Summary of study design including measures

Item/set of items	Baseline	First session	Second session	Post test	Booster call	12-month follow-up
Knowledge	○			○		○
Perceived barriers	○			○		○
Perceived benefits	○			○		○
Self-efficacy	○			○		○
Behavioral intention for screening	○			○		○
Screening	○			○		○
Intermediate communication outcomes				○		○
Religiosity and religious coping	○					
Demographic information	○					

# Hypotheses

## Spiritually-based > Secular

- Higher rates of CRC screening at 12-months
  - Higher levels of knowledge about CRC screening
  - Report higher self-efficacy, perceived benefits, behavioral intention
  - Report fewer perceived barriers to screening
    - at post-test and 12-month follow-up, compared to baseline

# Church Recruitment

- 16 African American churches recruited from metro Birmingham area
  - Importance of personal relationships
  - Recruitment approach



# Participant Recruitment

- Community Health Advisors and study staff recruited 30-35 participants in each church
- Sign-up sheet and pre-enrollment screening (eligibility criterion)
- Participant check-in at beginning of sessions

# Baseline Data Collection

- Completed at first session after informed consent process
- 16-page survey; 30-40 minutes
- Study staff assisted as necessary

# Baseline Findings

## Sample demographics:

- N = 109
- Age 48-90 (mean = 62.15, SD = 9.57)
- 77 women (74.8%); 26 men (25.2%)
- 44.1% married; 21.6% widowed; 16.7% single; 16.7% divorced/separated
- 36% some college; 29% high school or GED; 23% 4+ years college

# Baseline Findings

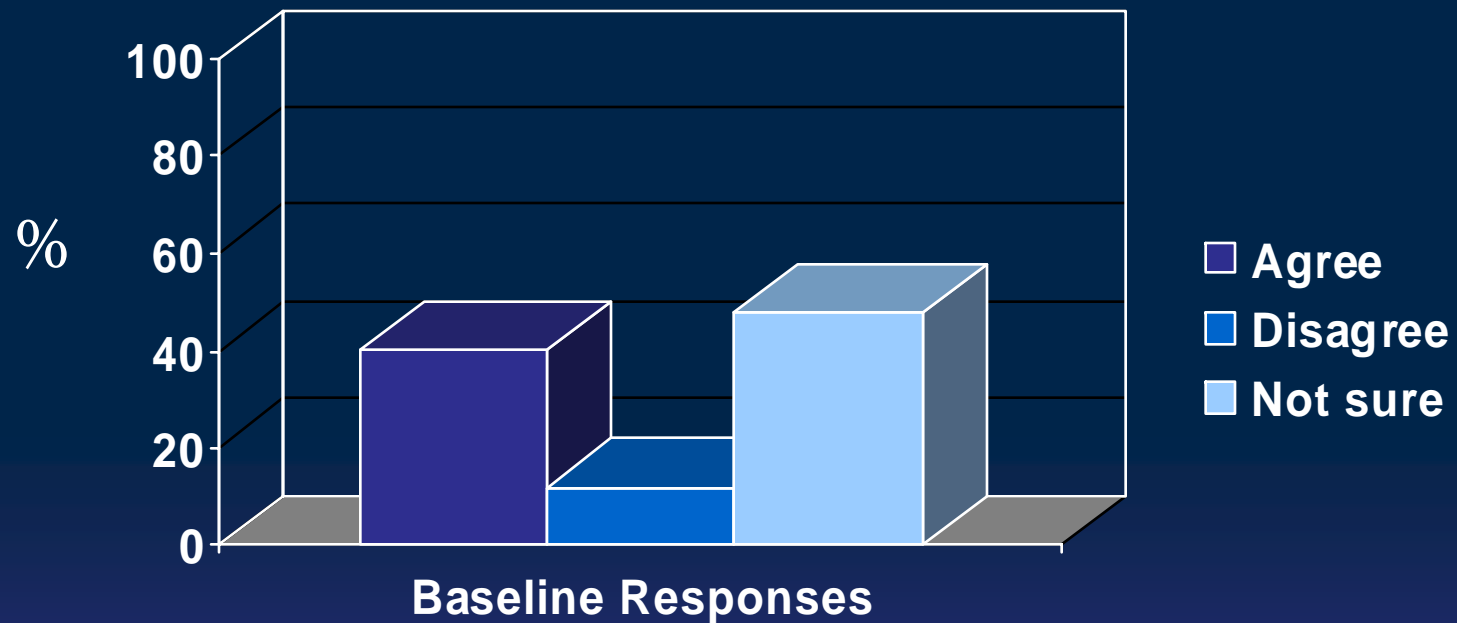
## Sample demographics:

- Work status: 34.1% retired; 30.5% full-time; 14.6% disabled; 12.2% part-time; 8.5% not employed
- Median income: \$20000-\$30000/yr
- Health insurance: 57.6% private insurance; 44.2% Medicare; 21.1% Medicaid; 18.2% “other insurance”

