

Faith, Activity & Nutrition Summary Report

FAITH, ACTIVITY, AND NUTRITION Key Partners and Staff

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Note of Thanks to FAN Churches...

Greetings Faith, Activity and Nutrition (FAN) Churches!

What began in 2006 with a series of planning meetings between AME church elders, pastors, lay members and university partners has now encouraged more than 150 churches throughout the 7th Episcopal District of the AME Church to take charge of their health by making wiser eating and physical activity choices! Seventy four churches throughout Kingstree, Georgetown, Mt. Pleasant and Columbia took part in the evaluation of FAN from 2006-2011. The results from the program evaluation are included in this report. By working together, churches and university teams truly made a difference in the lives of AME members!

Since the end of the FAN evaluation in summer 2011, we have worked to share FAN with AME churches throughout South Carolina. Hands-on FAN trainings were held at the Conference level with more than 90 additional churches. We are continuing to spread the good news about the benefits of healthy eating and physical activity by making FAN available online at www.health-e-ame.org. All churches are encouraged to visit the website. The full FAN Committee and Cook Trainings are provided, along with materials and resources to support church efforts to improve health.

FAN would not have been possible without the combined efforts of church and university partners. However, at its core, FAN is an on-the-ground team effort! Therefore, a generous & warm THANK YOU is offered to:

- The Right Reverend Bishop Preston Warren Williams, II, who made health a top priority & called congregations to action;
- Participating Presiding Elders for their leadership and advisement;
- Church pastors, health directors/ FAN coordinators, cooks and kitchen staff, who worked to get the message out and increase opportunities for healthy living;
- Dedicated lay members, who shared their information and took steps to improve their health!

Many thanks and much success as you continue the journey to a healthier you!



Faith, Activity, and Nutrition (FAN), a partnership between the AME Church and University community, was designed to spread the good news that by increasing physical activity and eating a diet rich in fruits, vegetables and whole grains and low in fat and salt, you can improve your health and lower your chances of developing heart disease.



Cardiovascular disease or heart disease, a condition which may cause heart attacks, kidney problems and stroke, is the leading cause of death in the United States. According to the American Heart Association, African Americans are at greater risk for heart disease than Whites or any other racial/ethnic group.

You are at greater risk for developing heart disease if you have high blood pressure, are overweight & do not get enough physical activity.

Studies show that people who eat more fruits & vegetables and who are more physically active can lower their risk for heart disease. The goals of FAN were to help AME members become stronger in health by:

- Becoming physically active at a moderate intensity (e.g., brisk walking) for 30 minutes per day, at least 5 days per week
- Eating around 5 cups of fruits and vegetables each day
- Eating whole grain foods (e.g., whole wheat bread instead of white bread, brown rice and pasta instead of white rice and pasta)
- Eating less fat, especially saturated fat
- Eating less sodium (salt)

A Church-University Partnership

Church-university partnerships have worked well in spreading health information. FAN built on this strength by bringing key church leaders, lay members, and university teams together, as equal partners to plan the development and evaluation of FAN.

Instead of offering a “one size fits all” program, partners worked to create a program that would fit the needs of each church, while making sure that FAN members would see & hear health messages that focused on proven ways to improve health.

FAN was also unique in that it worked to build support for healthier lifestyles into church guidelines, practices and its leadership. What better way to stress the importance of leading healthier lifestyles than to weave it into church messages (sermons, bulletins, health moments) and make more opportunities for healthy eating & physical activity available.





Putting FAN in Place! Input & Ideas

All Palmetto Conference and Columbia District churches were invited to participate in FAN. These churches played an important role in measuring how well FAN worked. Churches that volunteered to take part in FAN formed committees, which included the pastor, health director/ FAN Coordinator, cook and kitchen staff, to take part in hands-on FAN Committee and Cook Trainings.

As a part of training, committees worked step-by-step to develop a plan to share health information & materials and to make opportunities for healthy eating and physical activity more available at church.

