



**Pasos Saludables: An obesity prevention program
for farm workers**

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Agenda

Pasos Saludables Program-Phase I

1. Overview and Background
2. Objectives
3. Methodology
4. Results
5. Program status: Phase II
6. Future efforts

Overview and Background

- Reiter Affiliated Companies (RACs) vision of a healthy workforce
- Health outcomes among Latino migrant farm workers
- Lack of intervention models for farm workers
- Collaboration with the University of California, Davis

Objectives

1. Reduce obesity rates
2. Prevent type II diabetes
3. Provide a sustainable model for farm worker populations

Goals

Pilot aims to determine the impact of these intervention programs on immigrant farm worker populations, and specifically to:

- 1) Determine whether the pilot intervention resulted in enhanced health measures over the control group, specifically increased knowledge and awareness of healthy eating and exercise habits and changes in behavior.
- 2) Develop a culturally and linguistically sensitive health education model that is effective at changing behavior among the farm worker population.

Methodology

- Study design and protocol
- Program design
- Recruitment
- Data collection & analysis

Results-Phase I

1. Participant retention
2. Knowledge & awareness
3. Life style changes
4. Physiological changes (anthropometric measurements)
5. Emotional health measurements
6. Overall changes

Results-Retention

- Table 5.1: Retention Numbers and Rates by Site

Table 5.1: Retention Numbers and Rates by Site

	<i>Intervention</i>			<i>Control</i>			<i>Overall</i>		
	<i>Baseline</i>	<i>Final</i>	<i>%</i>	<i>Baseline</i>	<i>Final</i>	<i>%</i>	<i>Baseline</i>	<i>Final</i>	<i>%</i>
Oxnard	101	59	58.4%	50	40	80%	151	99	65.6%
Watsonville	73	53	72.6%	30	26	86.7%	103	79	76.7%
Whole Sample	174	112	64.4%	80	66	82.5%	254	178	70.1%

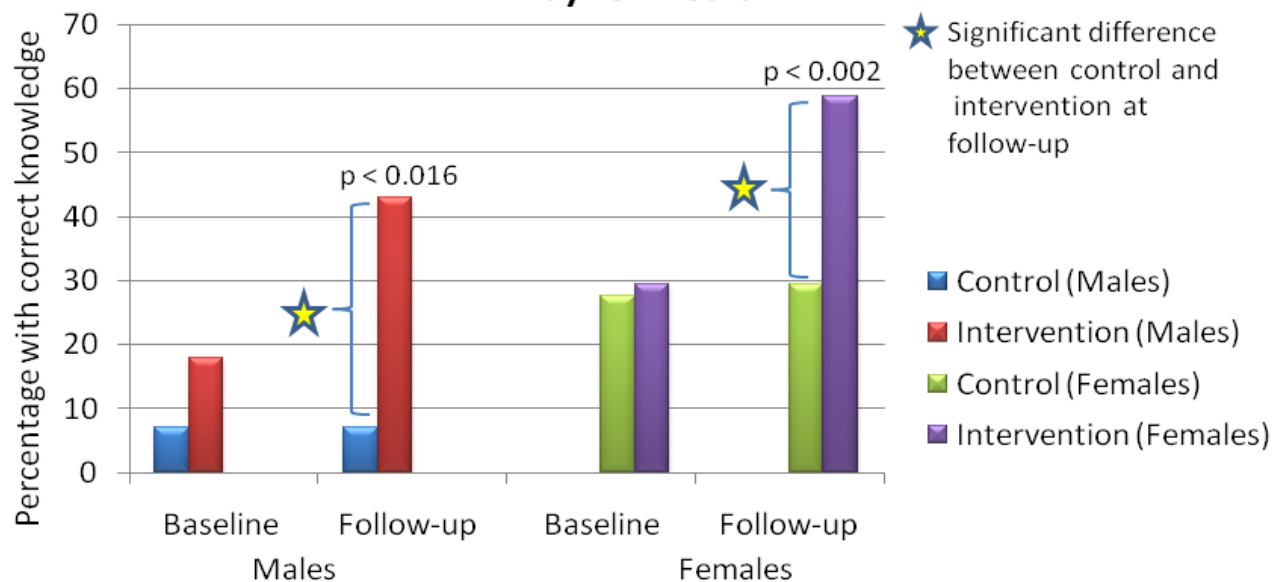
Table 5.3: Retention Numbers and Rates by Gender and by Site

	<i>Oxnard</i>			<i>Watsonville</i>		
	<i>Baseline</i>	<i>Final</i>	<i>%</i>	<i>Baseline</i>	<i>Final</i>	<i>%</i>
Women	95	66	69.5%	88	70	79.5%
Men	56	33	58.9%	15	9	60.0%

Results-Knowledge & Awareness

Knowledge Number of servings of fruit and vegetables eaten per day

Fig. 7.5 Knowledge of Fruit and Vegetables Servings Per Day for Health

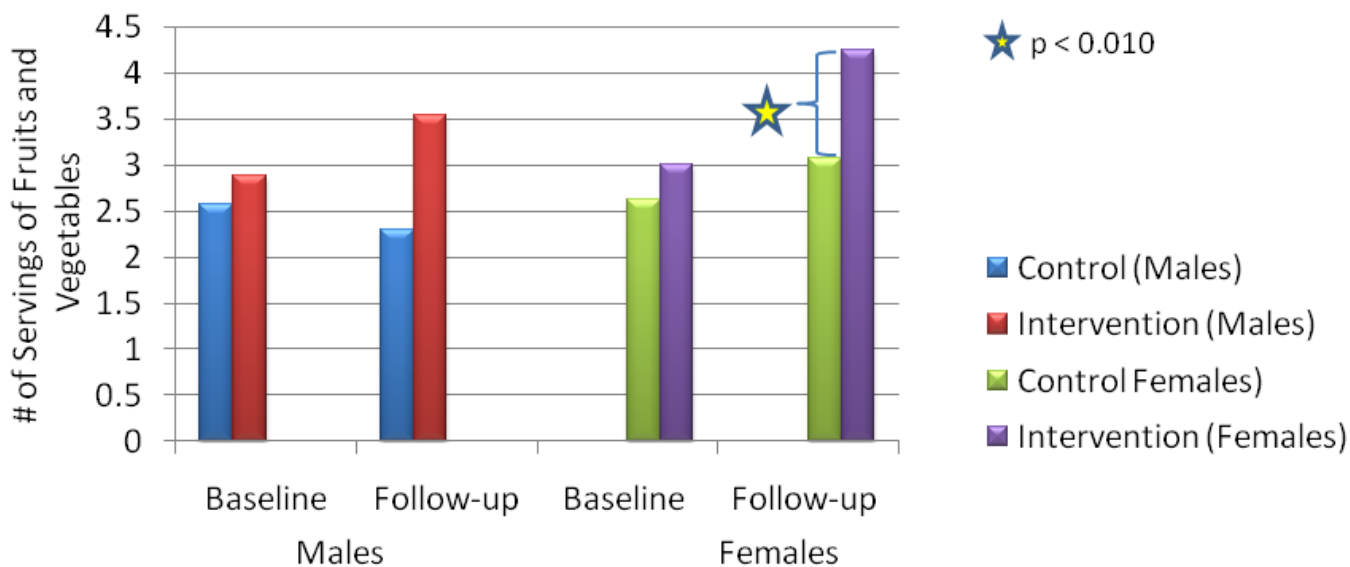


The definition of a serving was given by pictures and is ½ cup of cooked vegetables, or one piece of fruit, 1 cup of salad, or ¾ cup of 100% fruit or vegetable juice.