# Baseline Findings: Knowledge

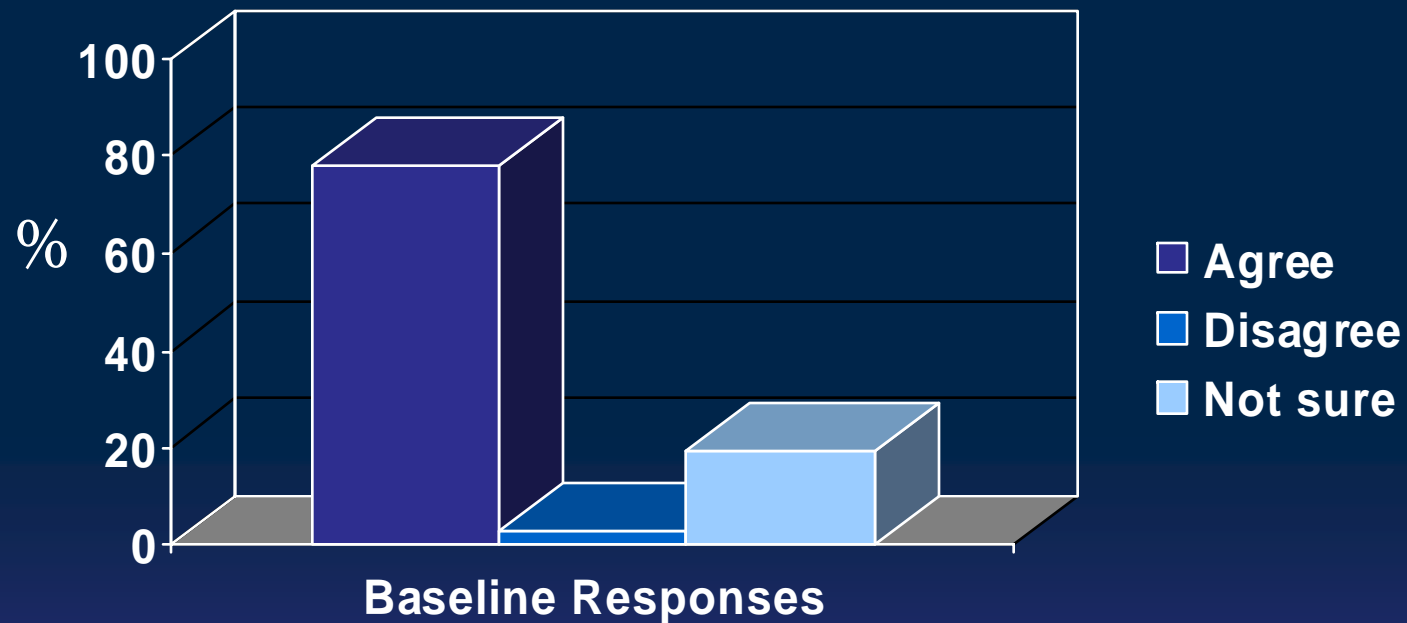
# Baseline Findings

CRC is leading cause of cancer death



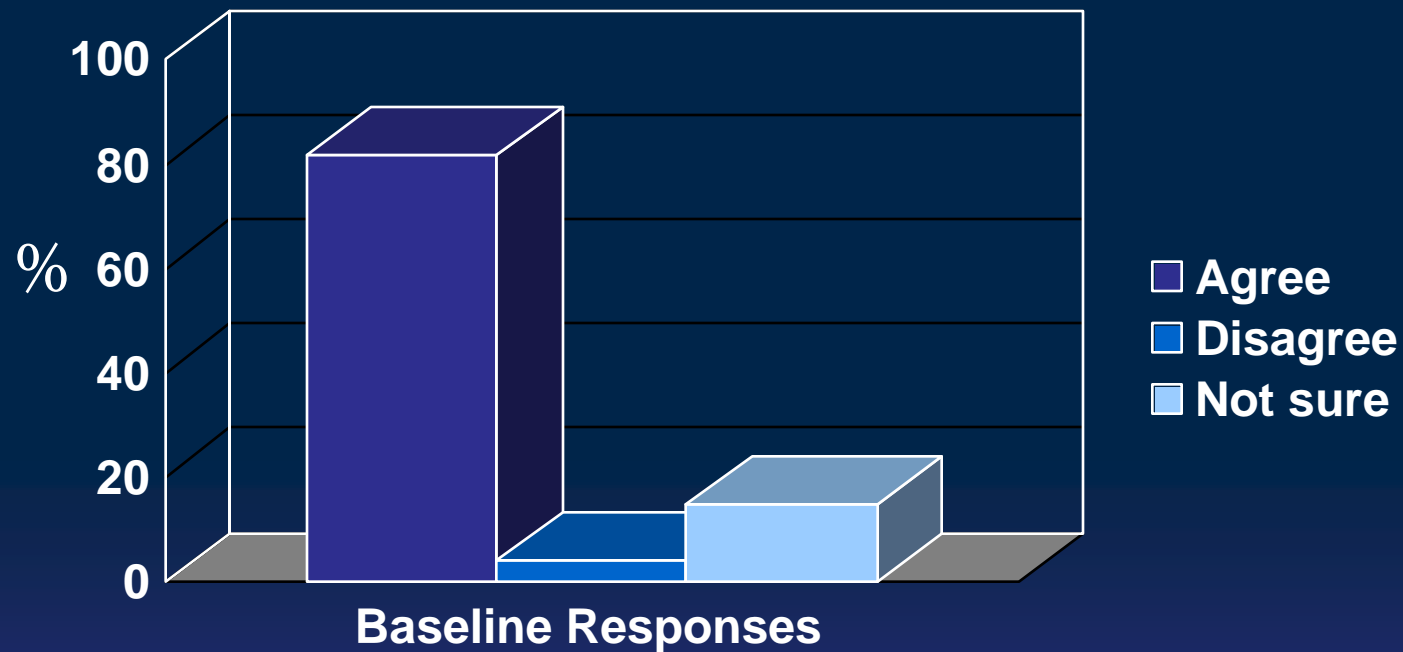
# Baseline Findings

Risk of CRC increases with age



# Baseline Findings

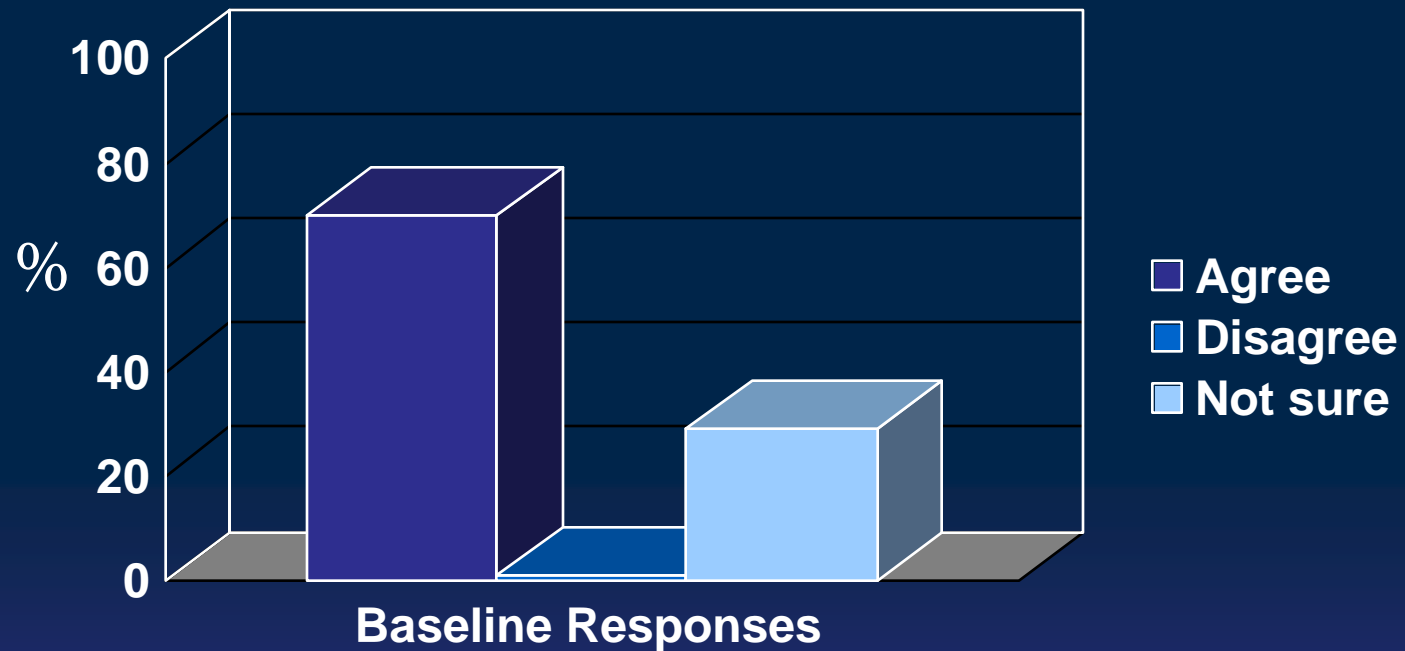
Both men and women are at risk for CRC





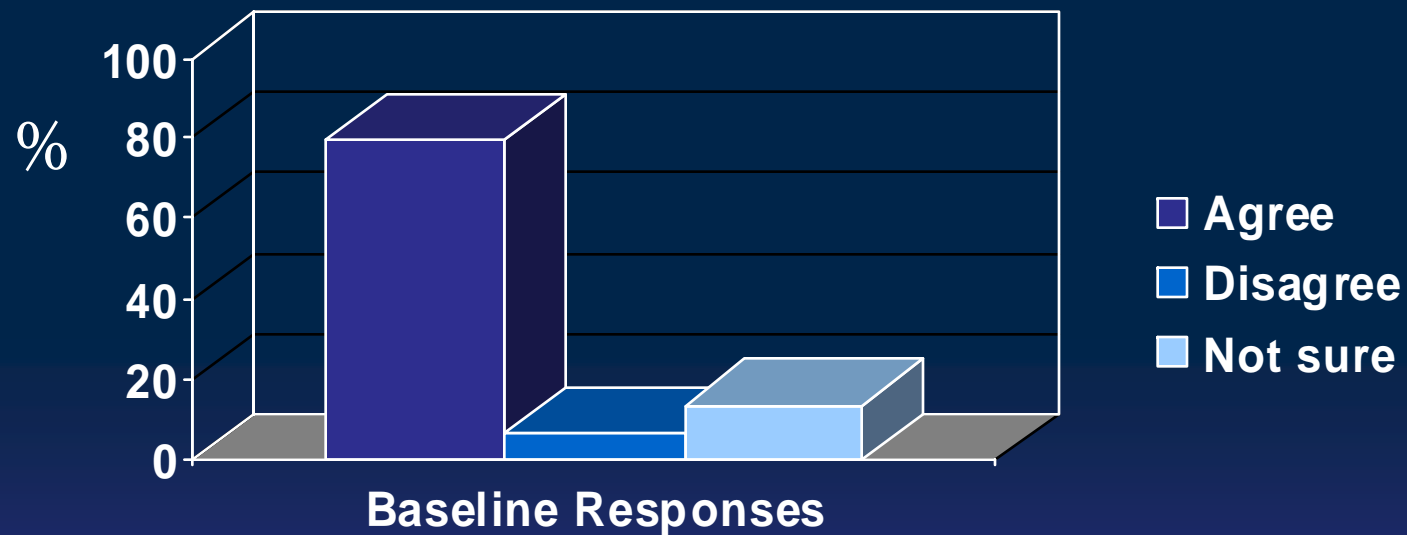
