CanyonRanch Institute
THE POWER & POSSIBILITY OF A HEALTHY WORLD

Using Health Literacy to Save Lives and Improve Performance: Canyon Ranch Institute Life Enhancement Program

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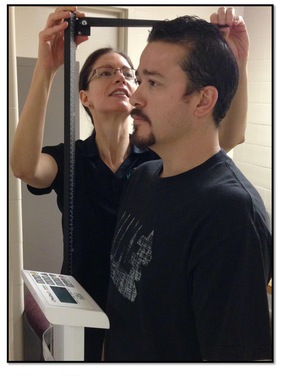
BACKGROUND

The Canyon Ranch Institute Life Enhancement Program (CRI LEP) is an evidence-based, multi-disciplinary program using an integrative approach to health. The CRI LEP is grounded in the best practices of health literacy to prevent, diagnose, and reverse chronic disease in low-income communities.

Canyon Ranch Institute works with local health care organizations to tailor the CRI LEP in a manner that is culturally and linguistically relevant to each community. The CRI LEP has been conducted with adults at eight diverse locations in the United States: South Bronx, NY; Pittsfield, MA; Great Barrington, MA; Milan, MO; Savannah, GA; Cleveland, OH; and two partner sites in Tucson, AZ. Financial support for the CRI LEP comes from the health care organizations, grants, and philanthropic contributions.

CRI LEP participants build social support for each other and complete more than 40 hours of contact time, including interactive sessions focused on behavioral health, sense of purpose, nutrition, exercise, integrative health; hands-on cooking demonstrations; and grocery store tours. A critical aspect of health literacy and integrative health are least four one-on-one consultations between each participant and members of the credentialed and certified CRI LEP Core Team to jointly create plans to identify and act on small steps toward a healthier lifestyle.

METHODOLOGY



CRI LEP participants complete physical assessment at pre, post, +3 months, and +12 months post program.

The CRI LEP conducts participant evaluations at pre-, post-, post-plus 3 months, and at post-plus one year to monitor quality and measure outcomes. These evaluations include a survey of knowledge, attitudes, behavior and beliefs; fitness assessment; physical assessment; and blood work. Participants are recruited primarily from the patient populations of partner health care organizations. Analysis is based on matched pair results from 567 participants from seven program sites for which data are available using matched pre-, post-, and plus 3 months post data. Analysis for some measures includes fewer matched pairs. All results displayed are statistically significant at $p < 0.05$ or lower.

PARTICIPANT DEMOGRAPHICS

Intake Demographics	
Female	86%
Male	14%
Average Age	52.2 years
Average Years Education	12.4 years
Employed Full-time	36%
Unemployed	41%
Income <$15,000 per Year	41%
Working >1 Job	7%
Chronic Conditions at Intake	
Overweight or Obese	68%
Hypertension	47%
High Cholesterol	38%
Type 2 Diabetes	32%
Depression	32%
Cardiovascular Disease	8%
Other Diagnosis	41%
Average # Chronic Conditions	2.9

CRI LEP participants have opportunities to maintain their group connections after graduation.

An important component of the CRI LEP is the opportunity for regular fitness activities, both during the CRI LEP and after graduation.

KEY FINDINGS

Exercise and Fitness	
Strenuous Exercise per Week	+ 100.0%
Moderate Exercise per Week	+ 72.2%
Mild Exercise per Week	+ 28.0%
Average Minutes Exercised per Week	+ 40.9%
Exercise Self-Efficacy	+ 20.4%
How Often Self-Consciousness Keeps You From Exercising	- 20.8%
Number of Push-ups (measured)	+ 41.9%
Number of Sit-ups (measured)	+ 28.2%
Flexibility (measured)	+ 10.6%
Blood Work	**Change (Pre/Post)**
C-reactive Protein	- 21.2%
Systolic Blood Pressure	- 5.7%
Diastolic Blood Pressure	- 3.4%
Cholesterol/ HDL	- 2.6%
Triglycerides	- 3.5%

KEY FINDINGS

Healthy changes made by participants in the CRI LEP are seen in markers of general health and well-being, nutrition, exercise, fitness, and blood work.

General Health and Well-Being	Change (Pre/Post)
Healthy Literacy (Calgary Charter)	+ 11.0%
Self-Report Health Knowledge	+ 27.7%
Depression (PHQ-9)	- 41.2%
Stress	- 25.0%
Life Satisfaction	+ 14.3%
Body Mass Index	- 2.6%
General Health Status (Self-report)	+ 14.7%
Days Not Well Mentally and Physically (Last 30 Days)	- 39.4%
Civic Engagement	+ 10.6%
Nutrition	**Change (Pre/Post)**
How Often Read Food Ingredient List	+ 35.7%
How Often Read Nutrition Facts Labels	+ 31.0%
How Often Plan Meals	+ 13.8%
How Often Eat Fried Foods	- 15.4%
How Often Serve 2 or More Vegetables at a Meal	+ 12.1%
Glasses of Soda per Day	- 60.0%
Glasses of Water per Day	+ 20.8%

IMPLICATIONS

The CRI LEP takes the best practices of health literacy and integrative health to create a cost-effective program with robust positive health outcomes, suggesting that tailored prevention and disease management efforts that encompass the integrative approach are replicable in any community and have the potential for profound public health change. A cost-benefit assessment shows that the CRI LEP is producing health gains at an average cost from $105,058 to $235,166 lower than the average cost of other medical and public health interventions to produce the same health gains as participants in the CRI LEP experience.

Furthermore, evidence of the power of improving health literacy to improve health has been lacking – the CRI LEP makes a solid contribution to the field of health literacy. Such evidence should be useful in changing policy and practice to further advance the role of health literacy in both clinical and public health contexts.

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