Results-Lifestyle Changes

Number of servings of fruit and vegetables eaten per day

Fig. 7.6 Actual Number of Servings of Fruit and Vegetables Eaten Per Day

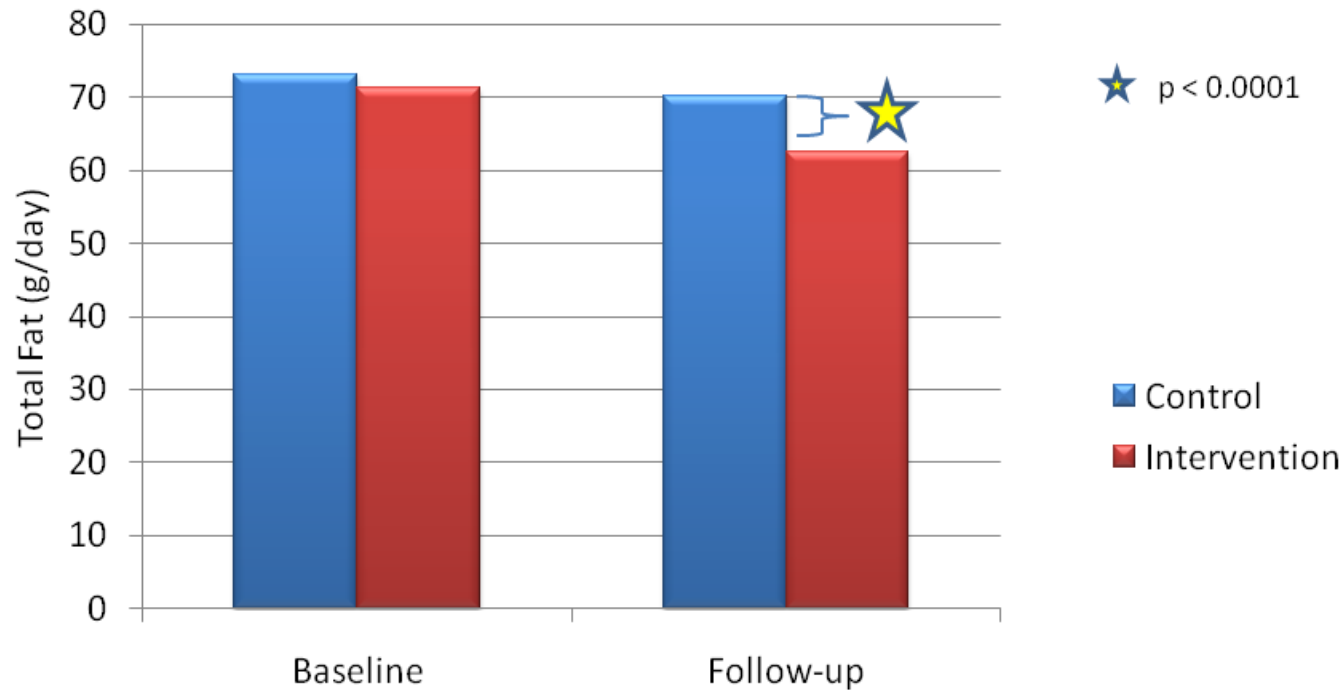


Participants were shown what a portion consisted of and asked how many fruit and vegetable servings they usually ate each day. Answers were recorded from 0 – 6 with 6 being 6 or more portions.

Results-Lifestyle Changes

Fat intake-Females

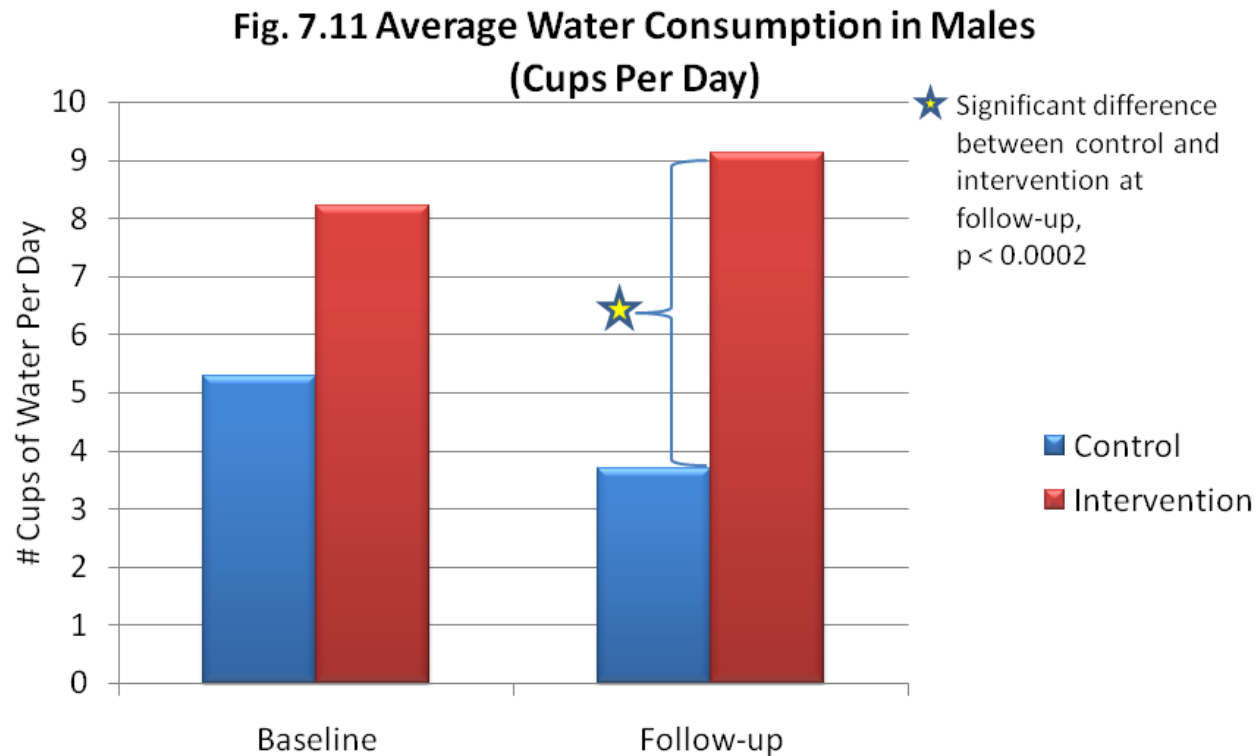
Fig. 7.10 Total Fat Intake in Diet: Females



Seventeen questions about diet were used to estimate total fat, saturated fat, percentage of diet as fat and mg cholesterol.