- Pastors were encouraged to develop guidelines to increase healthy eating and physical activity and to model a healthy lifestyle.
- Cooks and kitchen staff were encouraged to make healthier food options available--those high in fruits, vegetables and whole grains, and lower in fat and salt.

Churches received monthly health materials & FAN support over a 15-month period to help build healthy eating & physical activity into church messages, services & events.

Measuring What Works!

We tested how well FAN worked. Before FAN training, members volunteered to:

- allow measures of their blood pressure, height, weight and waist,
- complete a survey on eating & activity habits & basic demographics (age, education, gender) and health status

A small group was chosen at random to wear an activity monitor, a small device that measures movement.

After these measures, churches were selected at random to be in one of two groups:

- half received training soon after measurements & began 15 months of FAN (early)
- half continued health ministry activities & received training 15 months later (delayed)

Members from both groups were asked to repeat all measures after 15 months. The purpose was to test if taking part in FAN led to members eating more fruits & vegetables and increasing their physical activity-- leading to improved blood pressure.



FAN Recruitment & Measurements

FAN's goal was to enroll about 1,600 members in the evaluation of the program.

- ⇒ A total of 1,257 members from 74 churches throughout Kingstree, Georgetown, Mount Pleasant & Columbia took part in the evaluation of FAN.

Following measurements, churches were chosen at random to “early training” or “delayed training” groups. The breakdown of churches was as follows:

District	Early	Delayed	Total # Churches
Kingstree	14	10	24
Georgetown	8	10	18
Columbia	8	8	16
Mt. Pleasant	8	8	16
Total	38	36	74

FAN Study Participants

To take part in the FAN evaluation, members had to be at least 18 years or older, free of serious conditions that would make physical activity difficult, not planning to move during the next two years and attend church service or activities at least once a month.



Of the 1,257 members who took part:

- Most were African American (99.4%) and female (76%).
- Two thirds (66%) were age 50 or older.
- Most had earned a high school diploma or higher (89%).
- More than half (58%) were employed and married (54%).

Self-Reported Health

As part of the survey, members shared information about their general health status.

- Most (81%) rated their health as “good,” “very good” or “excellent”
- 30% rated their health as “very good” or “excellent”

Despite positive ratings of health, when asked “Have you ever been told by a health professional that you had any of the following conditions?”

- Most members (80%) reported at least one chronic health condition.
- More than half (54%) reported two or more chronic conditions.

Health Conditions*	%
High Blood Pressure	65
High cholesterol	40
Arthritis	35
Diabetes	23
Asthma	11
Angina	7
Heart attack	5
Stroke	3

* health conditions reported by members on survey

Physical Measures - Understanding Risk

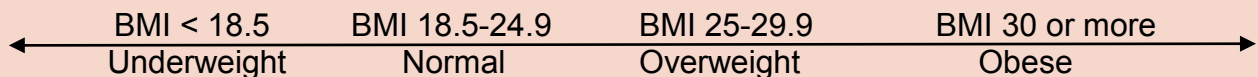
FAN staff measured church members' height, weight, waist size and blood pressure. Members were given feedback (verbal and written) about these measures, as well as the opportunity to ask questions. The reports below are from the first measurement.



Waist Circumference - If most of your fat is around your waist rather than at your hips, you may be at a higher risk for heart disease. This risk goes up with a waist size that is *greater than 35 inches* for women or *greater than 40 inches* for men.

⇒ Most members had a waist size that put them at increased (21%) or substantially increased (62%) risk for heart disease

Body Mass Index (BMI) is a comparison of your height to weight. It determines weight categories and estimates body fat. The higher your BMI, the higher your risk for certain diseases such as heart disease. *Normal BMI is between 18.5-24.9 kg/m².*



⇒ Of the 1,233 members measured, most were overweight (27%) or obese (62%)

⇒ The average BMI was 33 kg/m²

Want to know your current BMI? <http://www.cdc.gov/healthyweight/assessing/bmi/>

Blood Pressure - Having high blood pressure is a serious condition that can lead to stroke and other health conditions. Knowing your blood pressure is important even if you feel fine. Readings *above 120/80 mmHg* raise your risk, and the risk grows as blood pressure numbers rise.