# Baseline Findings

CRC begins as a growth in colon/rectum



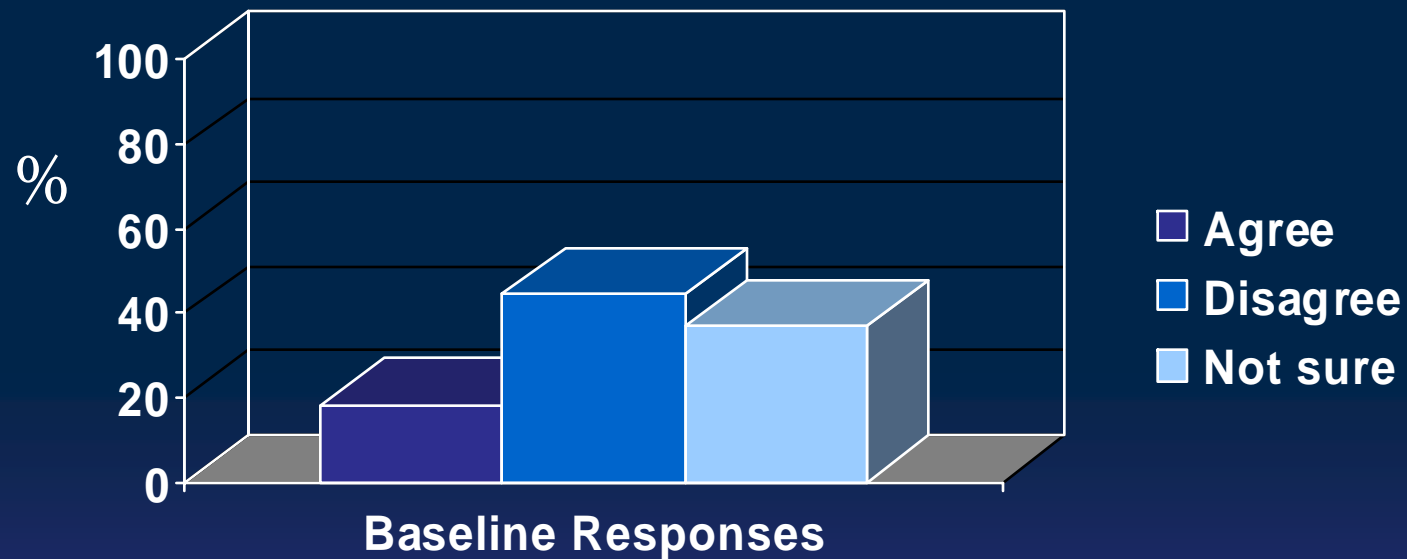
# Baseline Findings

Change in bowel habits is a symptom  
to report to doctor



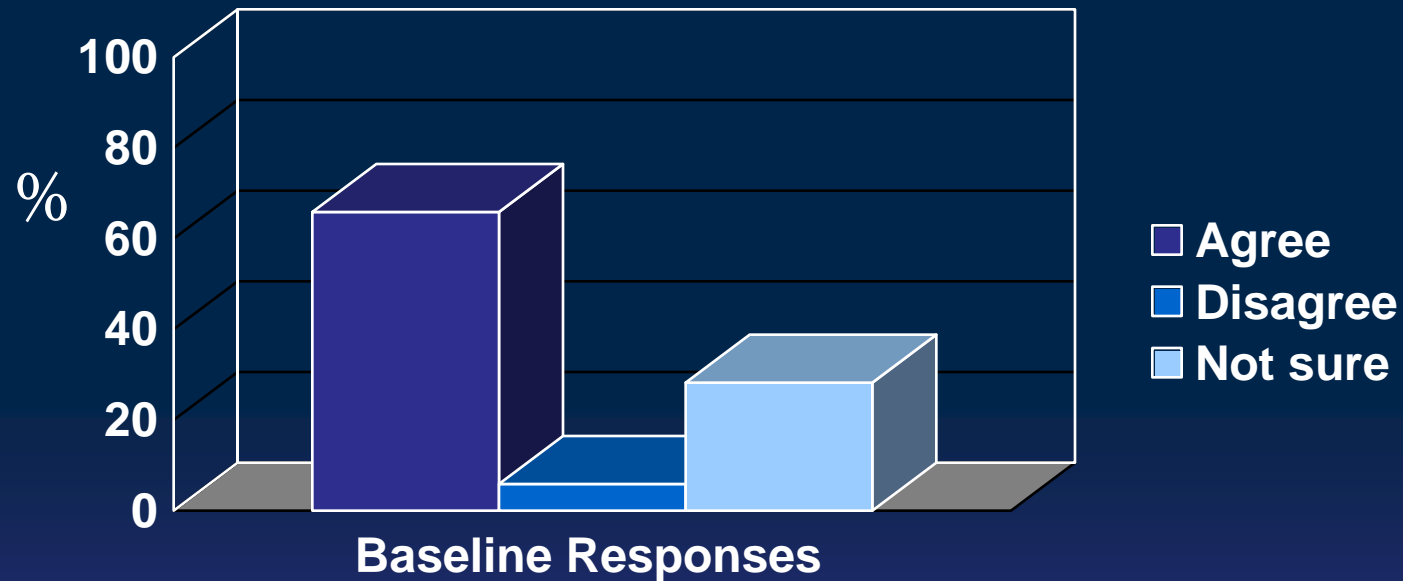
# Baseline Findings

CRC is usually fatal



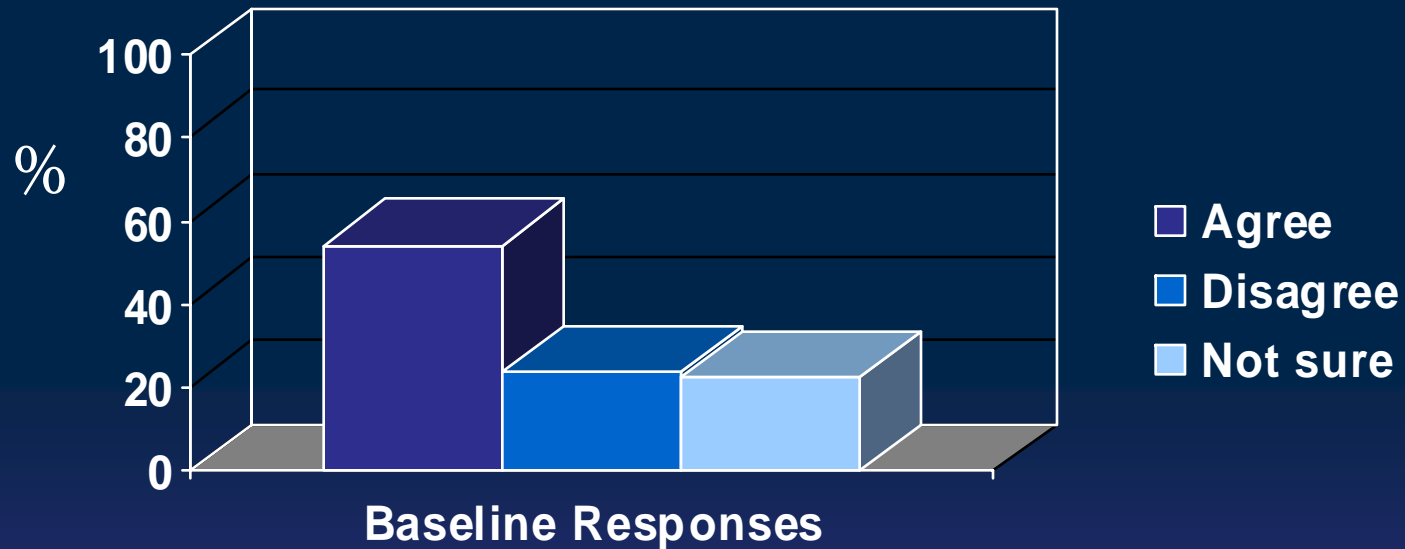
# Baseline Findings

There are several tests for CRC



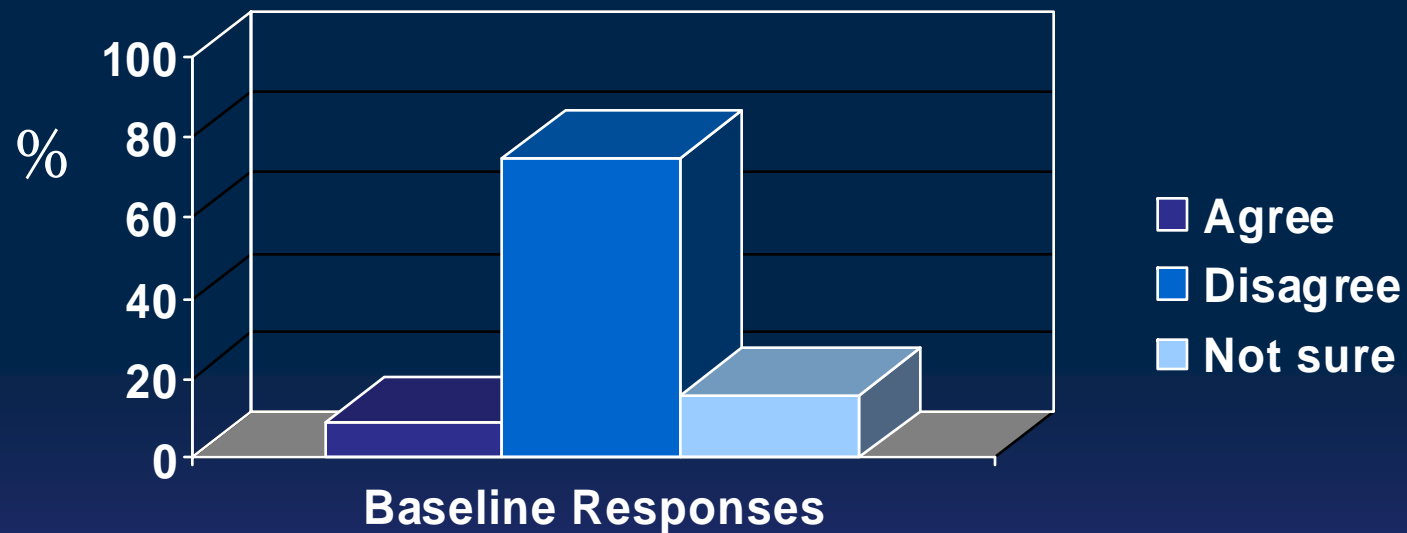