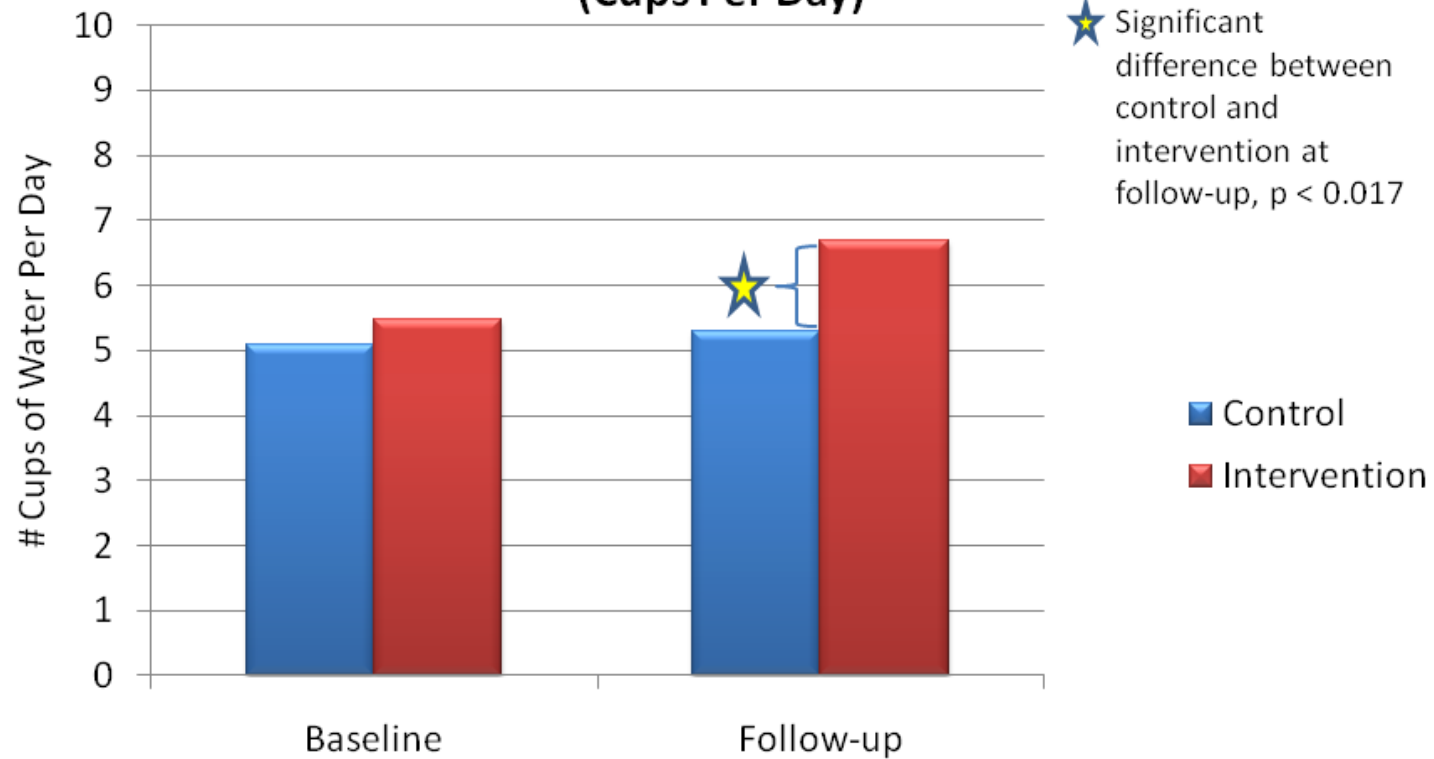
Results-Lifestyle Changes

Water consumption-Males



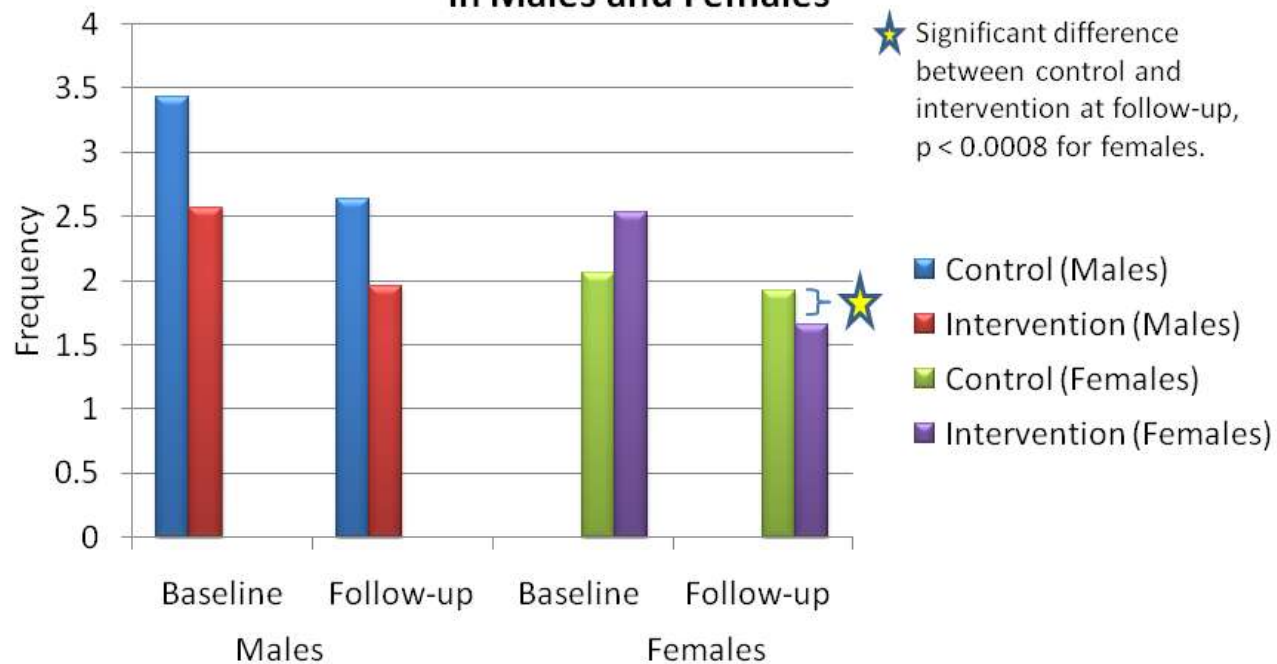
Results-Lifestyle Changes

Fig. 7.12 Average Water Consumption in Females
(Cups Per Day)



