



Exercise: The Missing Ingredient in the FHT recipe

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Presenter Disclosure

- **Presenters:** Jessica Janssens, Christine Doroslovac
- **Relationships with commercial interests:**
 - **Grants/Research Support:** none
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 - **Consulting Fees:** none
 - **Other:** Jessica Janssens; employed by SFHT
 - **Christine Doroslovac;** Contact employee by SFHT

Disclosure of Commercial Support

- This program has received no financial support.
- This program has received no in-kind support.
- Potential for conflict(s) of interest:
 - None identified.

Outline

- ▶ Objectives
- ▶ Background – Stratford FHT programs
- ▶ Brief overview of role of exercise in chronic disease management/prevention.
- ▶ What is a Registered kinesiologist?
- ▶ The metabolic exercise program– what is it?
- ▶ Outcomes
- ▶ Case Study
- ▶ Challenges and overcoming barriers
- ▶ Future program plans
- ▶ Questions

Objectives

- ▶ Learn from the successes and challenges of one FHT's integration of a Registered Kinesiologist.
- ▶ Learn strategies of engaging community partners (gyms)
- ▶ Increase awareness of the benefits of incorporating a structured exercise component for a variety of CDM programs
- ▶ Greater value of a multidisciplinary approach to CDM which utilizes the expertise and scope of other registered health providers.

Background <2012

- ▶ **Chronic disease Programs**– DM, HTN, Healthy hearts (dyslipidemia). Allied involved; RNs, RD's, pharmacist.
- ▶ **COPD program**– the only SFHT program with a practical exercise component (RN led). Gap in exercise in all other programs
- ▶ **Exercise for CDM programs** – Often an 'add-on' in a typical patient visit... outcomes?

..... So many Barriers

- ▶ Pain– arthritis, injuries etc.
- ▶ Trouble getting started
- ▶ Lack of knowledge what to do
- ▶ Time
- ▶ Finances



Research has shown regular exercise to have benefits in the following areas:

- ✓ Type II diabetes
- ✓ Heart disease
- ✓ Stroke
- ✓ Bone density
- ✓ High blood pressure
- ✓ Cancer
- ✓ Alzheimer's Disease
- ✓ Depression/Anxiety
- ✓ Balance/fall incidence



Sources: <http://www.oka.on.ca/>

Overview of role of exercise in CDM programs

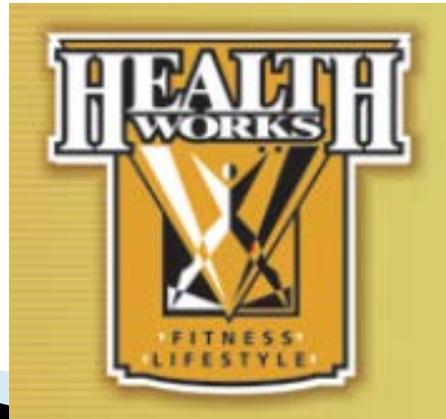
- ▶ <http://www.ncbi.nlm.nih.gov/pubmed/18046884>
- “walk with ease” showed participants in more structured practical program had better outcomes than an educational session

What is a Kinesiologist?

- ▶ Regulated as of April 2013
- ▶ College registration requirements:
 - ✓ 4 year bachelor's degree in Kinesiology
 - ✓ Online jurisprudence
 - ✓ CPIC check
 - ✓ reference letters
 - ✓ professional liability insurance
- ▶ Services provided by a Kinesiologist

What is the metabolic exercise program?

- ▶ Target Population; 18 +, not exercising, metabolic risk factor...
- ▶ 12 Sessions (6 weeks, 2x week)
- ▶ 1.5 hours
- ▶ YMCA
- ▶ “Fit Kits”
- ▶ A typical session..



