Closing the Gap Diabetes Self-Management and Education Program

MetroHealth Buckeye Health Center and the Saint Luke's Foundation
A Community Health Partnership

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Learning Objectives

Learning objectives:

- Restate at least two strategies a program can utilize to develop its own community health program.
- Identify two potential partnerships within a program's own community to help build or expand a public health program or intervention in its community.
- Identify methods or strategies used to address culture, health knowledge, and literacy in a community health program.

Planning for community-based programming

- Design a health center to provide quality care to Mt. Pleasant/Buckeye/Shaker/Woodland Hills community of Cleveland in a retail shopping complex.
- Include primary, specialty care, and ancillary services
- Conduct focus groups with patients, residents, and community partners.
- Assess the communities needs, changes in the population, and current utilization of services.

The Buckeye Community

Demographics 2004

- African American 76.3%, White 17.9%
  Asian 2.7%, 1.0% Hispanic, 0.2.7% American Indian, Other 2.1%
- Females 54%, Males 46%
- 28% of the population is under 18 years
  59% of the population is 18 to 65 years
  13% is over the age of 65 years

MetroHealth Department of Marketing and Research 2006

The Buckeye Community

- Education level 2004
  25.8% have not completed high school
  27.7% graduated high school
  35% have attended 1-4 yrs of college
  11.5% graduate degree

- Household income 2004-2005
  Median household income $25,000 to $49,000
  Households under $10,000/year = 21.4%

- Poverty Rate 1999 26.78 (City of Cleveland 26.27)

MetroHealth Department of Marketing and Research 2006

The Buckeye Community

- 46% of the diabetic patients served by all of MetroHealth and its community centers are African Americans.
- In 2005 The Buckeye Health Center contacted 42,197 patients of which 96% were African Americans.
- 41% live in the Mt. Pleasant/Buckeye/Shaker/Woodland Hills community.
- Medicaid (43%), Medicare (23.9%), self pay (12.9%)

MetroHealth Department of Marketing and Research 2006

The Buckeye Community

A recent telephone survey conducted in 2007 with a sample size of 400 to assess diabetes knowledge found that:

- 33% reported someone had diabetes in the household
- 75% of the African American respondents reported at least 1 person in the household with diabetes

Action Based Research LLC 2007

Finding support for a common cause

- Partnering with a local foundation with a similar mission; to improve and transform the health and well being of the community.
- The Saint Lukes Foundation of Cleveland, Ohio provided funding that would assist the health center in developing or enhancing health care programs created to address the specific of the needs of the community.
- “Our vision: to be a philanthropic innovator and catalyst that supports programs that significantly advance its mission and have the potential to be locally, regionally and nationally recognized and replicated.” The Saint Luke’s Foundation.

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Closing the Gap (CTG)Diabetes Self-Management and Education Program

Purpose

- To provide an educational program that would involve lifestyle intervention and behavior change to compliment the primary care services provided to patients diagnosed with diabetes or impaired glucose tolerance.
- Additionally, the program's purpose was to provide a supportive environment to foster improved diabetes self-management skills.

CTG Program Goals

- provide opportunities for skill development
- improved labs values, A1c reduction, reduce cardiovascular disease risks
- weight reduction and maintenance
- adoption of healthy lifestyle habits
- understand the disease process
- retention of new skills and habits
- compliance with follow-up required for the patient's individual diabetes care plan

Education and Intervention

- Patients were offered adult skills development sessions and support group sessions throughout the year with the diabetes nurse educator and the dietitian
- The sessions involved important topics in diabetes care and open discussion about their personal experience with the condition.
- Sessions offered once a week (group or individual).

Education and Intervention

The patients were educated in the following areas:

- meal planning
- medication use and adherence
- exercise
- lifestyle management
- behavior modification
- self-monitoring of blood glucose levels
- management of short-term and long-term complications
- cooking, shopping, eating away from the home
- traveling and managing sick days

Education and Intervention

- Bi-weekly phone contact from the nurse or nutritionist for 12 months or longer following the 6 week sessions.
- Face-to-face contact was provided as needed for all participants to assist with medications, glucose meters, strips, and other equipment.
- Quarterly activities conducted by the staff to increase knowledge and reinforce new skills and behaviors.
- Access to social services
- Exercise support.