Results-Lifestyle Changes

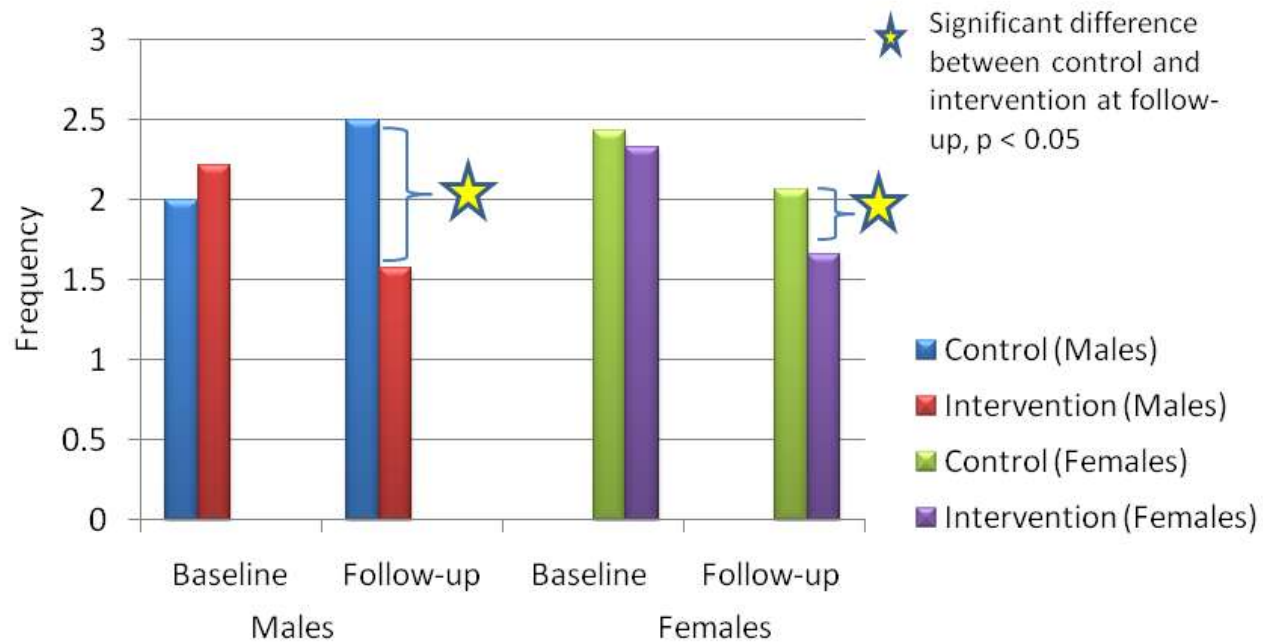
Fig. 7.13 Average Frequency of Soda Intake in Males and Females



(1) Never or rarely; (2) At least once a week; (3) 2-4 times a week; (4) At least 1x per day; (5) Almost with every meal.

Results-Lifestyle Changes

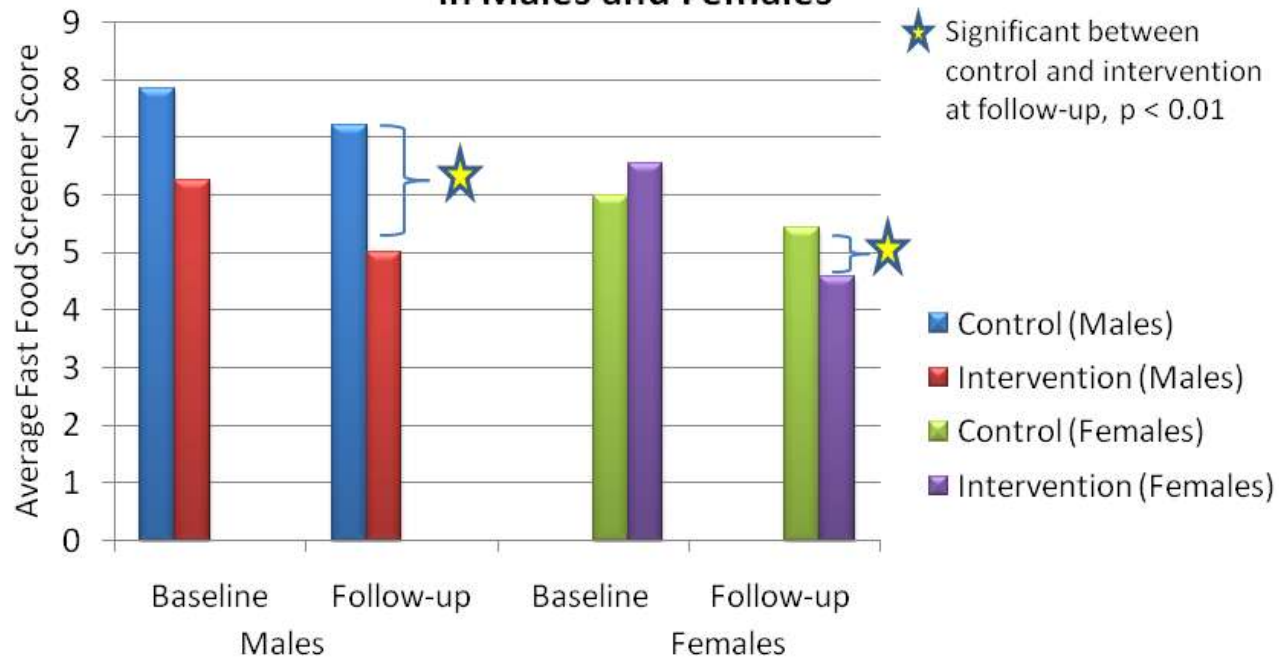
Fig. 7.14 Average Frequency of Sweetened Beverage Consumption in Males and Females



(1) Never or rarely; (2) At least once a week; (3) 2-4 times a week; (4) At least 1x per day; (5) Almost with every meal.