YMCA



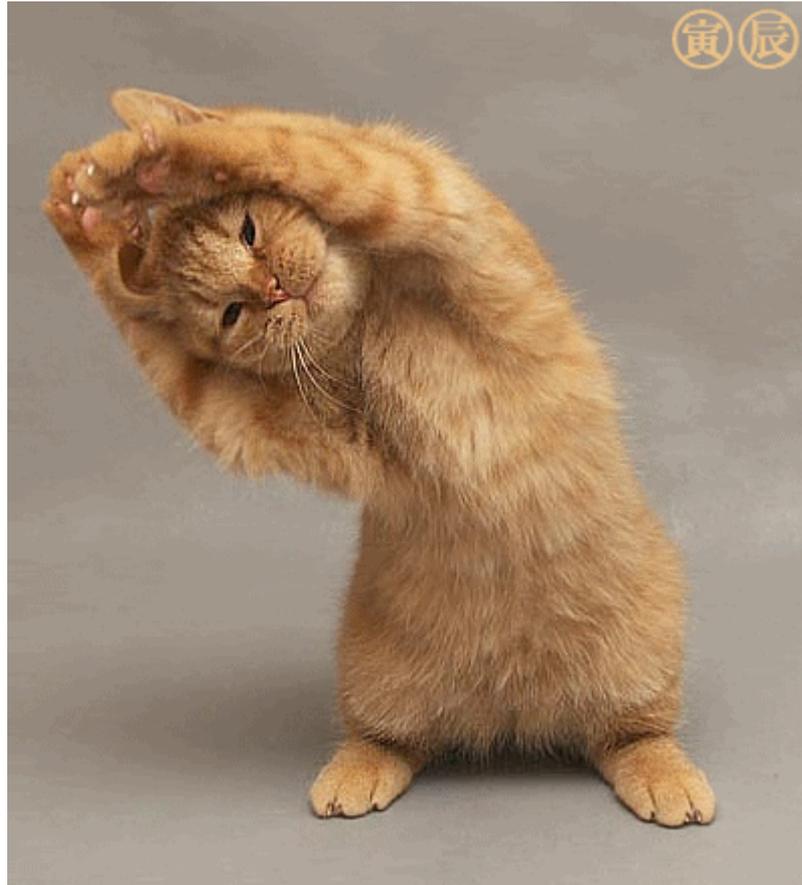
A typical session

- ▶ Check-in (5 mins)
- ▶ Educational topic (10 mins)
- ▶ Warm - up/dynamic stretching (5 mins)
- ▶ Functional strengthening & flexibility (5 mins)
- ▶ Cardio (30 mins)
- ▶ Weights (30 mins)
- ▶ Wrap-up (5 mins)

- ▶ *individualized attention



STRETCH BREAK!!!!