# Baseline Findings

CRC screening begins at age 50



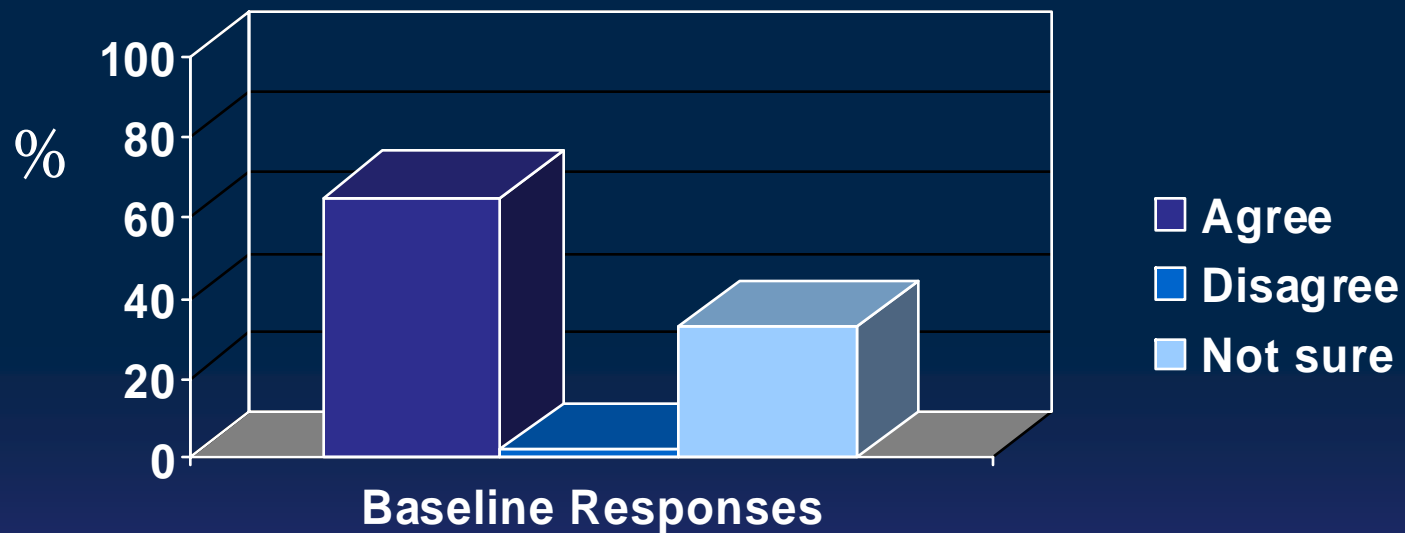
# Baseline Findings

CRC screening is not necessary if  
no symptoms



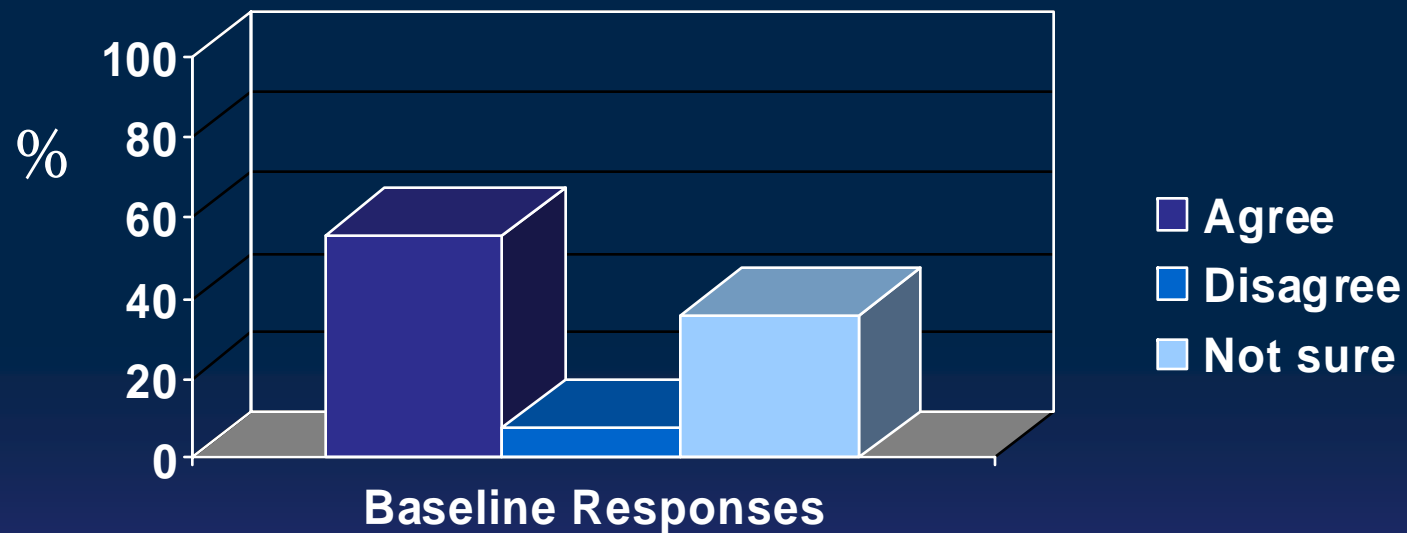
# Baseline Findings

People with family history of CRC are  
at greater risk



# Baseline Findings

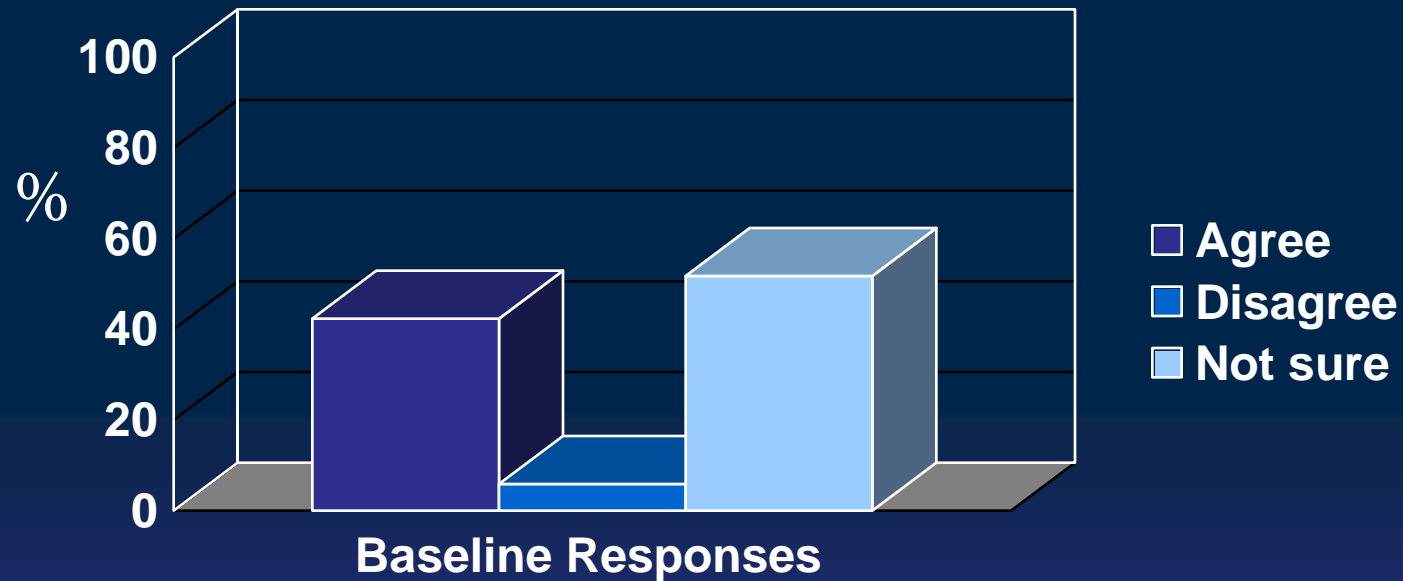
African Americans are at higher risk of dying from CRC than Whites