Education and Intervention

- Cooking demonstrations, samples, diabetes care items, cookbooks, gift cards, grocery store tours, reading materials, exercise tools, and movie tickets were provided as incentives.

- Transportation was provided to help patients attend all sessions, exercise classes, and social meetings.

Community Partnerships

- Community Leaders
- Project Learn
- Local Businesses
- Local grocery store
- Neighborhood Development Corporation
- Local Public Library
- Local Media
- Recreation Centers/Community Centers

Health Literacy

CTG utilized the expertise of Project Learn of Cleveland, Ohio; an adult literacy program.

- Assessment forms
- Educational Materials
- Newsletter
- Pamphlets

Local Businesses

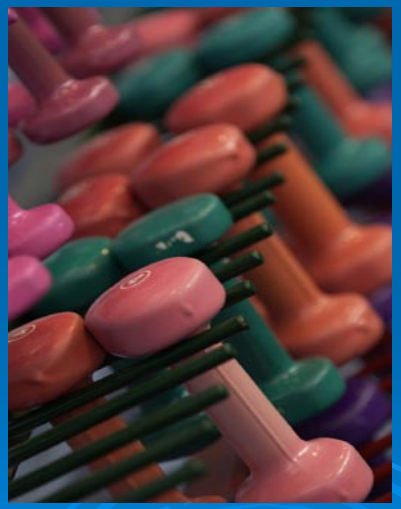
- Diabetes support group activities included cooking demonstrations, live music, samples, and free Closing the Gap tee-shirts.
- Local African American owned restaurants" Touch of Sugar" and "Simple Elegant Catering" created flavorful familiar foods and shared cooking recipes.

Supermarket Tours

- Neighborhood supermarket provided space for educational shopping trips.
- CTG provided gift cards, healthy shopping lists, and recipes.

Exercise Sessions

- Group activity offered once a week to educate patients on ways to increase physical activity at any age.
- Sessions involved movement, strength training, stretching, and relaxation.
- Support for developing social networks for activity and plans for the family were provided.
- Offered updated list for programs and activities at the local recreation centers.



Media Partnership

- MetroHealth's Department of Communications provided assistance with promotional activities.
- The CTG newsletter was developed to educate the local community about diabetes and scheduled events.
- Community events and radio spots highlighted program activities.
- Advertisements and articles in local papers and magazines provided continuous exposure and updates regarding the program.