Results-Lifestyle Changes

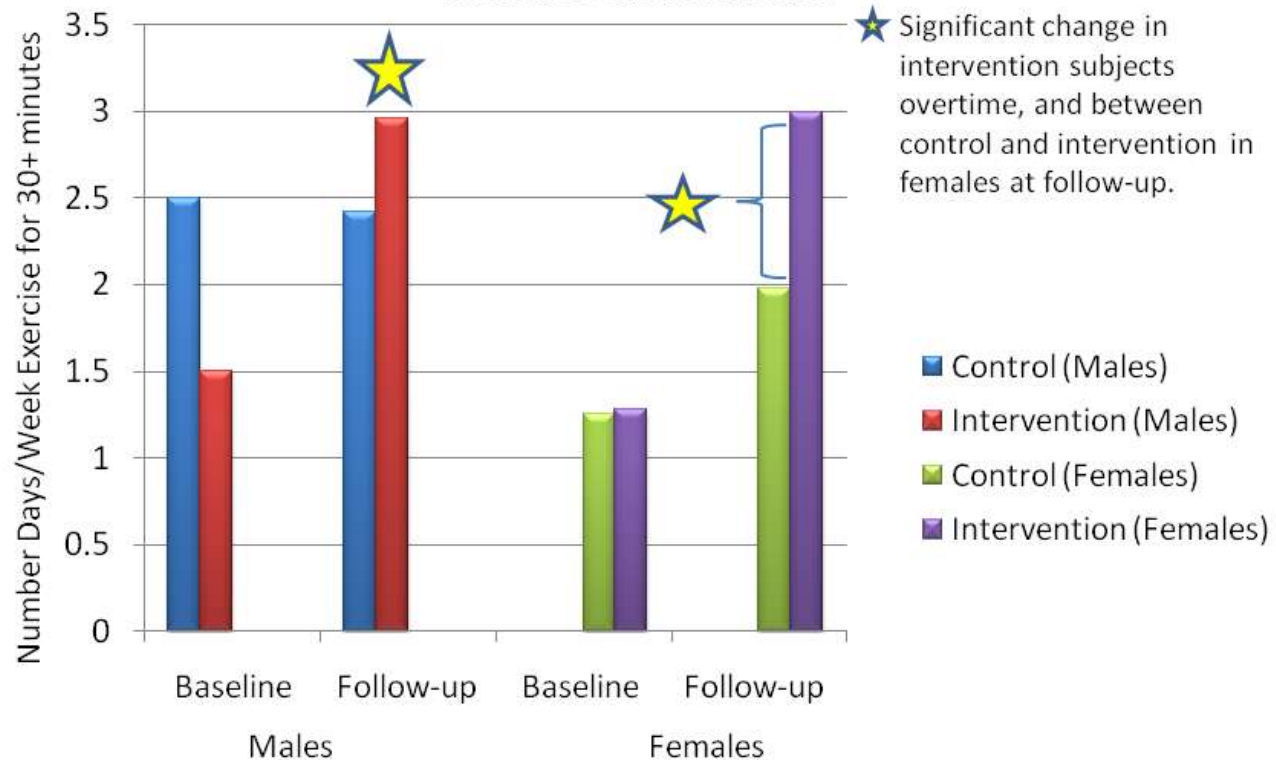
Fig. 7.15 Average Fast Food Screener Score in Males and Females



Sum of fast food, sweet drinks and soda combined. Values up to 15 by frequency (3-15 possible – the lower the score the better).