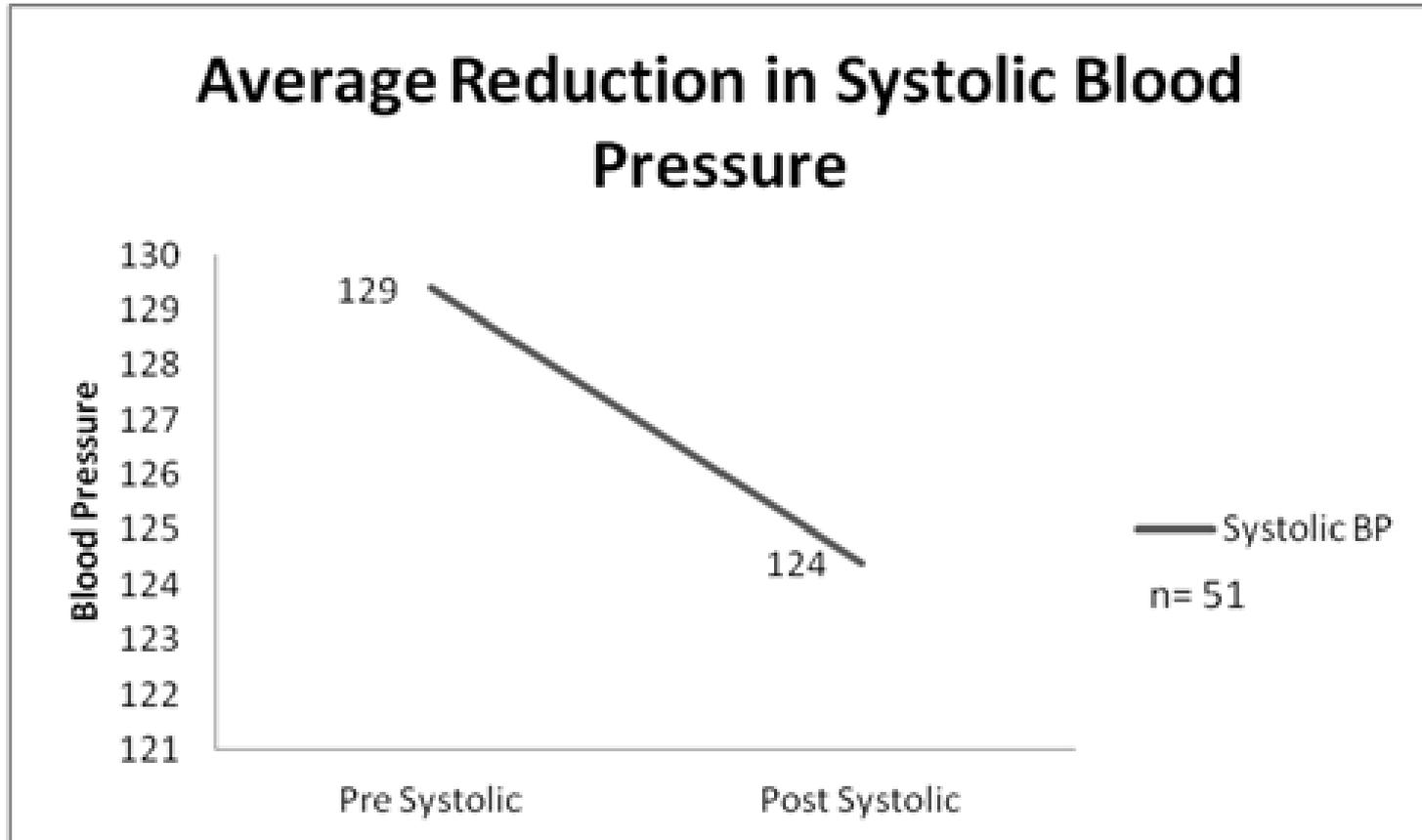


Outcomes

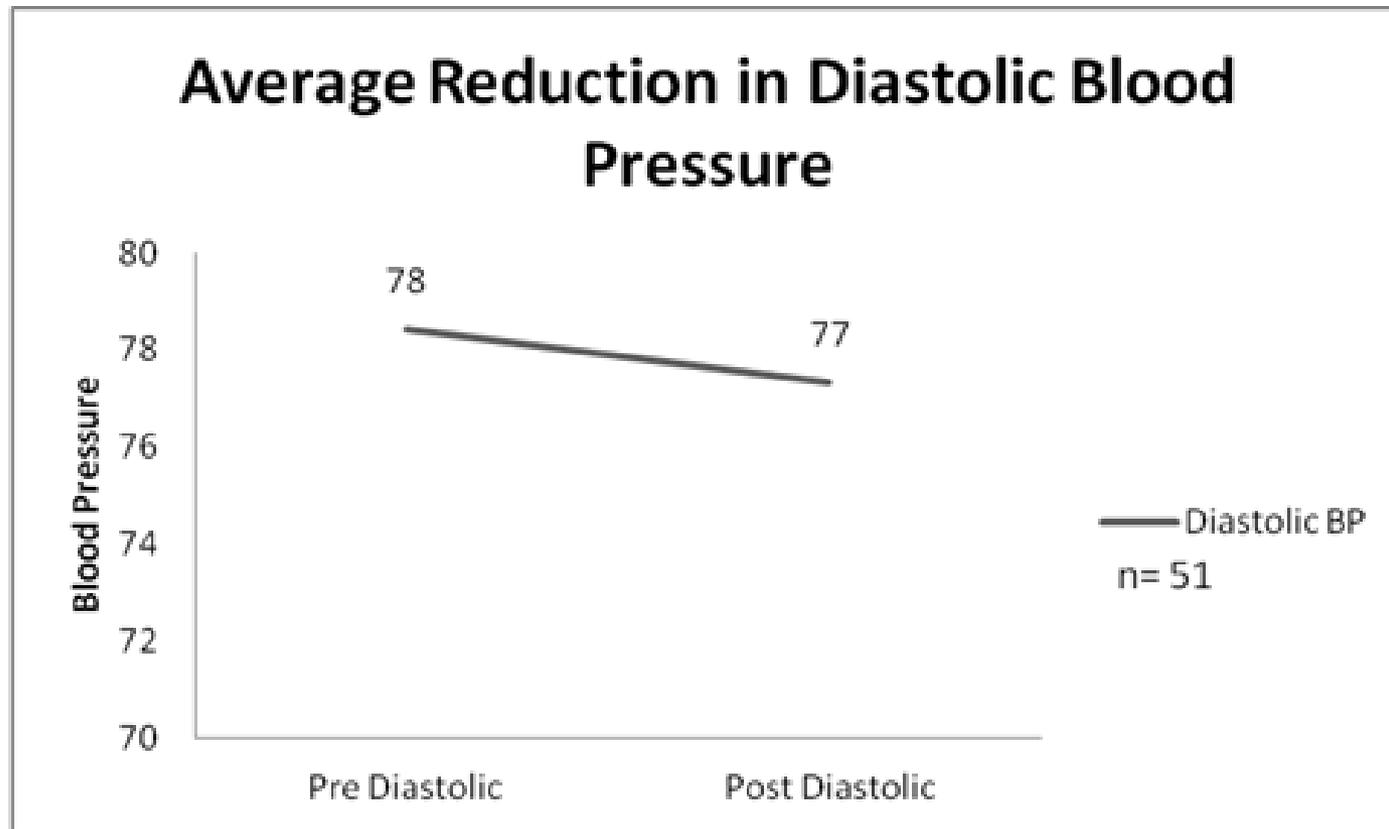
- ▶ How they were collected pre, post, 3, 6 month
- ▶ Role of care coordinator