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CTG Sessions: Results

Demographics August 2005 to January 2007

- Average age = 59 years
  Range = 38 to 90 years

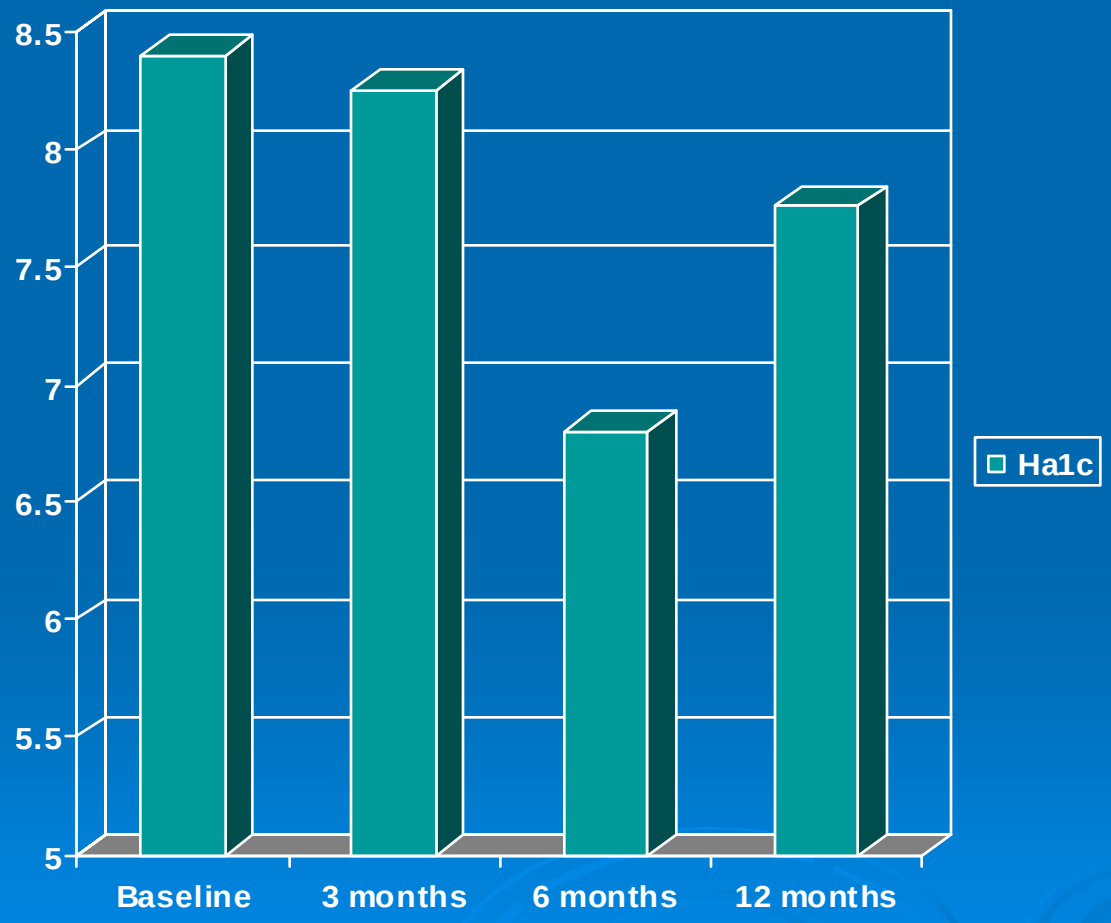
- Ethnicity
  African American = 101
  Caucasian = 1
  Middle Eastern = 1

- Gender
  Female = 68%
  Male = 32%

CTG Sessions: Results

- 6 week sessions with the dietitian and nurse educator
- 221 patients were contacted
- 143 patients completed the first week (65%)
- 103 completed the program (72%)

Average Hemoglobin A1c values measured up to 1 year for participants completing the CTG program