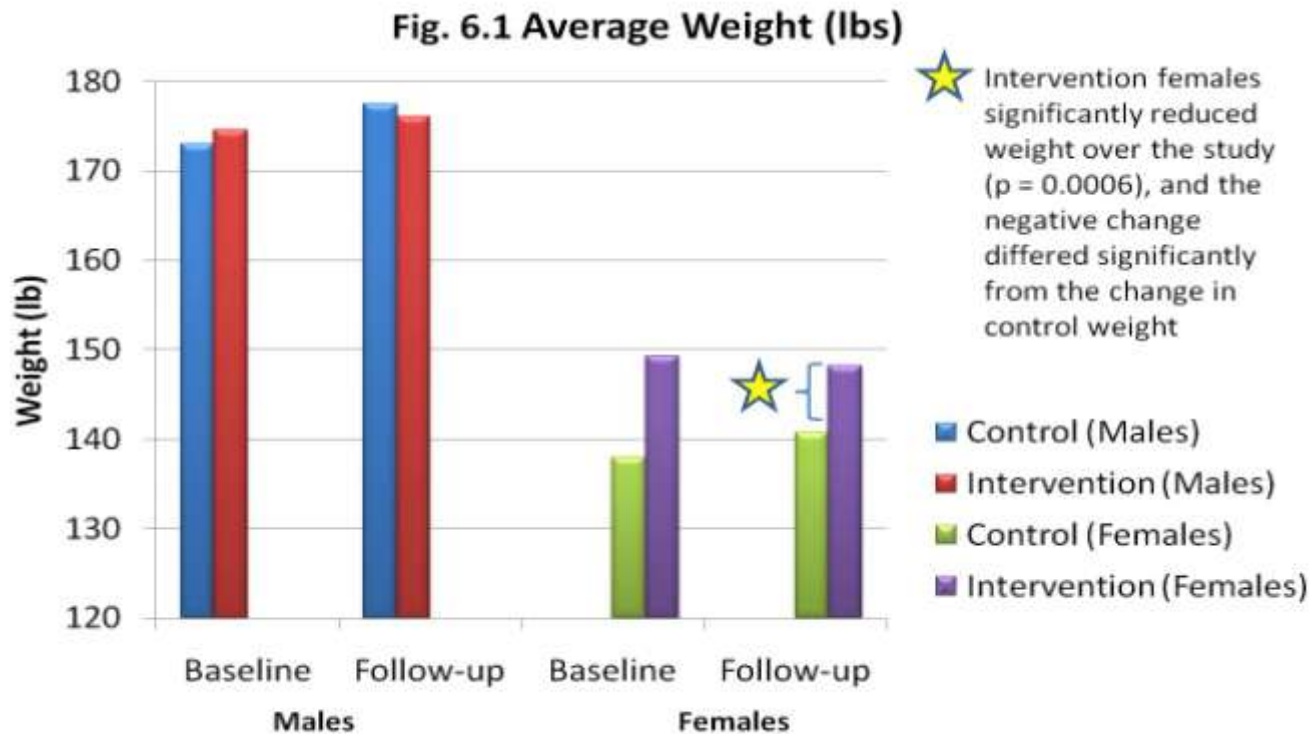
Results-Lifestyle Changes

**Fig. 7.22 Days Exercise Per Week for 30 Minutes or More
In Males and Females**



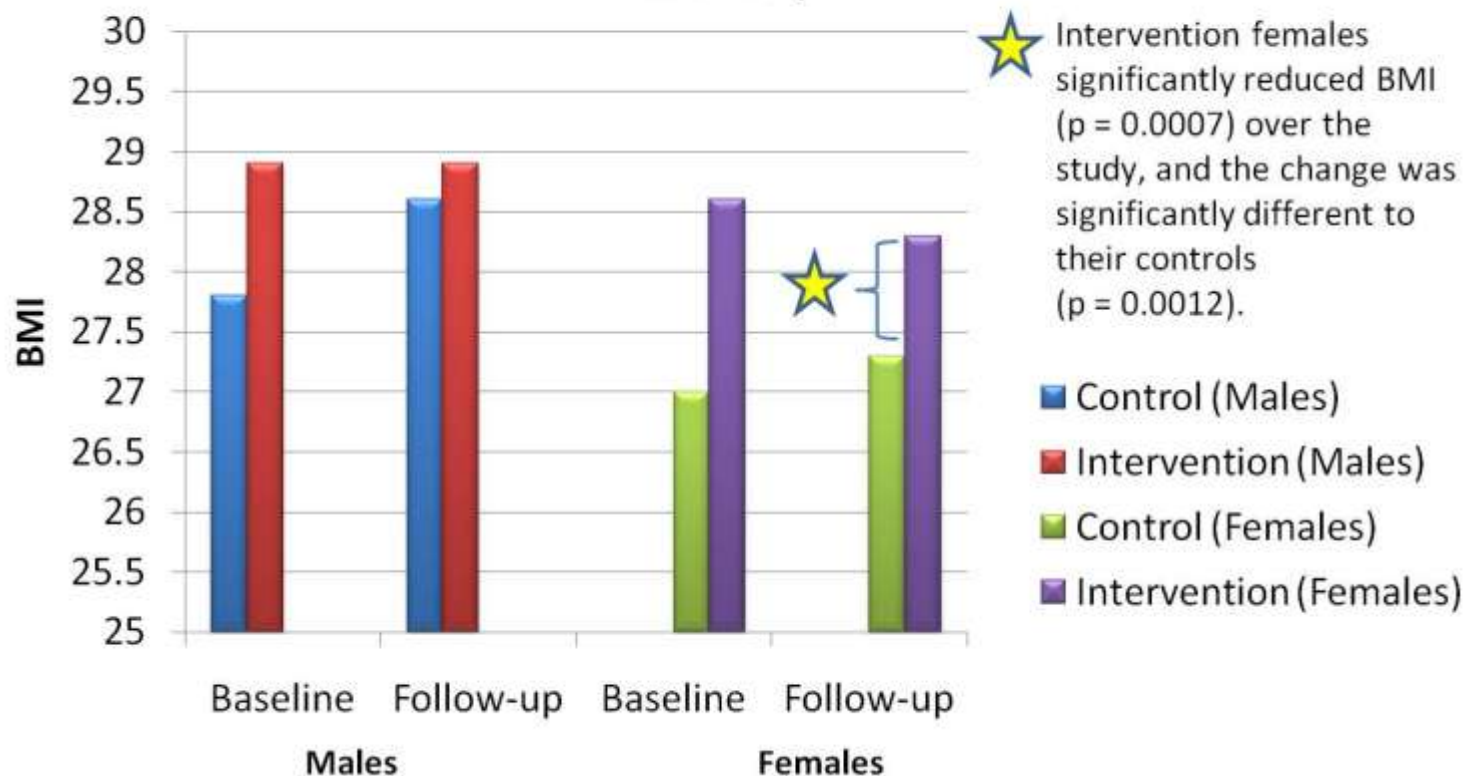
Results-Physiological Changes

Average Weight



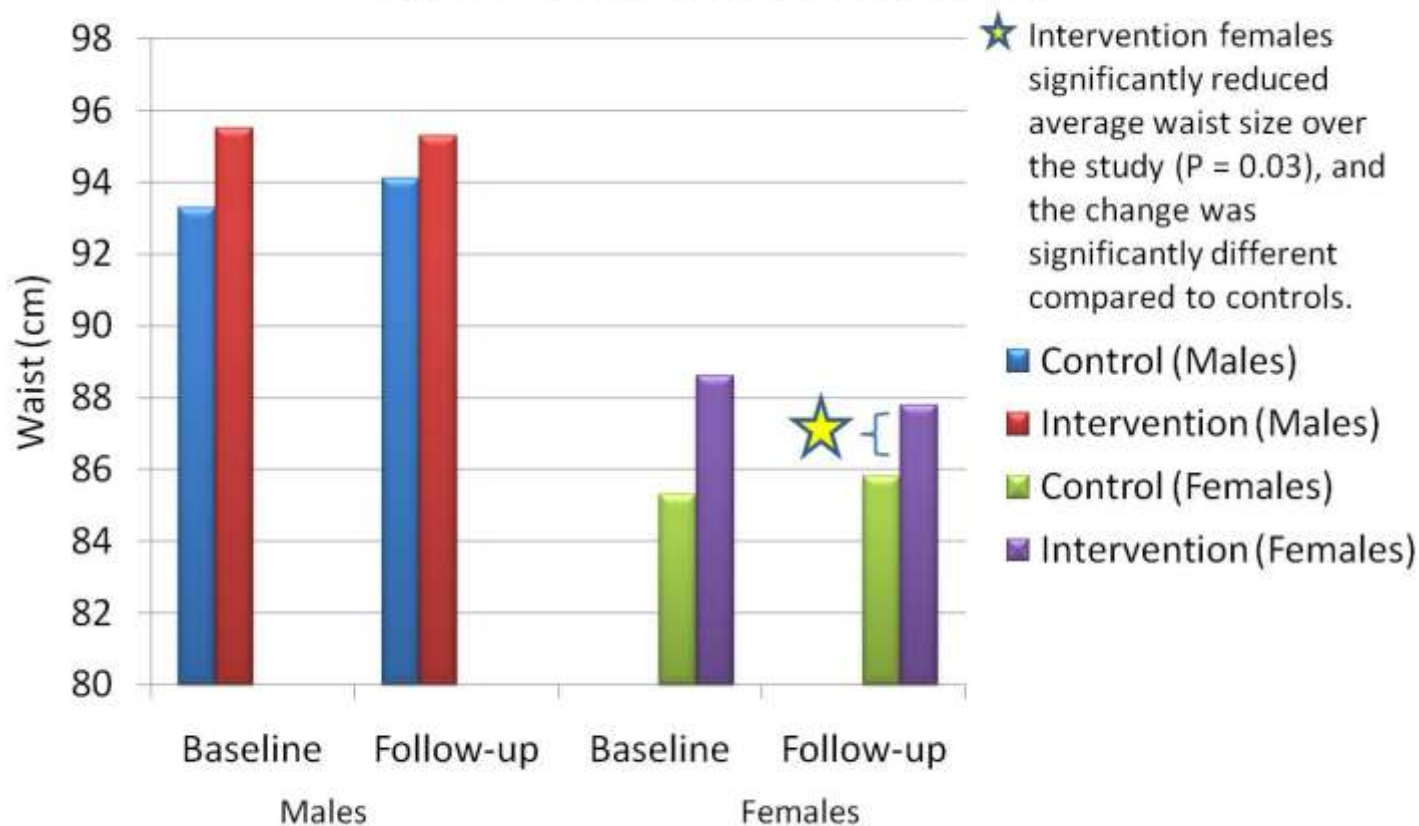
Results-Physiological Changes

Fig. 6.2 Body Mass Index (BMI Kg in weight/height in Meter²)