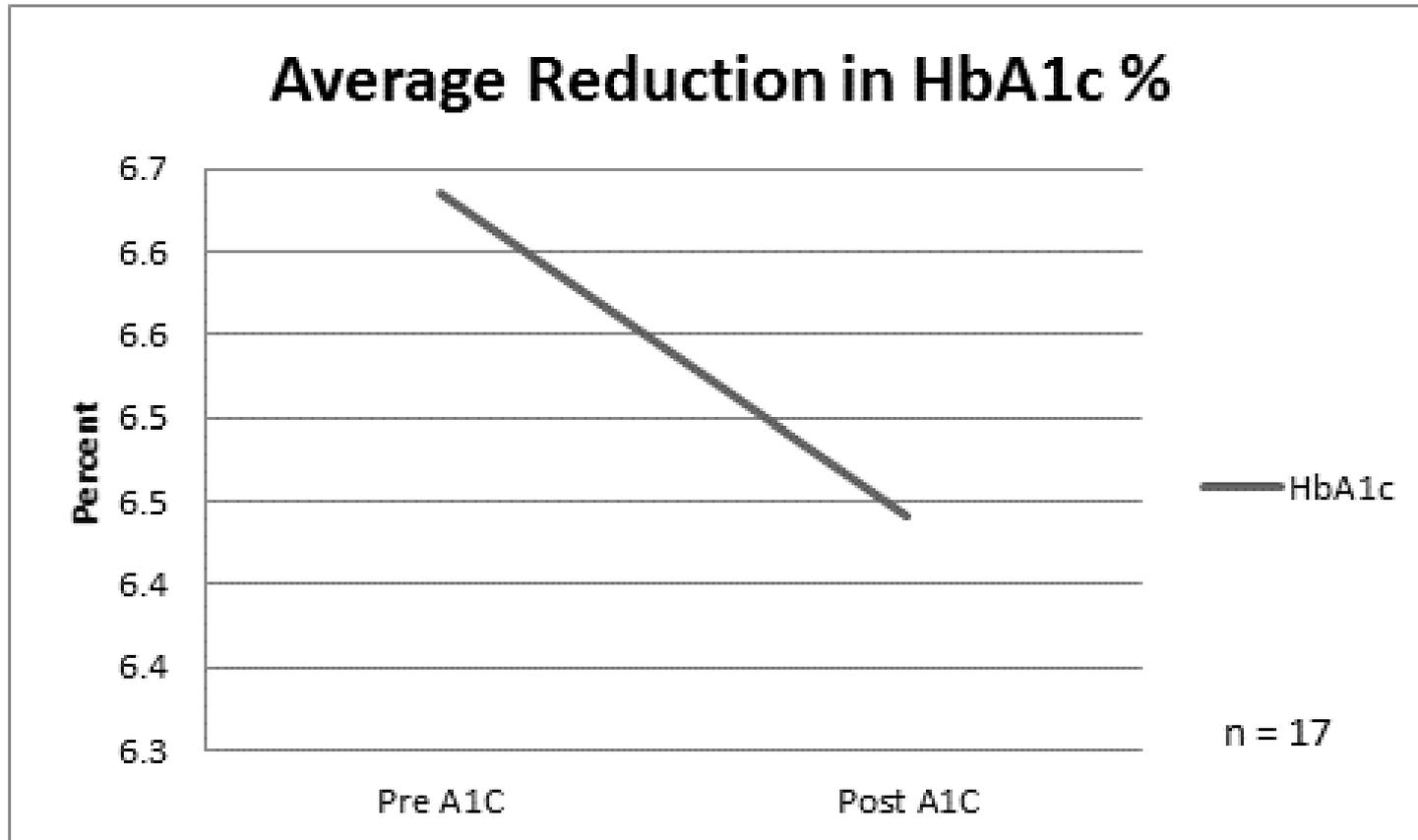
Blood pressure– Systolic



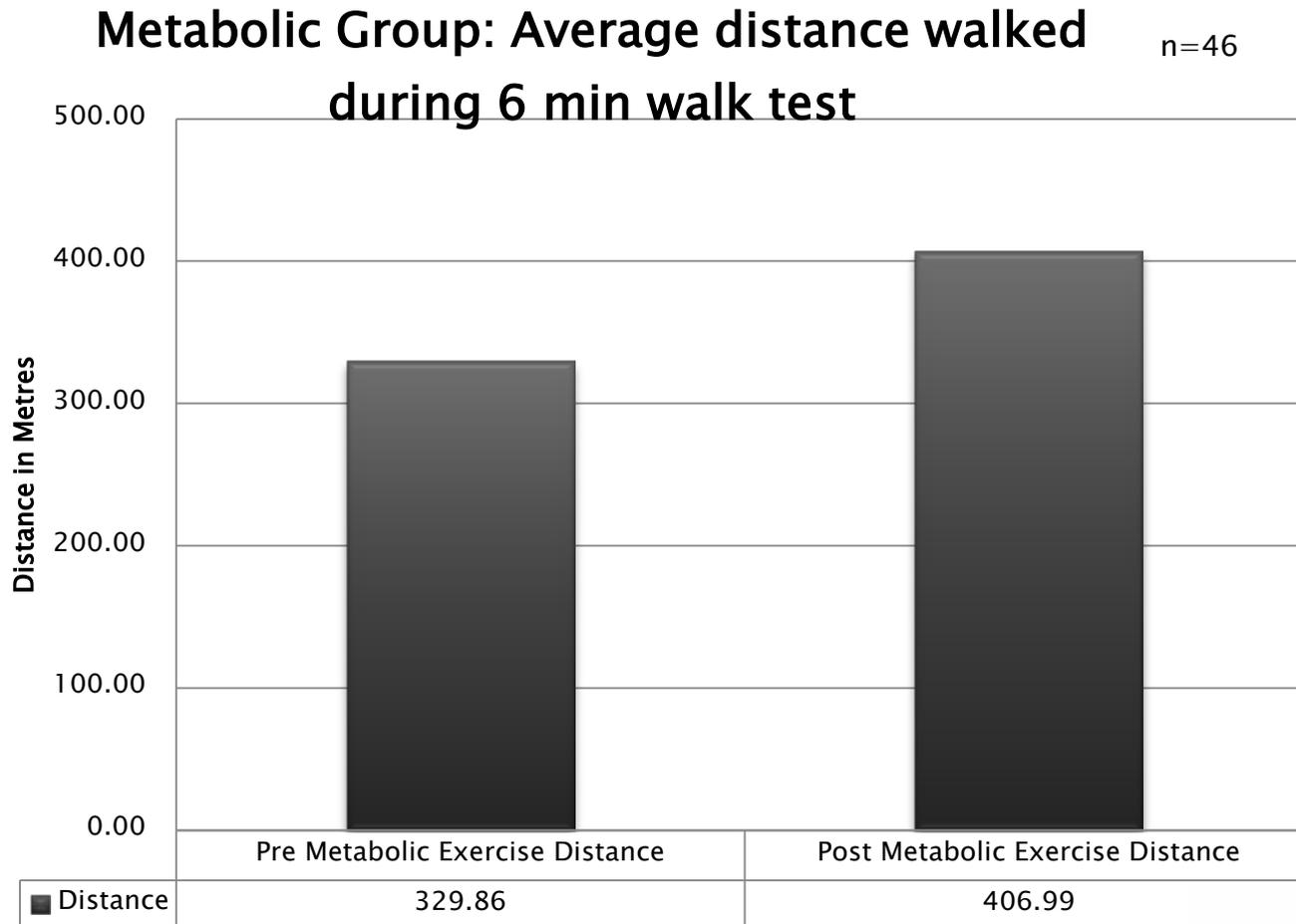