Baseline avg: 8.4 n=103

Range 4.9-15.7

3 months avg. 8.25 n=76

Range 5.5-12.8

6 months avg 6.8 n= 82

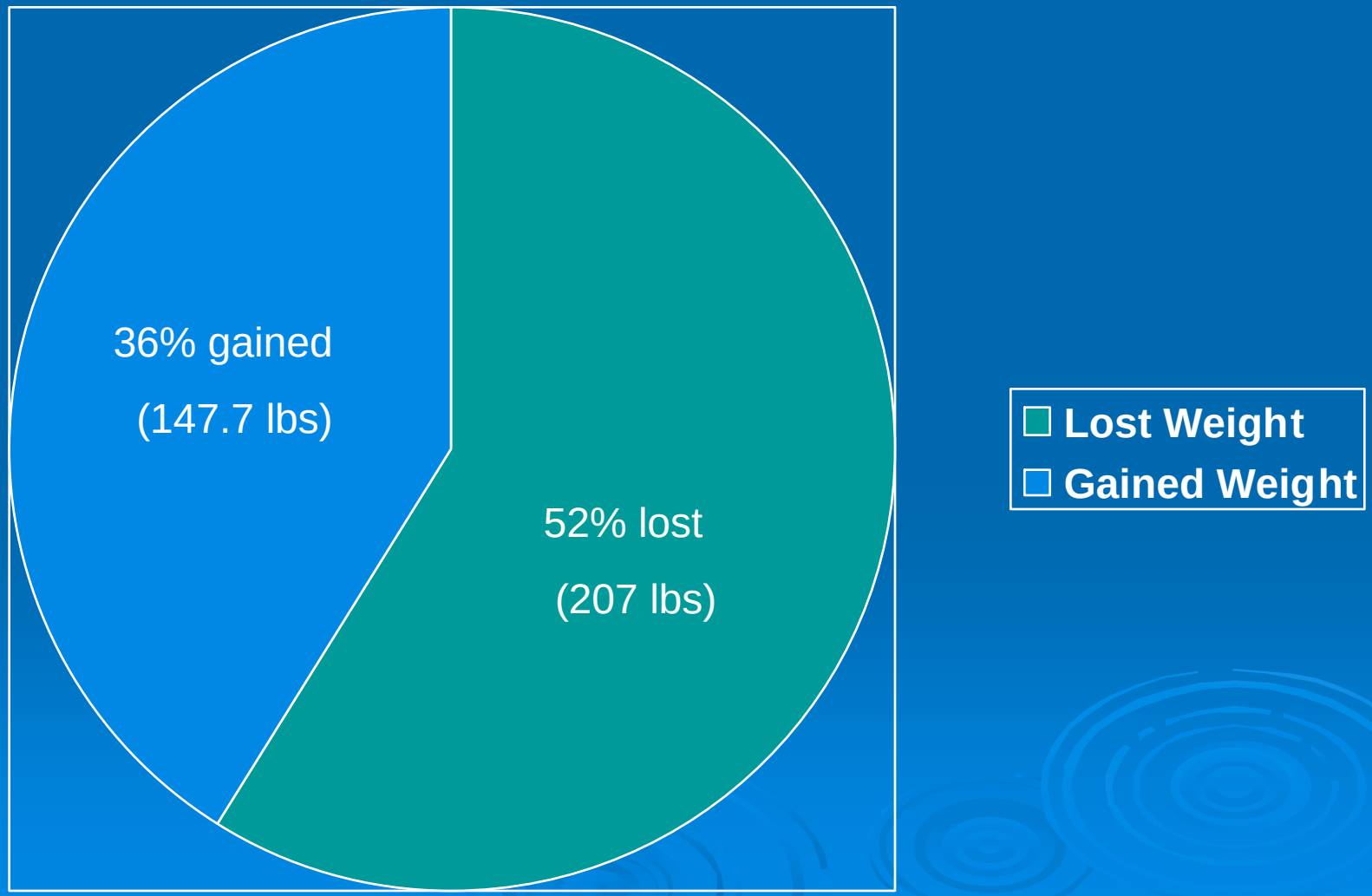
Range 5.2-10.5

12 months avg 7.7 n=53

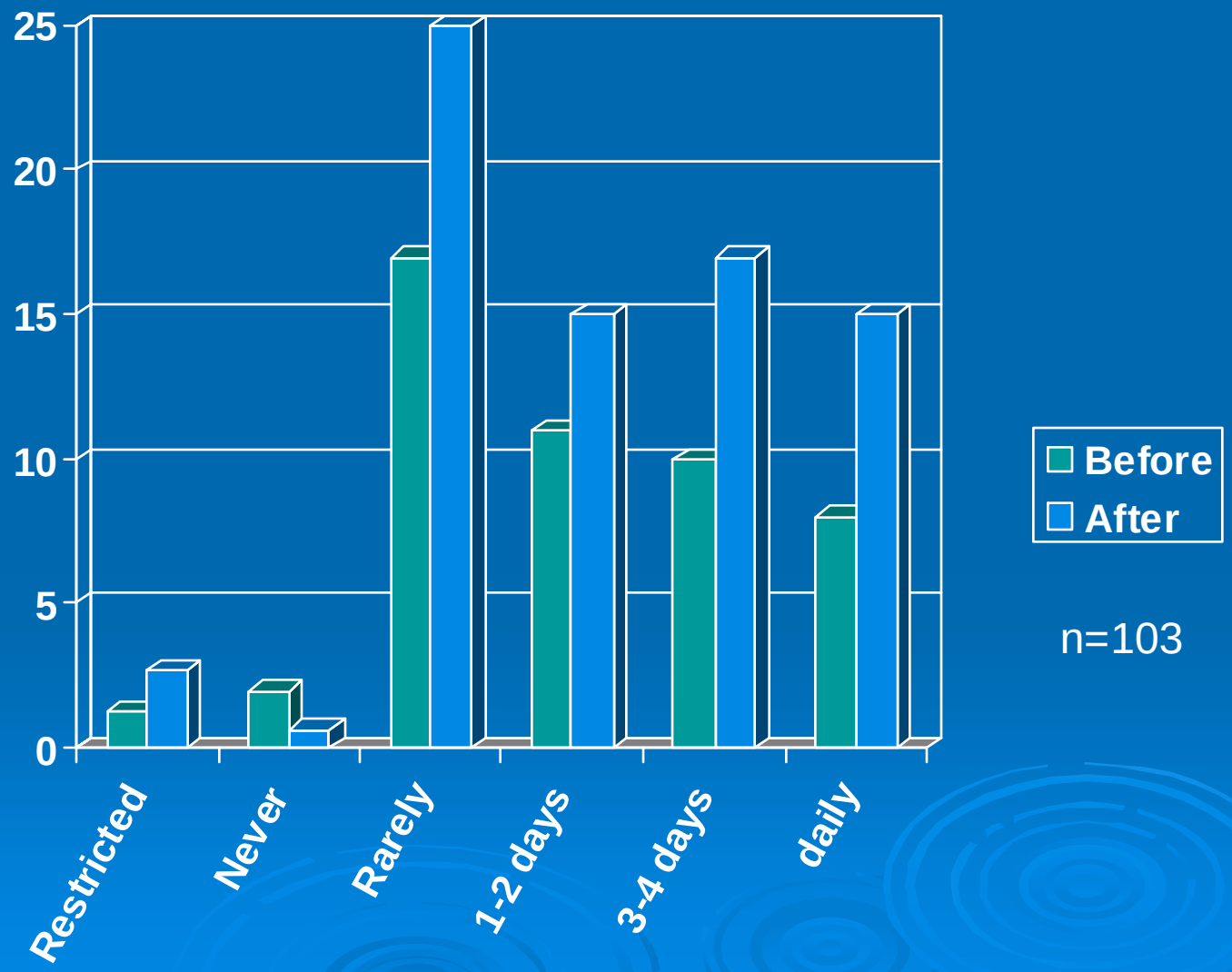
Range 5.2-13.4

	Total Cholesterol	Systolic Blood Pressure	Diastolic Blood Pressure	BMI
Baseline	181 n=103	142 n=102	80	35.5 n=103
range	82-310	80-189	52-104	16.34-64.33
3 months	166 n=62	139 n=84	78	35.3 n=97
range	88-270	92-199	58-105	19.9-65.31
6months	164 n=72	133 n=87	74	35.2 n=74
range	70-233	95-209	58-105	16.04-64.59
12 months	159 n=48	133 n=56	73	35.2 n=42
range	78-312	53-218	58-105	24.08-50.71