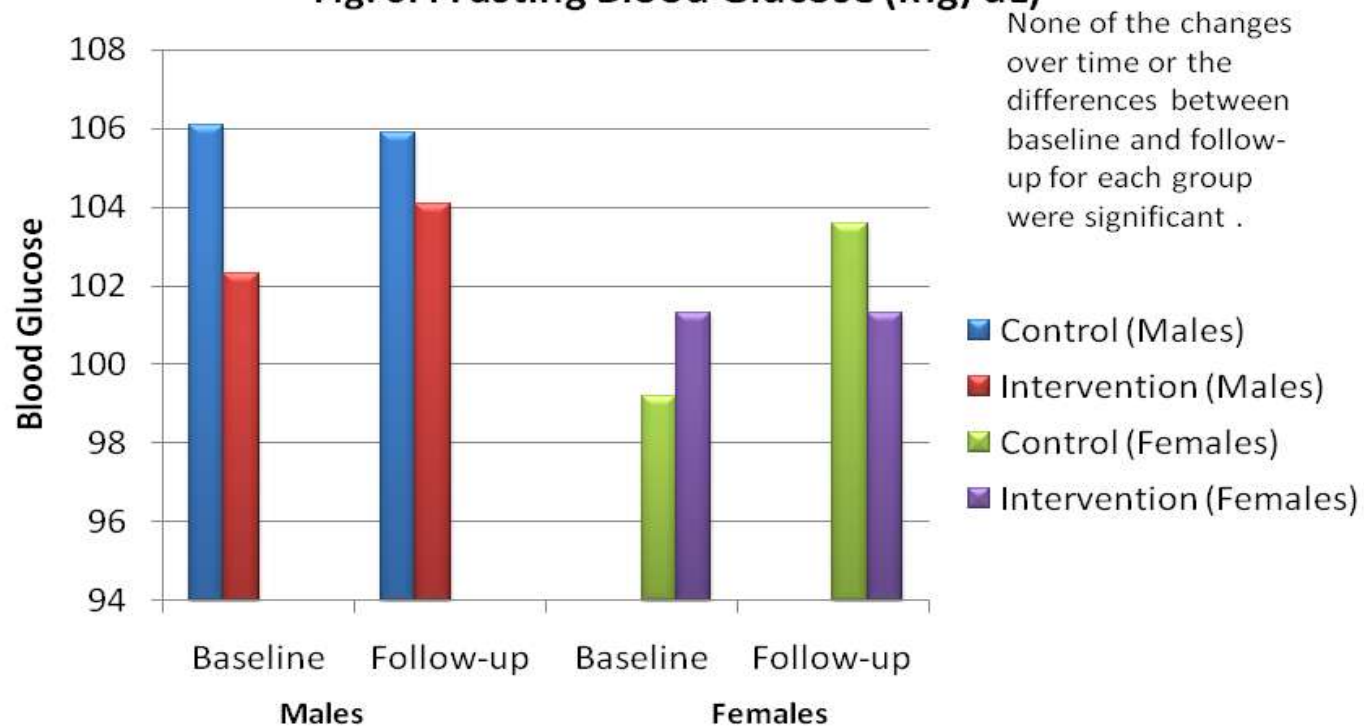
Results-Physiological Changes

Fig. 6.3 Waist Circumference (cm)



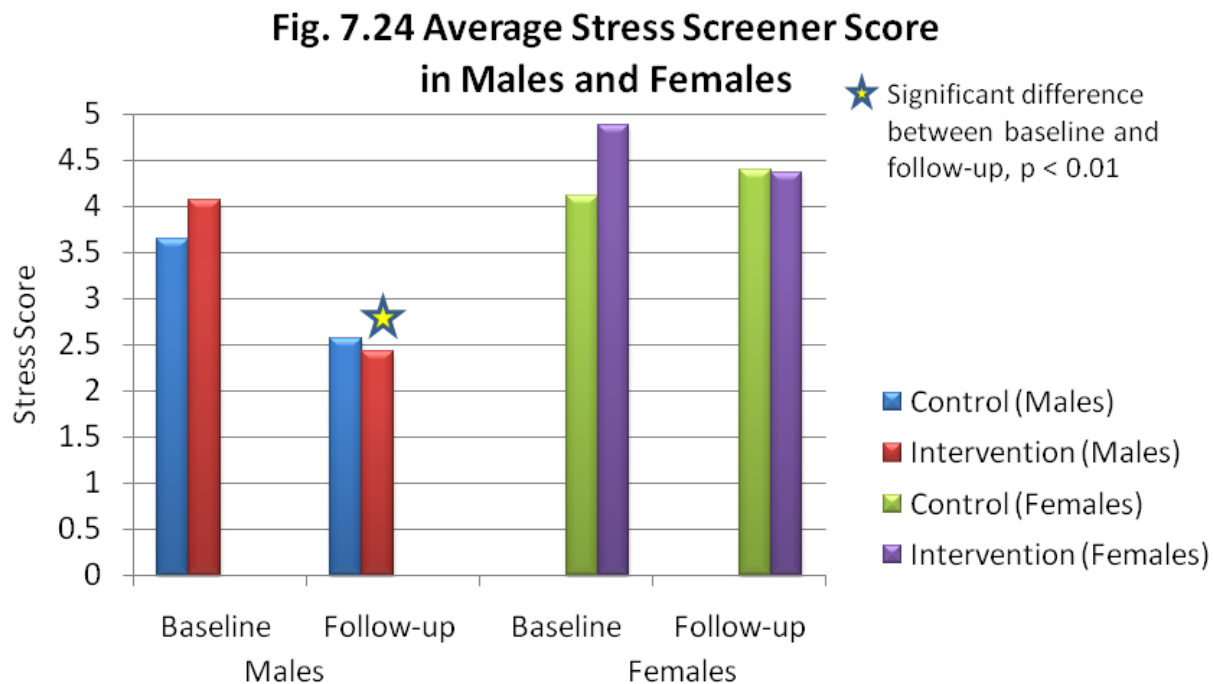
Results-Physiological Changes

Fig. 6.4 Fasting Blood Glucose (mg/dL)