Blood pressure- Diastolic



A1C

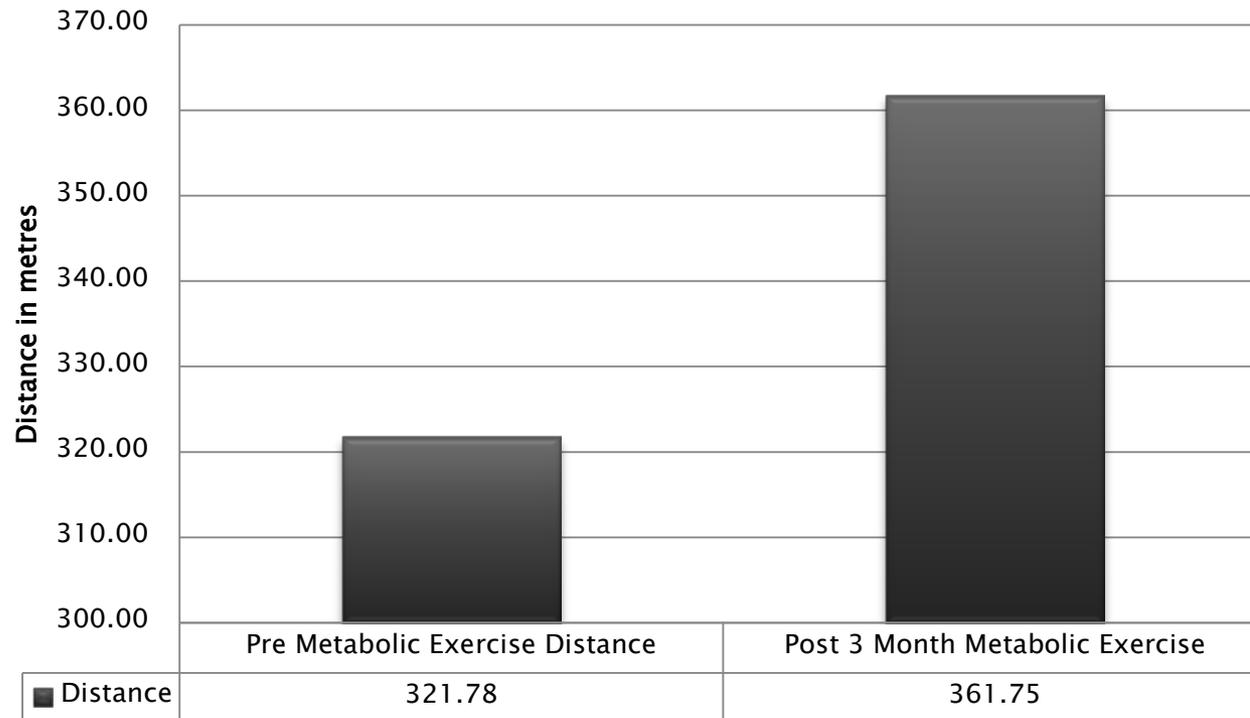


Distance (endurance)