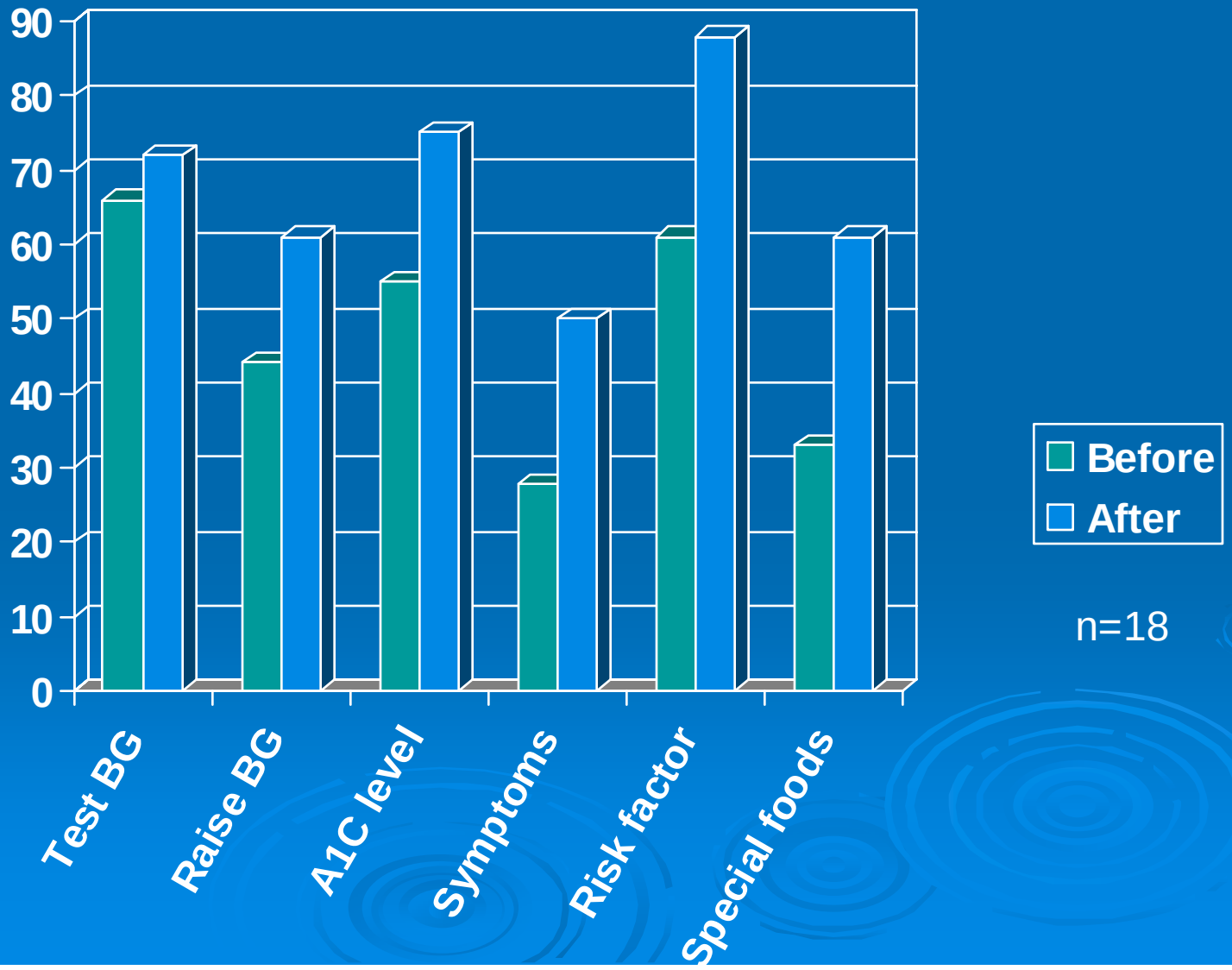
Weight change for participants completing the 6 week program