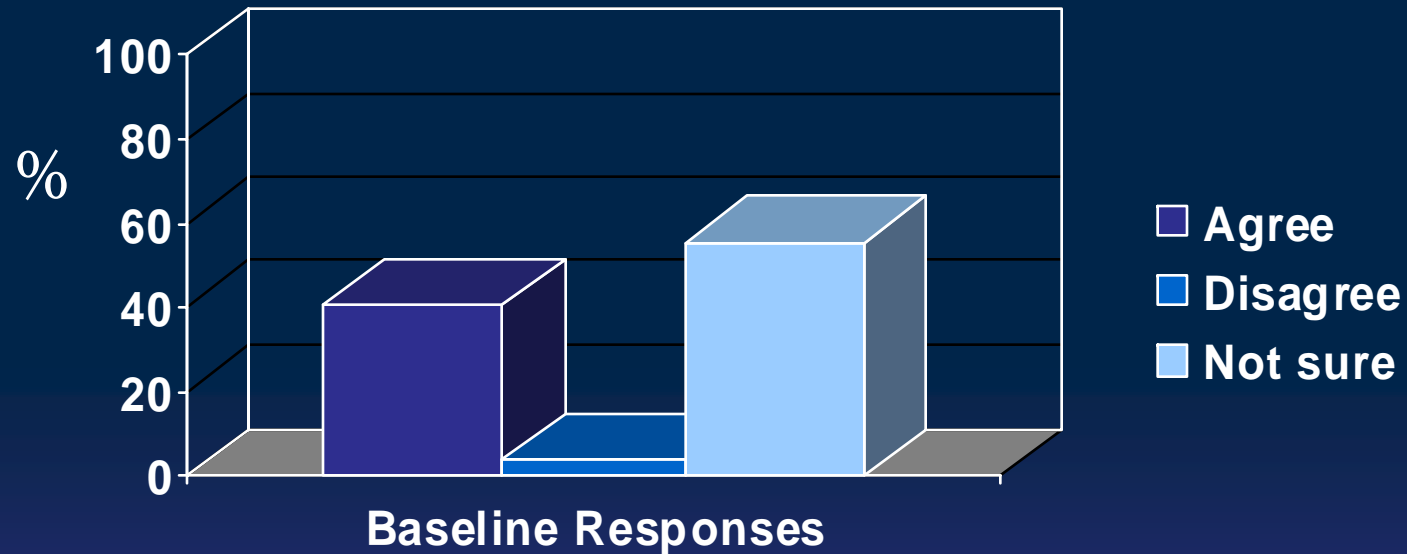
# Baseline Findings

FOBT should be done every 2 years



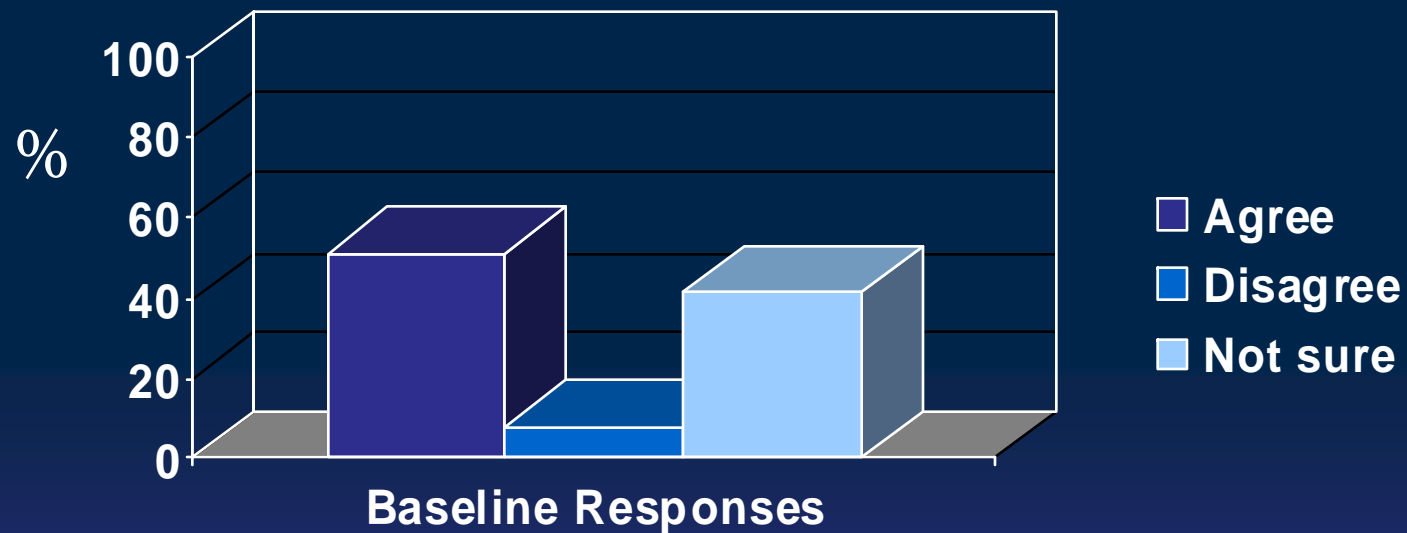
# Baseline Findings

Flex sig should be done every 5 years



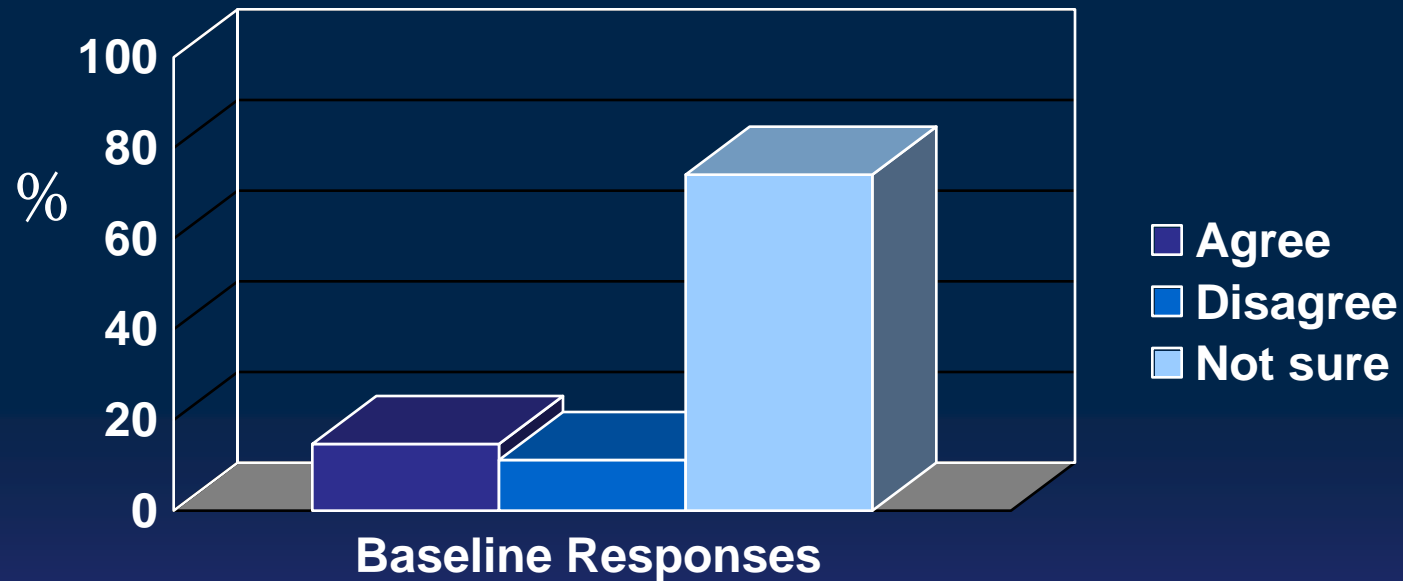
# Baseline Findings

Colonoscopy should be done every 5 years



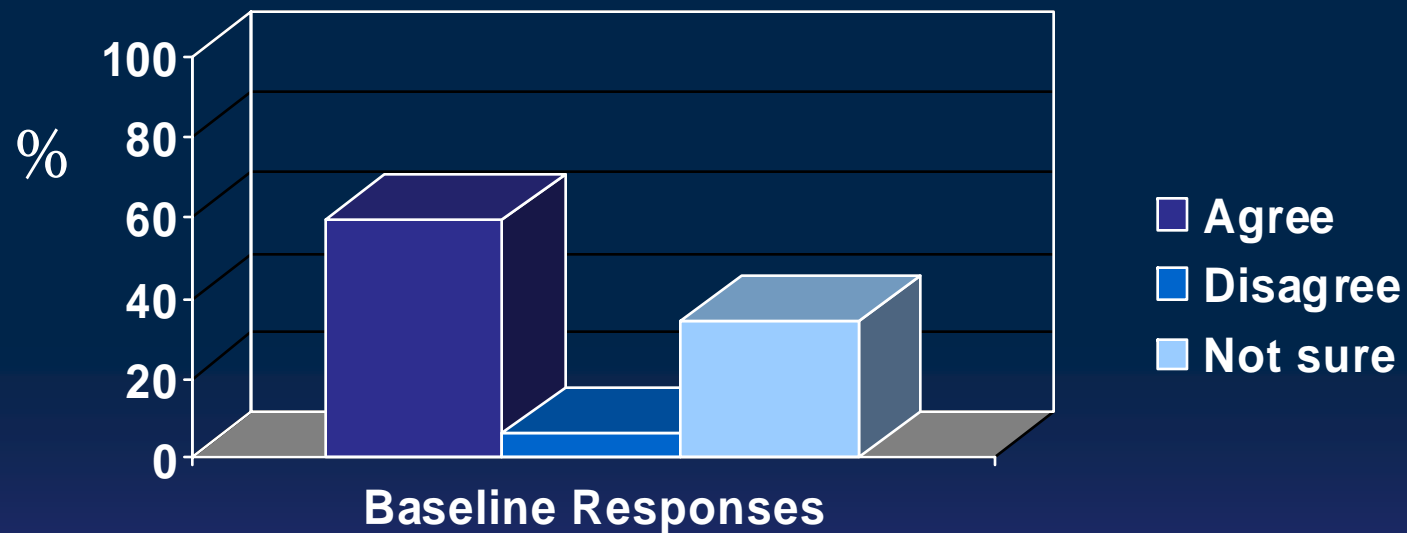
# Baseline Findings

DCBE should be done every 10 years



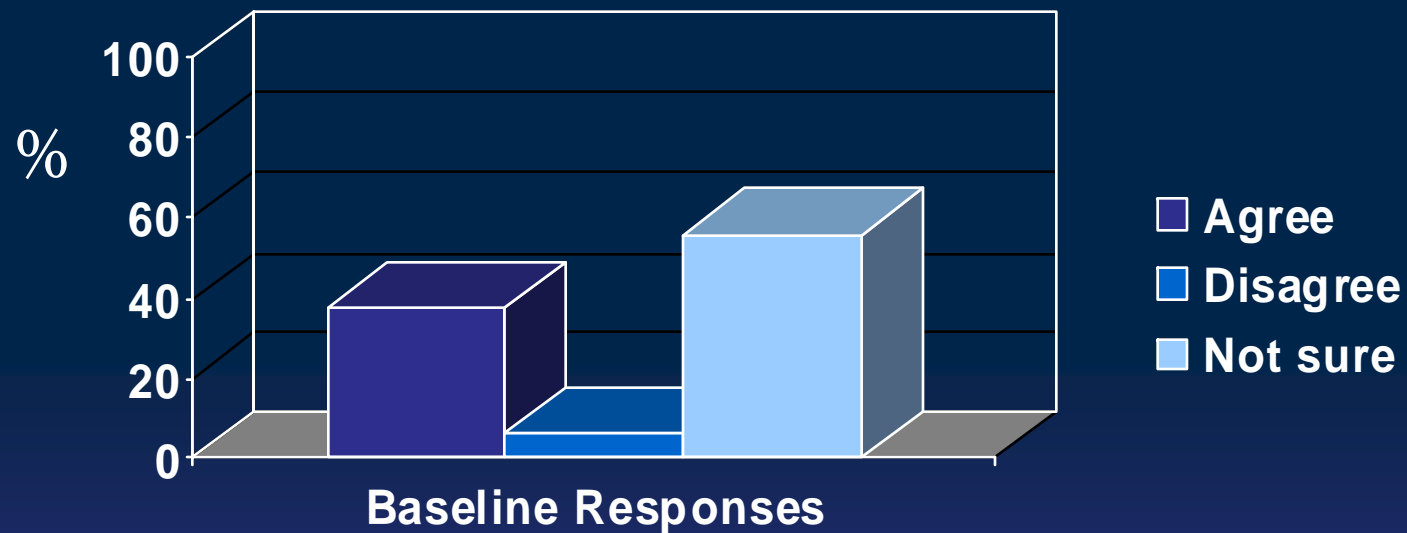
# Baseline Findings

Taking out precancerous polyps  
can prevent CRC