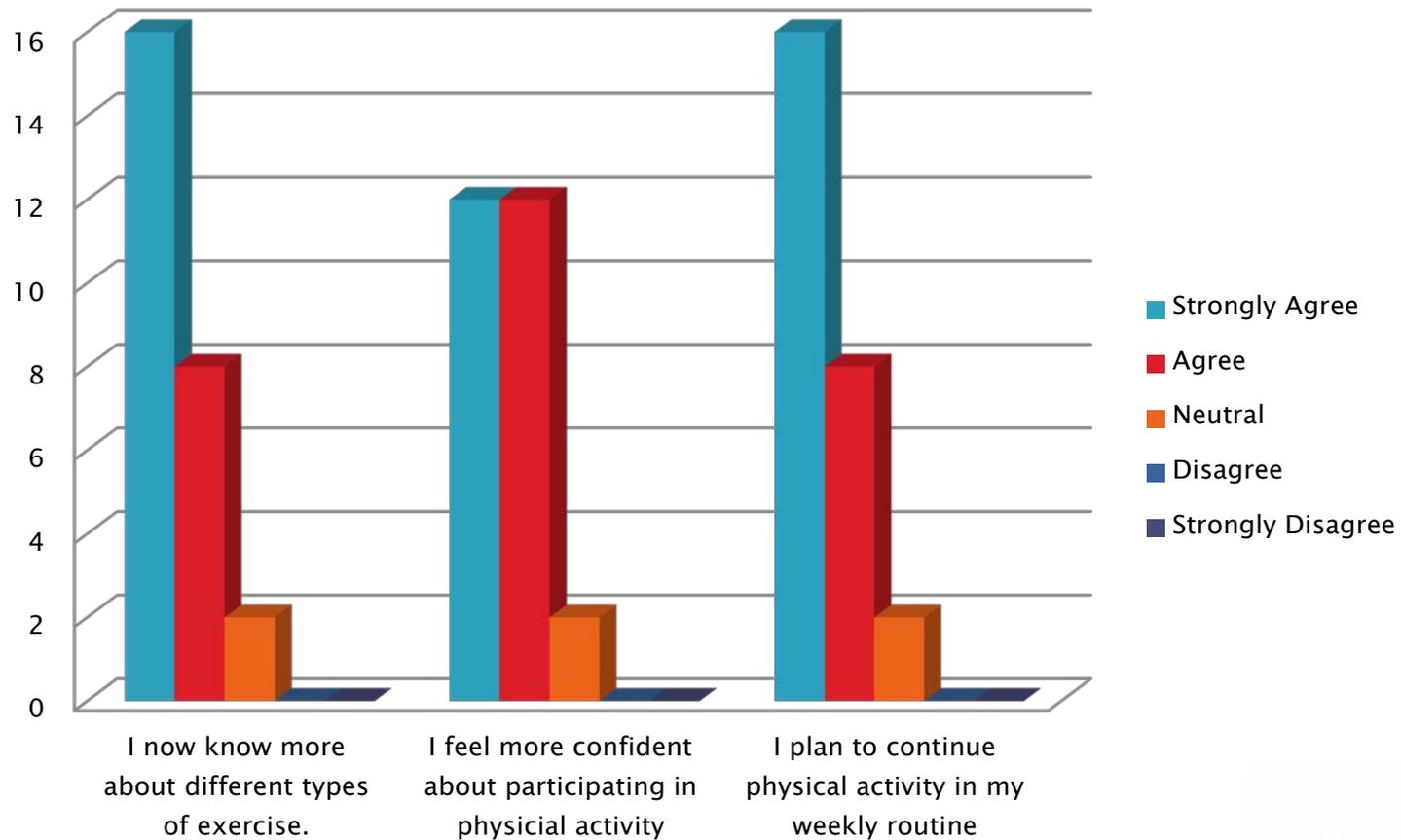
Metabolic Group: Average distance walked during 6 min walk test (Pre & Post 3 Month)