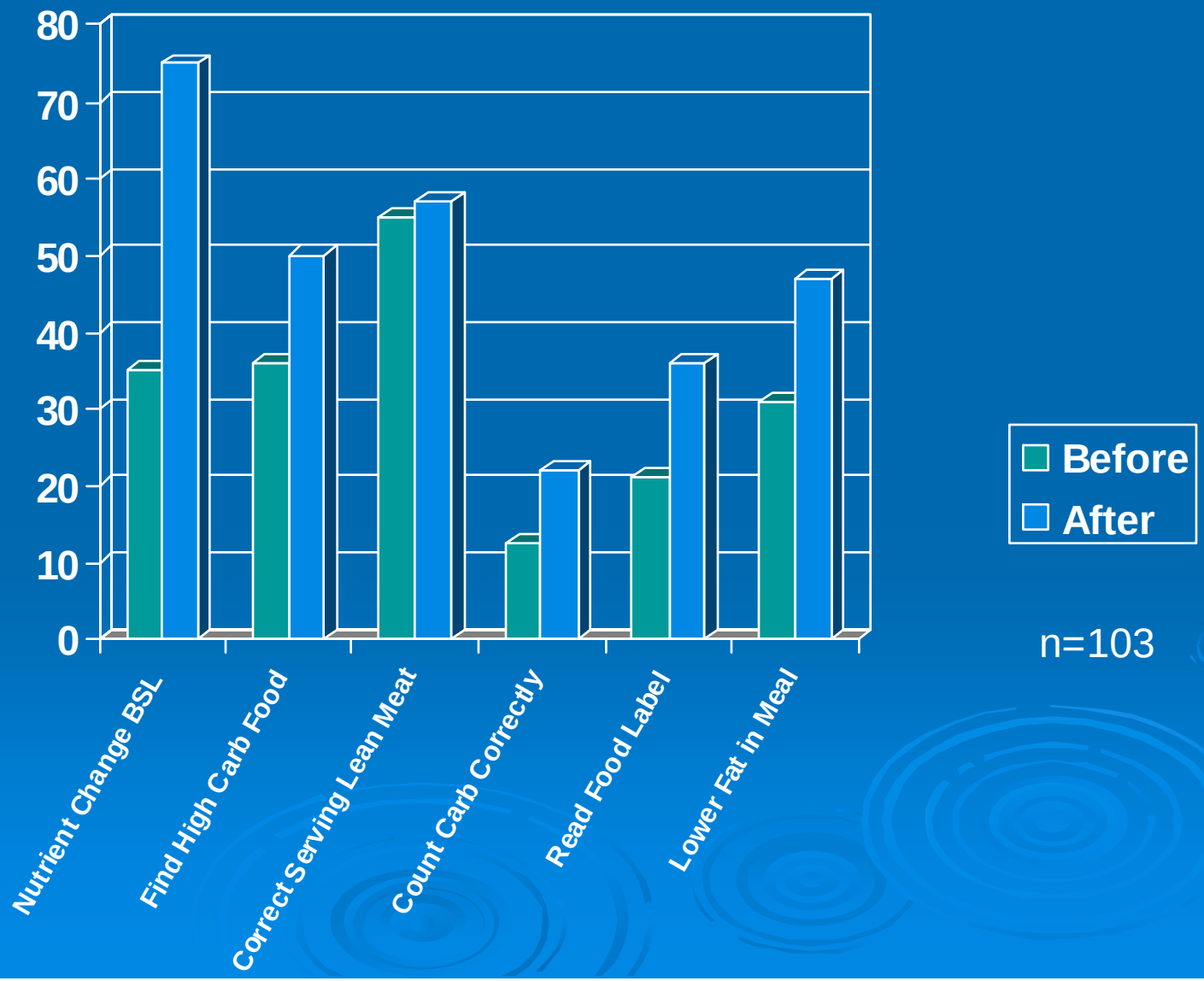
Percentage of participants with a change in physical activity.



Percentage of participants with a change in knowledge regarding diabetes.