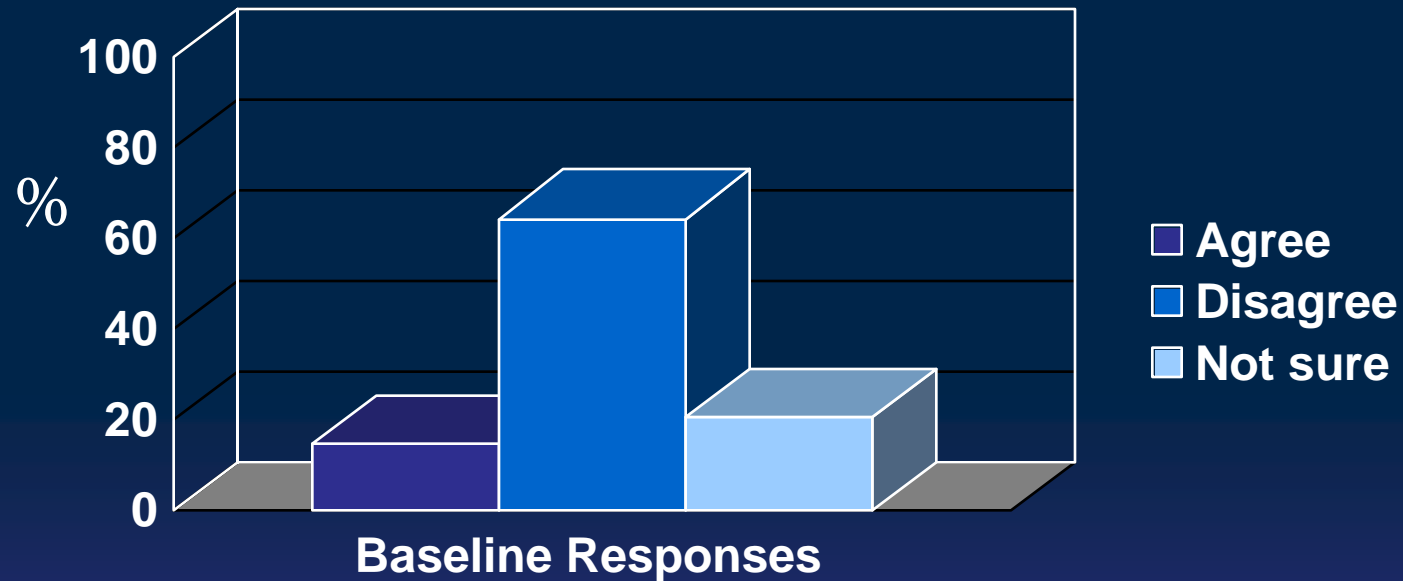
# Baseline Findings

Abdominal pain can be a symptom of CRC



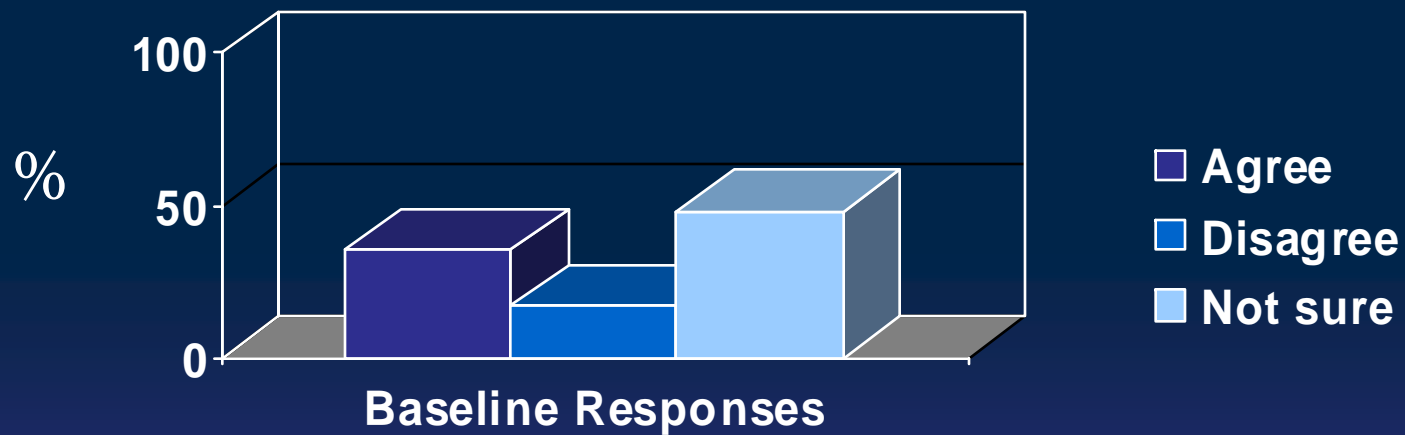
# Baseline Findings

CRC is a death sentence



# Baseline Findings

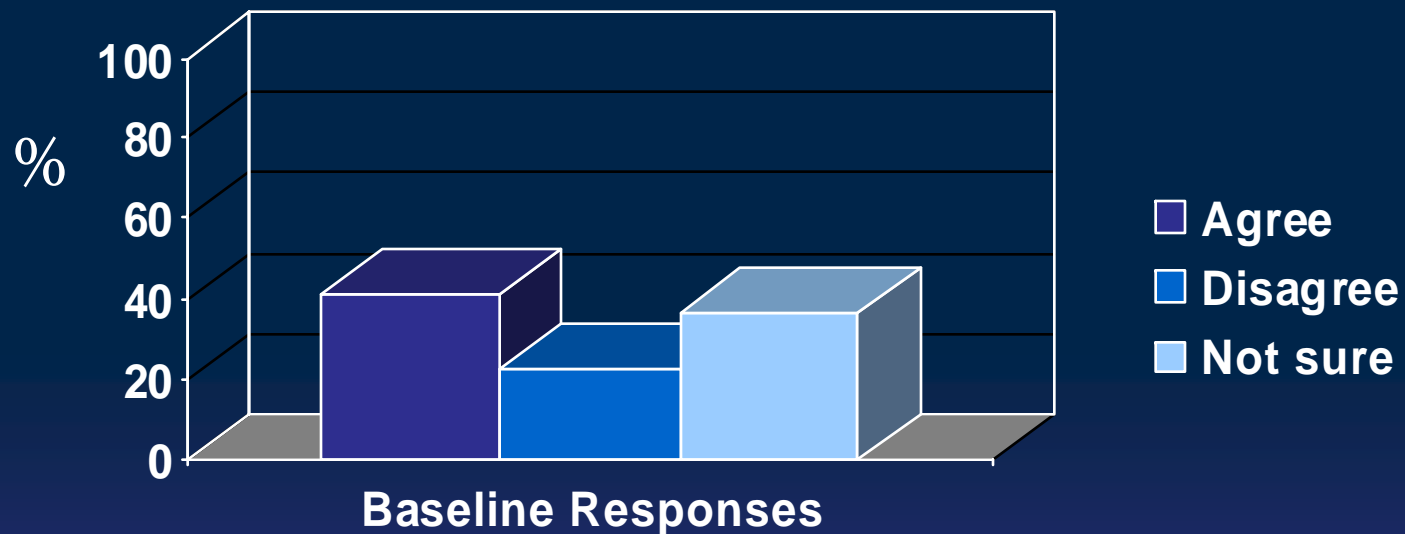
Being overweight increases  
risk for CRC





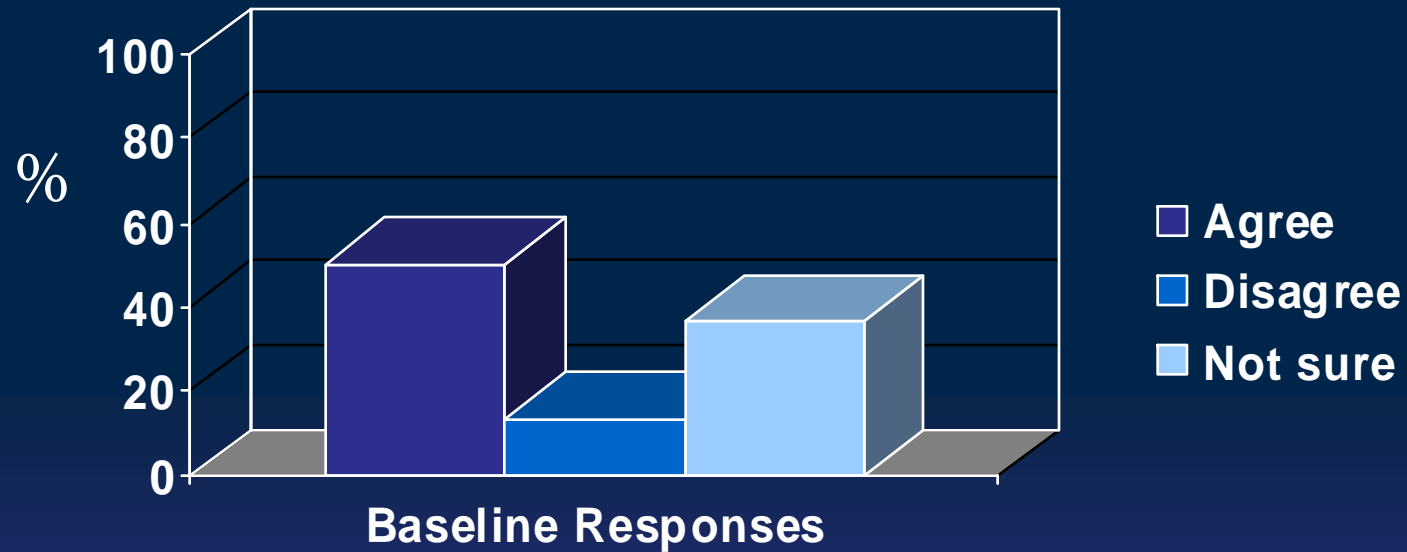
# Baseline Findings

Diet low in fruit/vegetables increases risk for CRC



# Baseline Findings

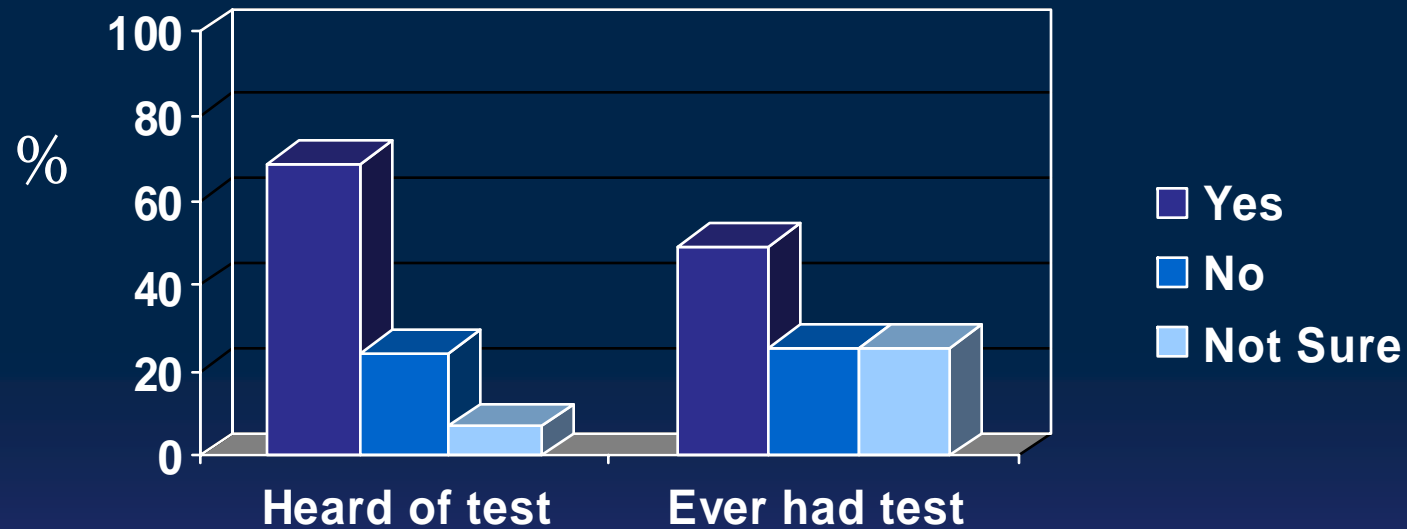
Diet high in fat increases  
risk of CRC