⇒ Of the 1,236 members measured, 128/70 mmHg was the average reading. This reading indicates "prehypertension," early signs of high blood pressure.

FAN 15 month Follow-up - Who returned?

At the end of the 15-month period, members who took part in measurement the first time were asked to repeat all measures a second and final time.

Of the initial 1,257 members, 61% provided enough information to be included in the evaluation.

Those who did not return for the follow-up tended to be younger, reported fewer health conditions, & attended fewer church activities. There were *no differences* in key areas such as gender, education, self-rated health, blood pressure, activity & eating habits.





FAN Analyses

We expected that members in early churches would show larger improvements than members in delayed churches in these key areas:

- Fruits and vegetables eaten
- Physical activity
- Blood pressure
- Behaviors related to reducing fat and increasing fiber

FAN Findings

Our primary finding was that FAN church members increased the amount of time spent engaged in physical activity during their free time.

⇒ Members from “early trained” churches spent more hours per week involved in physical activity that increases heart rate such as walking briskly or sports, during their free time.

FAN church members also spent more hours per week engaged in physical activity overall, when we included activities such as yard work, household chores and home repairs.

This finding is important because it shows that faith-based health programs can increase physical activity.



At the end of the program, FAN church members increased their fruits and vegetables, too.

- ⇒ Members from “early trained” FAN churches ate about 4 cups of fruits and vegetables a day
- ⇒ Members from “delayed trained” churches ate about 3 cups of fruits and vegetables a day

Fruits and vegetables play a very important role in reducing risk for chronic diseases. Eating MORE fruits and vegetables MATTERS!

We did not find differences between early and delayed churches in blood pressure or behaviors related to reducing fat and increasing fiber.

Discussion - *Putting the Findings in Context*

Measuring change is often hard. Despite less-than-planned participation in post measures, we found that taking part in FAN led to increases in free time physical activity, and a similar pattern was seen for overall physical activity & fruits and vegetables.

These findings are meaningful. Few other studies have shown that faith-based programs can increase physical activity.

FAN showed that by having access to health information, opportunities & support for healthy eating and physical activity, members began taking important steps to improve their health!

It is also worth highlighting that FAN was largely put in place by pastors, health directors, and other members interested in health, which shows that change can occur outside of professionally led group-based or more structured programs.



FAN's church-university partnership benefited from the combined experience of all partners. Few studies have involved churches in every step of development, implementation, and evaluation as thoroughly as FAN.

This collaboration allowed FAN to create a flexible program that addressed the needs of local congregations. By sharing information and building relationships among church leaders and university teams, FAN led to healthy lifestyle changes!

By churches and universities working together, FAN spread the good news about reducing risks for heart disease through healthy eating and physical activity across 74 churches with an estimated 36,000 members, before making the program available to the entire 7th Episcopal District. Rates of heart disease and stroke are very high in South Carolina, especially for African Americans. Even small changes such as those seen in FAN are meaningful. If increased and maintained over time, these small changes can give rise to important improvements in health. FAN has taken steps in the right direction. It is possible that the effects of FAN could be even greater with more training and additional technical assistance.

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We acknowledge and thank the contributions of the late Mr. Gilbert Smalls, who was the intervention coordinator on FAN. We appreciate the many ideas we received from the late Dr. Marci Campbell who was a consultant on FAN and shared many useful “lessons learned” from her work. Finally, we thank the many students and staff members from Allen University, Clemson University, the Medical University of South Carolina and the University of South Carolina who have supported measurement and intervention activities.

Please visit the Health-E-AME website for more information about Faith, Activity and Nutrition (FAN)

<http://www.health-e-ame.org/>