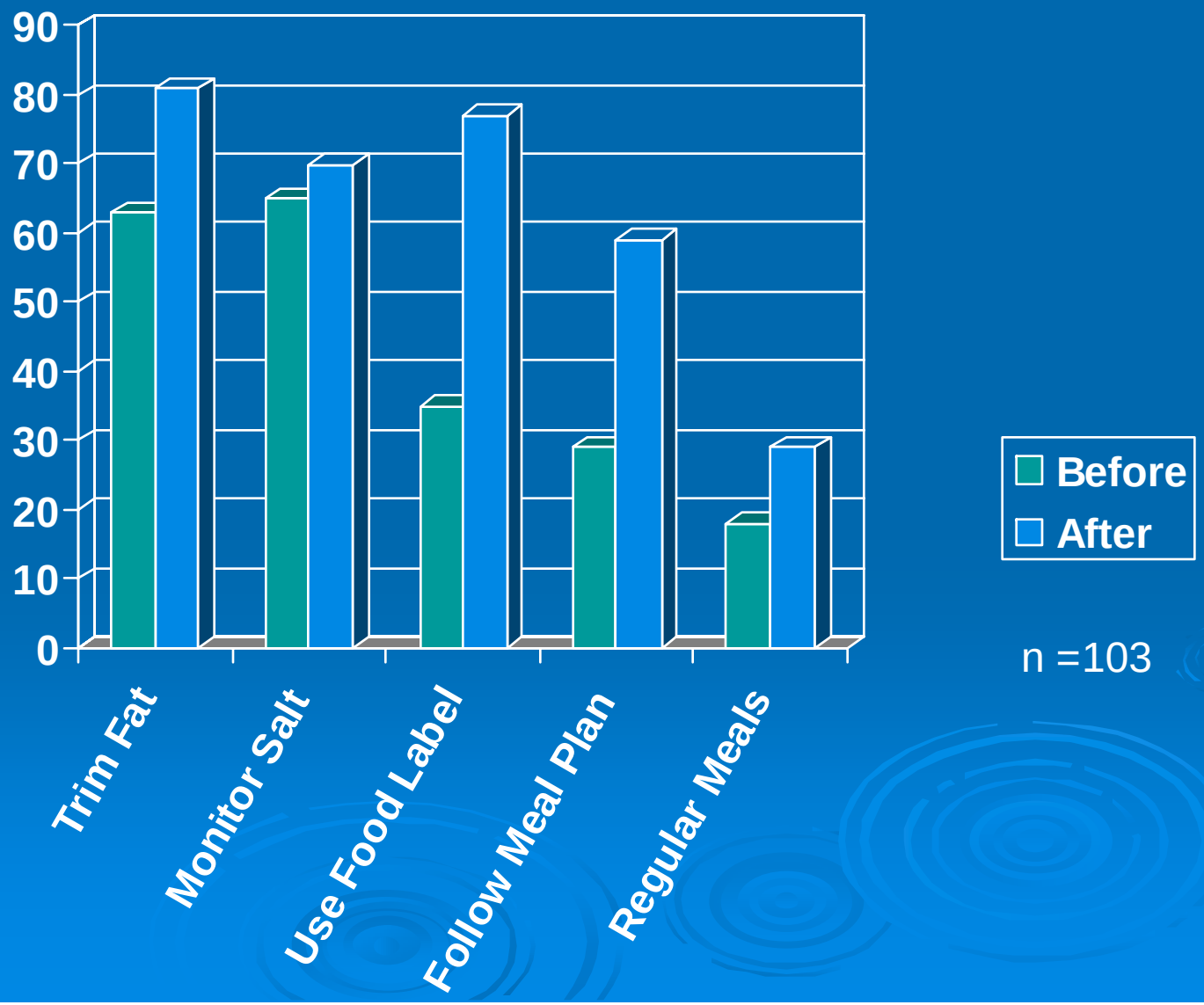


Percentage of participants with a change in knowledge regarding nutrition goals for diabetes management.



n=103

Percentage of participants with a change in behavior related to healthy nutrition habits.



n =103

Lessons Learned

- Developed a shared responsibility agreement form.
- Reduced session from 6 to 4 weeks
- Added more interactive learning sessions.
- Conducted a focus group for former participants and community members to address quality improvement and patient satisfaction.
- Explore additional partnerships for support (individual, group, and community level).
- Further evaluation and the development of educational support to address behavior change.

CTG Diabetes Program: Team Members

- Patricia Gorie-Anderson R.N., B.S.N, M.Ed; *Operations Director CCH*
- Susanne Evans R.N., B.S.N.; *Practice Coordinator Metro Health Buckeye Health Center*
- Cheri Collier M.S., R.D., L.D., M.P.A.; *CCH Nutrition Manager*
- Martha Marshall-Stoyanoff R.N., B.S.N.; *Clinical Nurse*
- Mandy Perveiler M.S, R.D., L.D; *Clinical Dietitian*
- Quanisha Lavender B.S.S.W., L.S.W; *Clinical Social Worker*
- E. Harry Walker M.D.; *Medical Director CCH*