# Baseline Findings: Screening

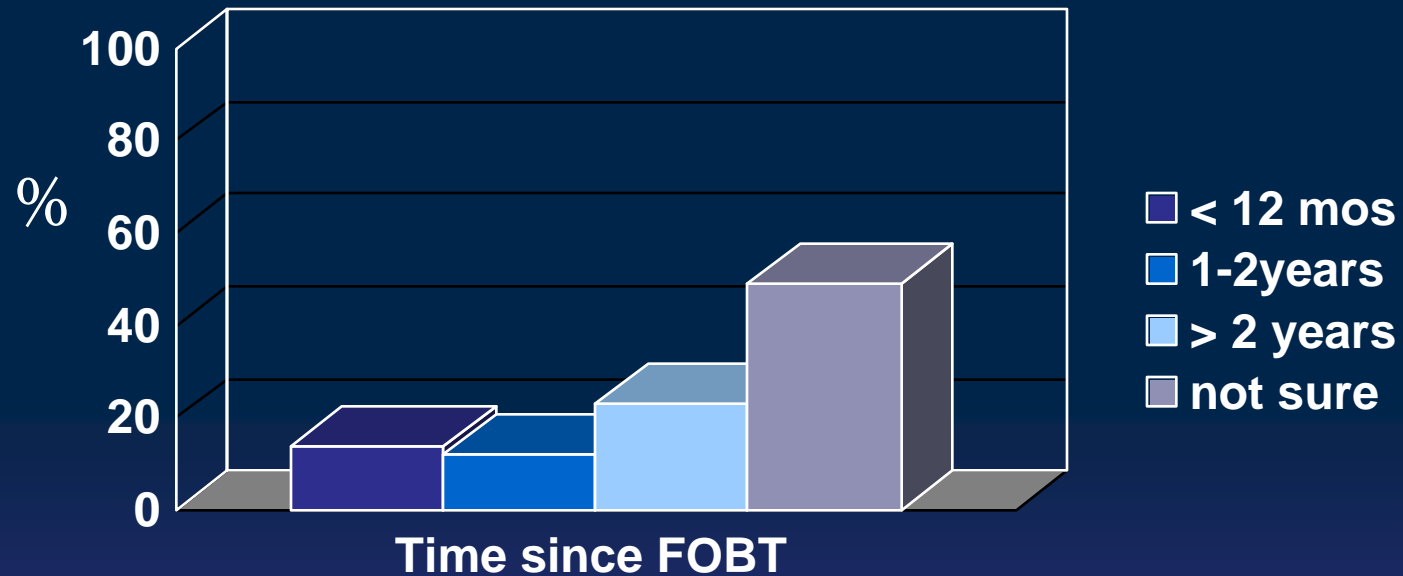
# Baseline Findings

## Fecal Occult Blood Test



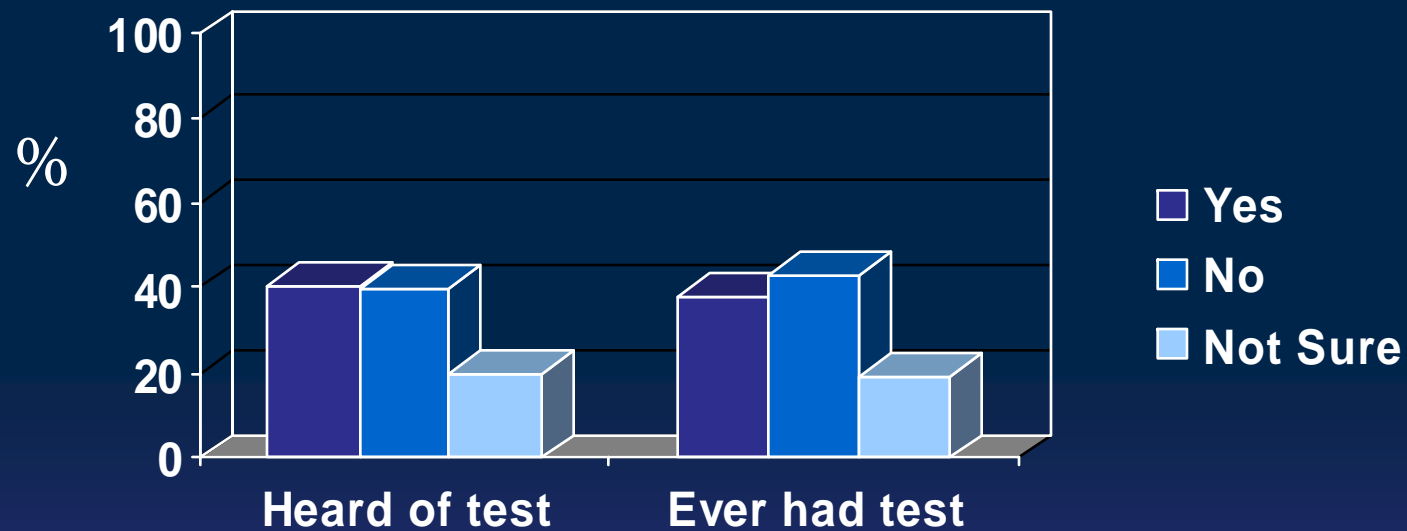
# Baseline Findings

When was your last FOBT?



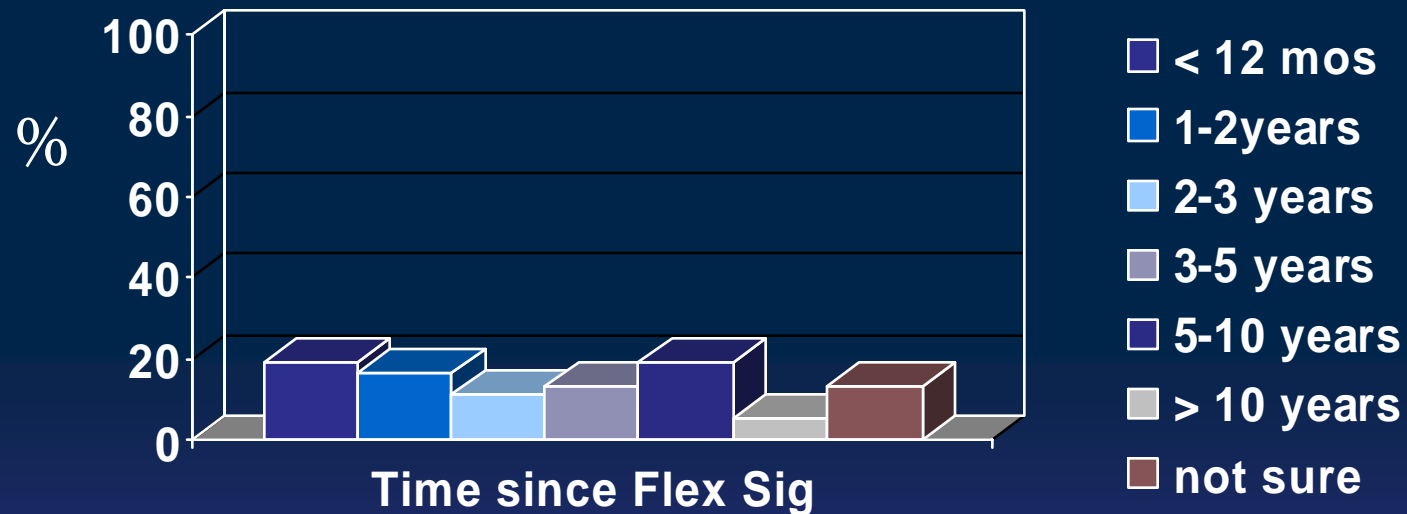
# Baseline Findings

## Flexible Sigmoidoscopy



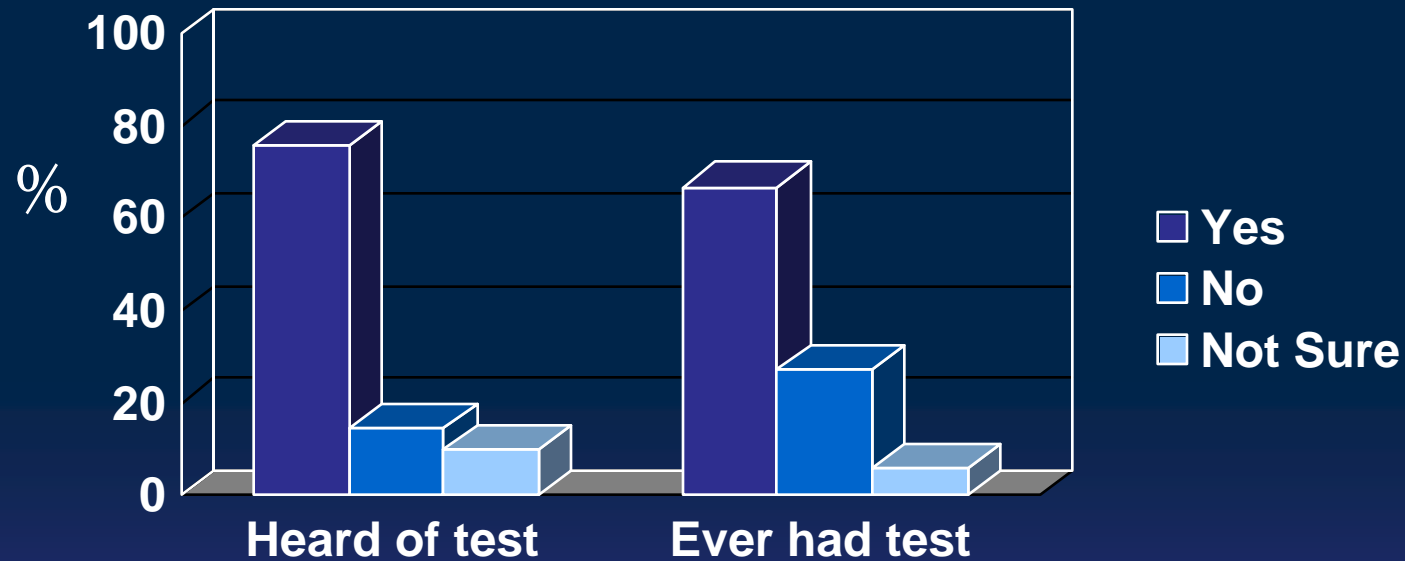
# Baseline Findings

When was your last Flexible Sigmoidoscopy?



