Organizing a Community "Biggest Loser" Weight Loss Challenge

Abstract
The program described here shows how Extension can be a strong collaborative partner in a rural setting in improving the overall health of the community by organizing a three month "Biggest Loser" Weight Loss Challenge. A pre-and post-fitness assessment and bi-weekly weigh-ins were administered. Three healthy lifestyle educational programs were provided, and a 3-month follow-up behavior change survey was collected. The program has been a tremendous success, with 588 participants losing 2,357.2 lbs. over the past 3 years.

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Introduction and Background
The 2008 Physical Activity Guidelines for Americans state that physical activity need not be strenuous to be beneficial. The guidelines recommend a minimum of 150 minutes per week of moderate aerobic activity and a minimum of 2 days per week of strength training for adults ages 18-64 (U.S. Department of Health & Human Services [HHS], 2008). In Idaho, 33.4% of adults participate in 20 minutes or more of physical activity three or more days per week (National Center for Chronic Disease Prevention [CDC], 2009).

Information obtained from the National Health and Nutrition Examination Survey (NHANES) showed an estimated 2/3 (68%) of American adults and approximately 23 million children are overweight or obese. The number of overweight and obese adolescents has increased from 5% in 1996 to 17% in 2004 (Sheehy & Dharod, 2008). Adult men in the nation measured in at 32.2% obese, and adult women at 35.5% (Flegal, Carroll, Ogden, & Curtin, 2010). In Idaho, the prevalence of overweight and obese adults has increased significantly in the past decade, from 55.7% in 2000, to 61.3% in 2009 (Idaho Department of Health and Welfare, 2010).

Families living in Idaho County are facing health issues currently affecting many U.S. families. In 2009, 37.3% of screened Idaho adults had been told they have high cholesterol, with 43% of those being overweight (Idaho Department of Health and Welfare, 2010). Dawkins, McMickens, Findlay,
and Pace (2010) found that community leaders exhibit knowledge on questions relating to obesity; however, they were less knowledgeable when addressing questions on exercise and body mass index (BMI). Investment in effective community programs that promote increased physical activity and good nutrition and improve overall health is the motivation behind developing the weight loss challenge described here.

Program Description

To address the lack of rural educational programs in the areas of healthy lifestyles, physical activity, and healthy nutritional choices, University of Idaho Extension, Idaho County partnered with local health providers to develop the group Our Health Our Community. Beginning in 2009, monthly meetings were held to develop a series of educational forums and events to address the rise in obesity and chronic disease rates in the community. The most successful event to address these health issues has been the "Biggest Loser" Weight Loss Challenge.

The "Biggest Loser" title was chosen as an incentive to gain interest in the weight loss challenge, because many people are familiar with NBC's television program "The Biggest Loser." This reality show is not without controversy, as James Hill (2005) reports, "Patients would be more successful in losing weight if they all had personal trainers and were followed around by television cameras." This is not a recommended healthy way to lose weight and/or body fat. Hill also states, "Losing weight requires a long-term commitment to a program that requires hard work and produces weight losses of 10-15% of initial weight." To ensure the participants of the weight loss challenge are successful at attaining a healthier weight, it is important to include education/information based on the recommended healthy weight loss guidelines set forth by HHS.

The Idaho County 'Biggest Loser' Weight Loss Challenge is designed as a community-wide physical activity, and nutrition education campaign. Organization includes:

- Marketing—newspaper articles, flyers, radio ads, banners
- Dates—January thru March
- Participants—(15 and older), charged a minimal fee to cover the cost of the challenge awards, can sign up as individuals and/or teams
- Registration packet—challenge rules, schedule of educational events, food logs, weigh-in sheets, fitness center passes

Participants are measured and assessed in the following areas at the kick-off event:

- Body weight
- Body fat percentage and body mass index (BMI) by means of bioelectrical impedance
- Cardiorespiratory fitness (Golding, Myers, & Sinning, Three-Minute Step Test, 1989)
Muscular endurance and strength (Canadian Standardized Test of Fitness, One-Minute Timed - Bent-Knee Sit-Ups and Push-Ups, 1987)

- Body dimensions (upper arm, chest, waist, hips, thigh, and calves)

The "Biggest Loser" Weight Loss Challenge is designed on a point system. Participants receive points for the following:

- Attending healthy lifestyle educational events: Metabolism & Me—provides healthy nutrition/physical activity guidelines; Blood Sugar and Cholesterol Screening/Information; Fitness for Free—working out at home, inexpensive fitness equipment, local walking/running clubs

- Attending the kick-off /final weigh-in/fitness assessment

- Completing the food log diary (paper logs/online food logs —www.choosemyplate.gov/SuperTracker, www.myfitnesspal.com)

- Using fitness passes

- Participating in community fun run/walks

To provide motivation during the challenge:

- Weekly email updates are sent on how the challenge is progressing.

- Phone calls are made to answer questions.

- Updates/announcements are shared on the challenge Facebook Page.

- Participants can weigh-in at the fitness center to record weight loss.

Final weigh-in:

- Participants receive points for every pound and percent of body fat lost. A future recommendation would be to award up to two points for two pounds lost/week to reflect a healthy weight loss amount (HHS)

- Monetary awards are provided to the 1st, 2nd, and 3rd place female/male individual winners, and to the 1st, 2nd, and 3rd place winning teams

The goal is to provide a competitive and educational healthy lifestyle program to improve overall health.

**Evaluation**

Starting with the 2011 challenge, participants were given a retrospective pre-post survey during the
educational presentation on metabolism, nutrition, and physical activity. Three months following the challenge, a survey was mailed to all participants. The intention of the survey was to measure which healthy lifestyle actions and behaviors the participants were continuing with following the completion of the challenge. Total weight loss was a combined measure of the participants who completed and returned the survey. Surveys were mailed to 80 participants, with (17) completed and returned, for a 21% response rate (Table 1).

Table 1.
"Biggest Loser" Weight Loss Challenge, 3-Month Follow-Up Survey Results, 2011

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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Eat snacks/meals frequently (5-6 times/day)</td>
<td>41%</td>
</tr>
<tr>
<td>2</td>
<td>Eat smaller portions</td>
<td>88%</td>
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<tr>
<td>3</td>
<td>Follow USDA Food Pyramid guidelines</td>
<td>71%</td>
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<tr>
<td>4</td>
<td>Participate in strength training exercises 3+ days/week</td>
<td>53%</td>
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<tr>
<td>5</td>
<td>Participate in 150+ minutes of cardiovascular (aerobic) exercise weekly</td>
<td>47%</td>
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<tr>
<td>6</td>
<td>Total Weight Loss</td>
<td>197.4 lbs.</td>
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</table>

Conclusion

Based on the 2011 program evaluation results, healthy lifestyle knowledge and behavior change was evident. Three months following the challenge finale, over 50% of the participants were continuing to eat smaller portions, follow the USDA Food Pyramid guidelines, and participate in strength training exercise 3+ days/week. Since 2009, 47 men and 541 women have participated in the "Biggest Loser" Weight Loss Challenge, 32% completing the full program. The total combined weight loss of 588 participants is 2,357.2 lbs., with an average body fat percentage loss of 2.8%. Future success will depend on continued involvement by the community partners to expand the challenge to surrounding communities, provide updated education on healthy lifestyle behaviors, encourage further online participation, and to help participants bring the "Biggest Loser" Weight Loss Challenge back to their communities and workplaces.

References