n=23



Group Feedback

Metabolic Exercise Group Feedback



Case study

- ▶ A.W.– 67 yrs old, HTN, asthma, dyslipidemia, preDiabetes, not exercising. Knee/back pain, uses cane
- ▶ Program Oct 2012–Nov 2012
- ▶ **Modifications from kinesiologist**– started out using bike, exercises to strengthen core/back, progressed to walking

Outcomes

- ▶ **A1C** 6.4–5.9% (pre, 6 mo post)
- ▶ **BP** 131/92 – 129/77 (pre, 6mo post)
- ▶ **LDL** 4.18– 3.61 mmol/L (pre, 6 mo post)

Endurance (measure of cardiovascular health)

	Distance in 6 min walk test (endurance)
Pre	128 meters
POST	144 meters
3 mo post	297 meters
6 mo post	306 meters

Continues gym 5x week (as of sept 2013). No longer uses cane, reports reduction in pain ++

Testimonials

Increases in Endurance

- ▶ “ In about 4 weeks I had tripled the length of time I could spend on the treadmill from the first day and had increased the speed from 1.2 to a top speed of 1.5”

Testimonials cont.

Reductions in pain/motivation to continue

- ▶ “This program has taught me the proper way to exercise by strengthening my left foot and being able to exercise and continue exercising with less pain. This in turn has motivated me to continue exercising with the correct knowledge to do so.”
- ▶ “This class is giving me the confidence and the knowledge to make changes in my life style.”

Testimonials cont.

Improvements in medical conditions

“I feel so much better about myself and actually have hope now that something can be done about the body pains I have, especially my left foot. I was starting to fall into a depression as I thought there was no hope of feeling better.”

Challenges / barriers

- ▶ Gym values matching FHT values
- ▶ Avoiding conflict of interest
- ▶ Too much/too little for some patients
- ▶ Patient attendance and compliance
- ▶ Streamline referrals
- ▶ Wait list/high demand!

Future plans

- ▶ Increase allied involvement in program.
- ▶ Enhance multidisciplinary approach
- ▶ Improved referral criteria
- ▶ Incorporate the Kinesiologist as part of our team!
- ▶ Continue with program/increase capacity as able.

Questions?