# Baseline Findings

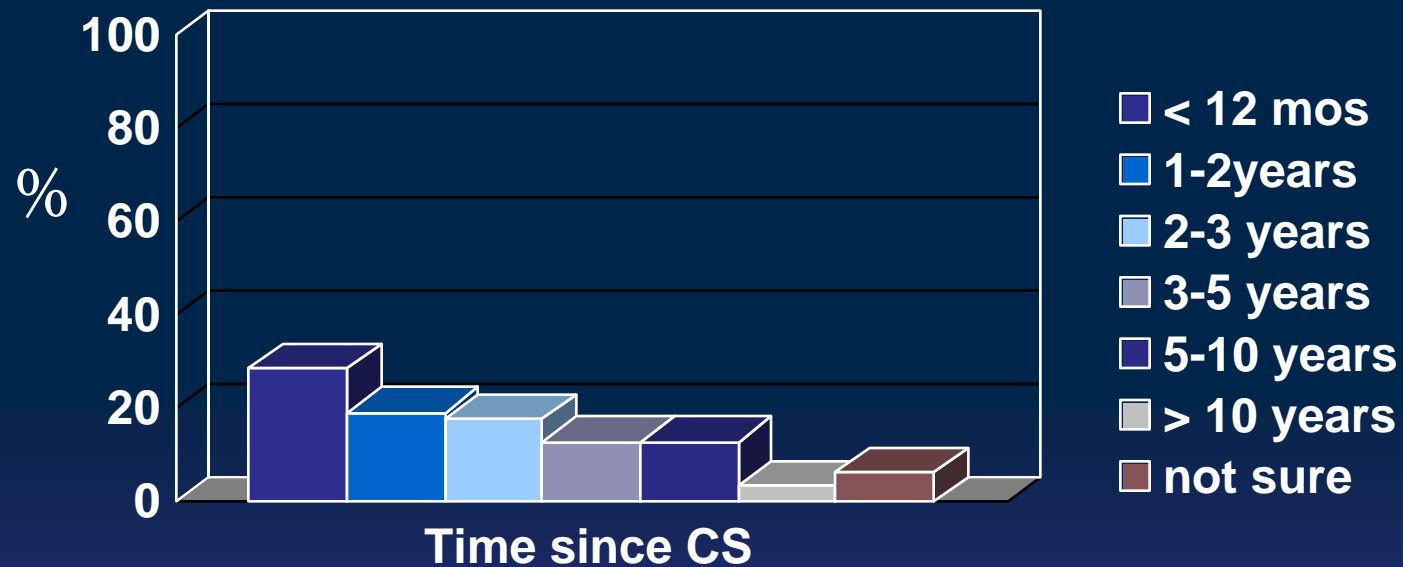
## Colonoscopy





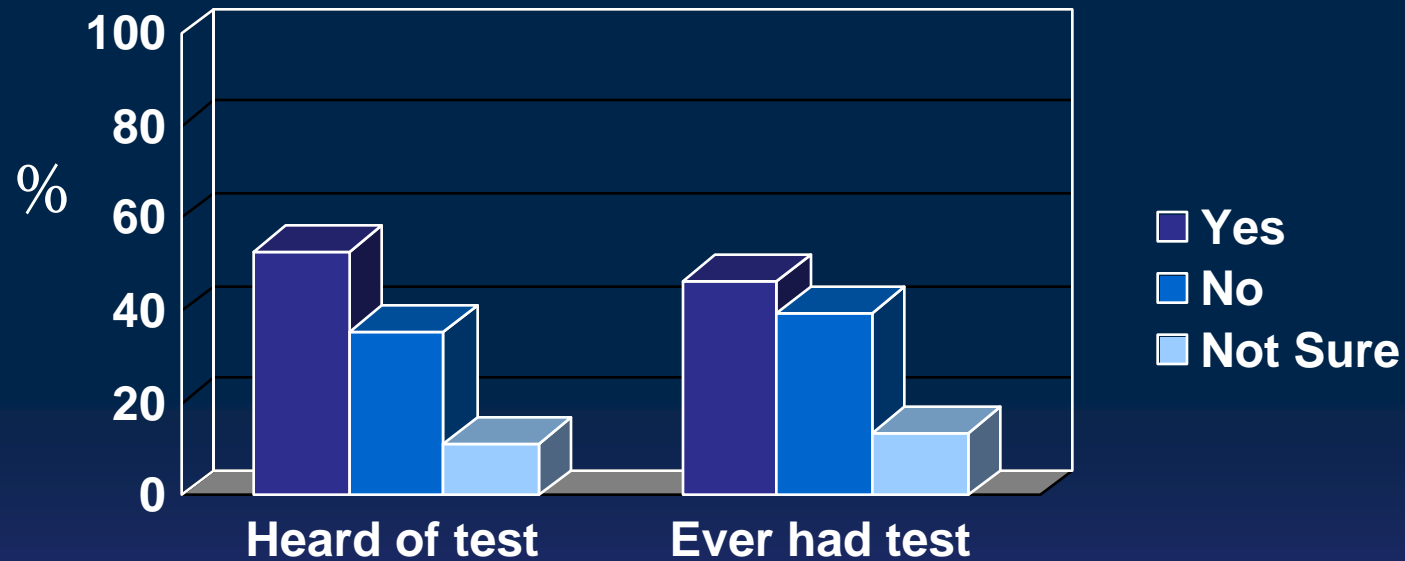
# Baseline Findings

When was your last Colonoscopy?



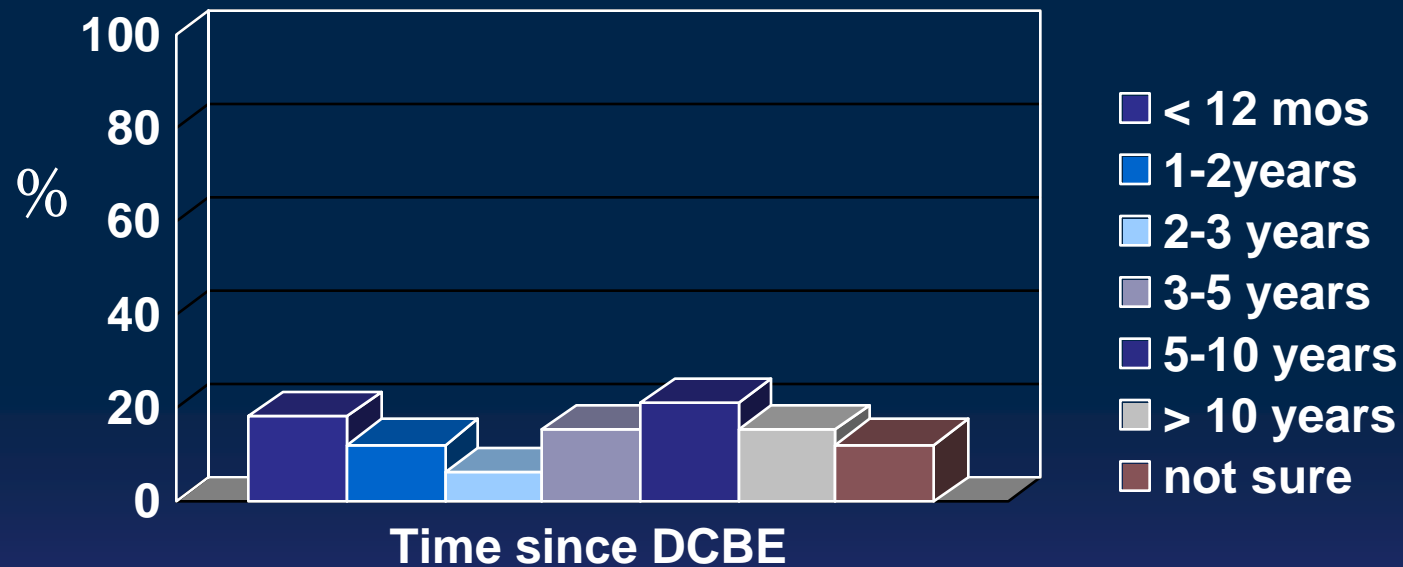
# Baseline Findings

## Double Contrast Barium Enema



# Baseline Findings

When was your last Barium Enema?



# Conclusions

- Knowledge about CRC and screening is limited
- CRC screening is underutilized
- Much potential for education

# Discussion/Questions

# Team Members

Cheryl L. Holt, PhD

Principal Investigator

Isabel C. Scarinci-Searles, PhD, MPH

Co-PI

John M. Bolland, PhD

Investigator

Martha R. Crowther, PhD, MPH

Investigator

Mohamad A. Eloubeidi, MD

Investigator

Mark S. Litaker, PhD

Investigator-Biostat.

Chastity Roberts, PhD, MPH

Program Coordinator II

Penny Southward, MPPM

Program Manager

Crystal Lee, BS

Research Assistant

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- The project was approved by the University of Alabama at Birmingham Institutional Review Board (X051004002, 10/25/05).

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