Results-Emotional Health

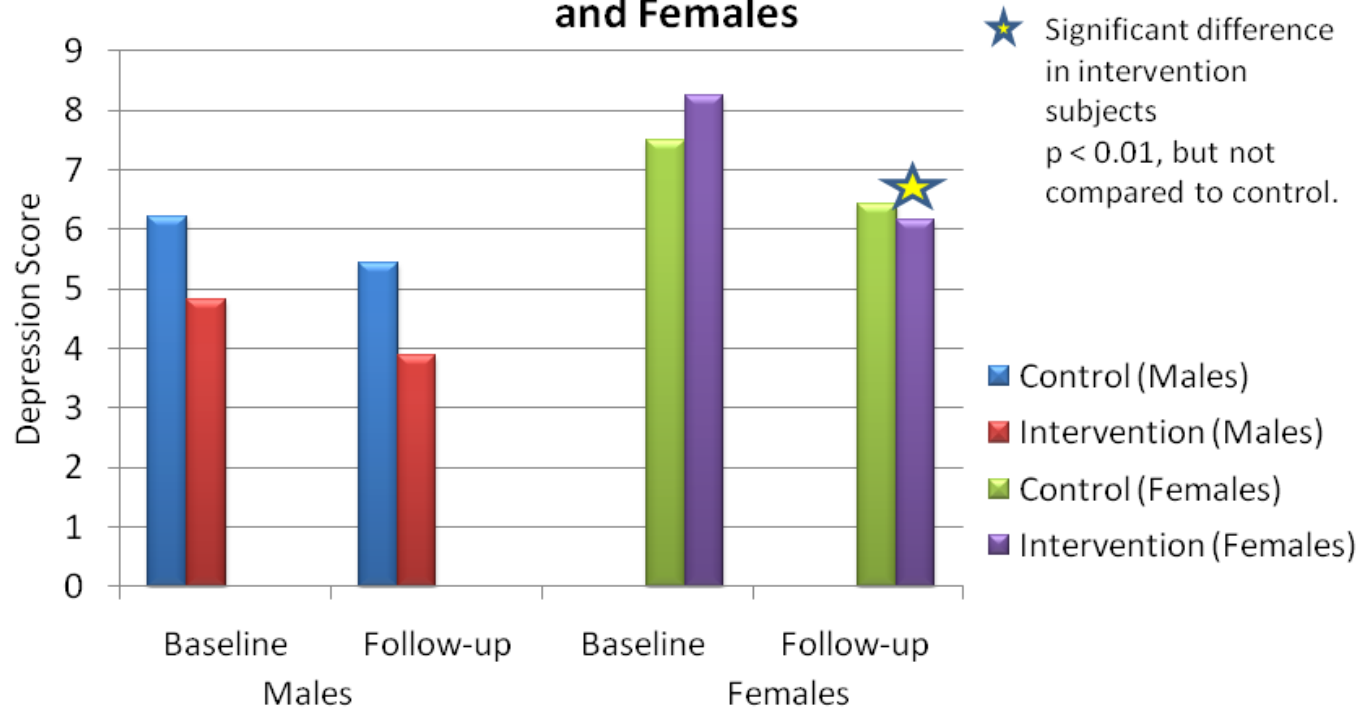
Stress Scores-Males and Females



The Stress Screener was composed of 4 questions. Each Scored 1-4 frequency of feelings. Higher Score = more likely to feel stress. A score greater than 5.5 indicates likely to feel stressed.

Results-Emotional Health

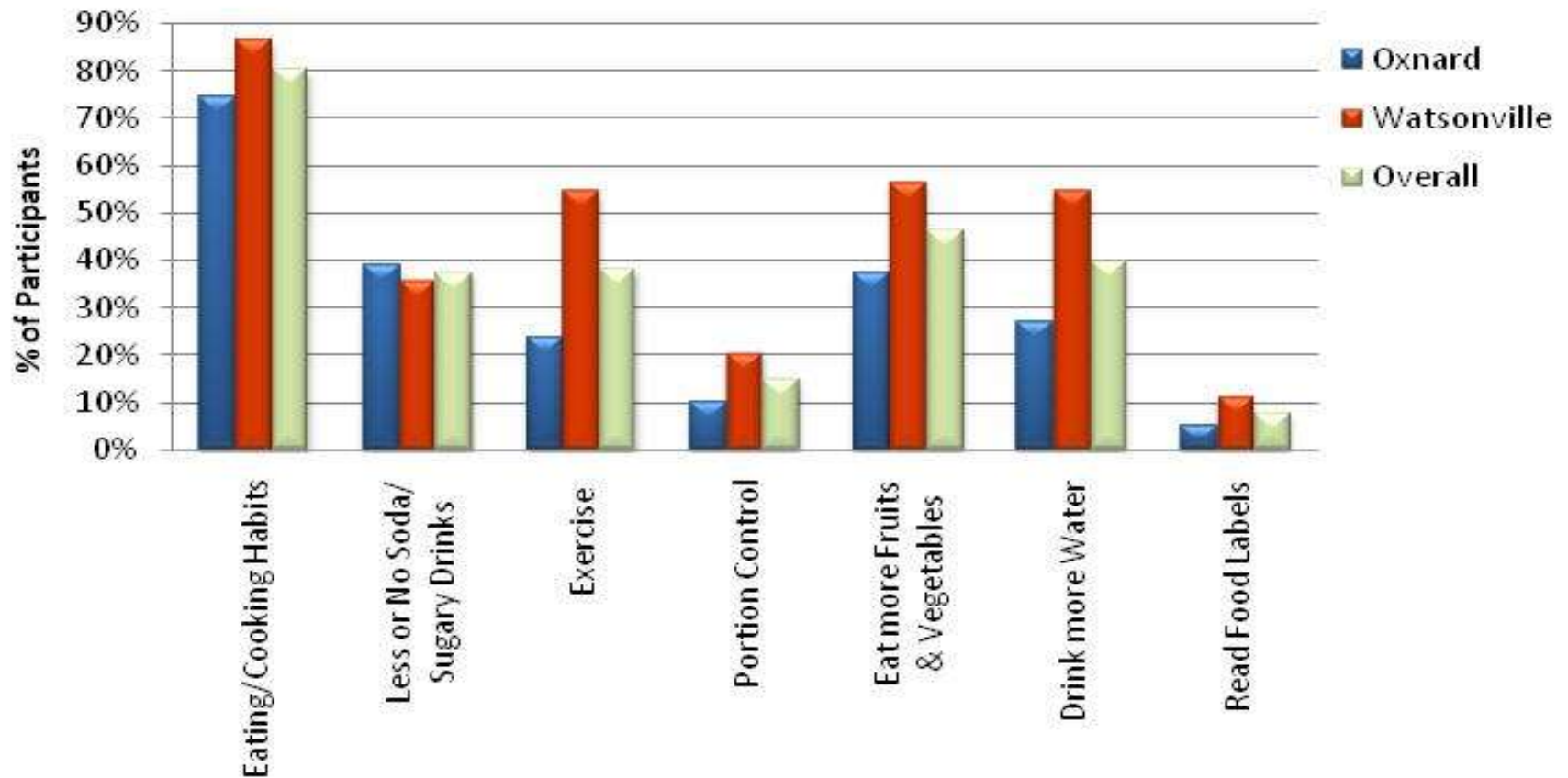
Fig. 7.26 Average Depression Screener Score in Males and Females



Screener was composed of 10 questions: Each scored 0-3 by frequency of feelings. Higher score, more likely to have depressive feelings. A score 10 or more, more likely to have depressive symptoms.

Results-Overall changes

Figure 8.8: Changes Made



Current program status

Pasos Saludables Phase II

- Two districts in Mexico: San Quintin B.C., Zamora Mich. and Jocotepec Jal.
- Two districts in the U.S.A: Watsonville, Ca and Oxnard, Ca
- Modified participation criteria to expand participation and focus on family unit

Concluding notes

- Pasos Saludables Phase I lessons
- Current program development
- Holistic approach to health - Future opportunities



Clinica FreSalud



Healthy lunch truck project



Healthy lunch truck project



Pasos Saludables-Diabetes prevention