florida heart research institute

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To date, FHRI's Living for Health® program has screened 6,682 individual adults in selected medically underserved areas of Miami-Dade County to identify those with high blood pressure, cholesterol and glucose and urge them to seek medical evaluation and make important lifestyle improvements to reduce risk.

FHRI's epidemiologist examined the results of the lifestyle survey questions. The Wilcoxon Rank Sum test was used to determine statistically significant differences in lifestyle behaviors from baseline to follow-up (3 months, 6months and 12 months).

Table 1.Changes From Pre to Post 3 month Intervention

	No Change	Positive Change	Negative Change	p-value
Fruit & Vegetable consumption (n=2252)	572 (25.4%)	1070 (47.5%)	610 (27.1%)	<.001
Grain consumption (n=2204)	636 (28.8%)	930 (42.2%)	638 (29.0%)	<.001
Fast Food Frequency (n=2242)	952 (42.5%)	928 (41.4%)	362 (16.1%)	<.001
Fast Food Type (n=815)	216 (26.5%)	300 (36.9%)	299 (36.7%)	.576
Fat Intake (n=2222)	693 (31.2%)	962 (43.3%)	567 (25.5%)	<.001
Physical Activity (n=2239)	500 (22.3%)	955(42.7%)	784 (35.0%)	<.001
Smoking (n=2229)	2043 (91.7%)	120 (5.3%)	66 (3.0%)	<.001

Table 2.Changes From Pre to Post 6 month Intervention

	No Change	Positive Change	Negative Change	p-value
Fruit & Vegetable consumption (n=881)	199 (22.5%)	441 (50.1%)	241(27.3%)	<.001
Grain consumption (n=844)	237 (28.1%)	414 (49.0%)	193 (22.9%)	<.001
Fast Food Frequency (n=884)	403 (45.5%)	343 (38.8%)	138 (15.6%)	<.001
Fast Food Type (n=148)	34 (23.0%)	66 (44.6%)	48 (32.4%)	.011
Fat Intake (n=873)	277 (46.4%)	399 (21.9%)	197 (31.7%)	.001
Physical Activity (n=884)	173 (19.6%)	355 (40.2%)	356 (40.3%)	.650
Smoking (n=844)	788 (93.3%)	48 (5.7%)	8 (0.9%)	.001

Table 3.Changes From Pre to Post 12 month Intervention

	No Change	Positive Change	Negative Change	p-value
Fruit & Vegetable consumption (n=328)	86 (26.2%)	171 (52.1%)	71 (21.6%)	<.001
Grain consumption (n=303)	84 (27.7%)	155 (51.1%)	64 (21.1%)	<.001
Fast Food Frequency (n=329)	158 (42.7%)	123 (41.5%)	48 (15.8%)	<.001
Fast Food Type (n=56)	7 (12.5%)	27 (48.2%)	22 (39.3%)	.453
Fat Intake (n=317)	116 (36.6%)	154 (48.6%)	47(14.8%)	<.001
Physical Activity (n=324)	63(19.4%)	151(46.6%)	110 (34.0%)	.009
Smoking (n=322)	294 (91.3%)	23 (7.1%)	5 (1.6%)	<.001

Wilcoxon Signed Rank Test
Bonferroni Correction alpha = .002

Table 1 above indicates that in all areas except Fast Food Type there was statistical significance in improved lifestyle outcomes. A p <.001 means that there is less than 1 time in 1000 that the results we obtained are due to random chance. In other words, 999 times of 1000 we would get this distribution because of real changes in lifestyle. Likewise a p of .001 indicates we would obtain the results only 1 time out of 1,000 by chance. Thus, the differences between time 1 and time 2 appear to be real, not a random anomaly.

Tables 2 and 3 indicates that, for those we were able to follow, the lifestyle changes (except for physical activity in Table 2) were sustained over six and 12 months.

A review of the clinical outcomes is shown in Table 4 All four clinical indicators investigated showed improvement at 3, 6 and 12 months after baseline. While the cases for which we have clinical data is small, the data support the self reported lifestyle changes.

Clinical Changes
Mean and Standard Deviation (SD)

	Base-line	3 months	p	Base-line	6 months	p	Base-line	12 months	p
TC	N=19			N=17			N=11		
	269.84 (25.098)	237.05 (40.080)	.004	280.71 (22.893)	242.35 (41.919)	.004	275.55 (26.801)	235.73 (56.669)	.056
TCHDL	N=48		.001	N=34		<.001	N=23		<.001
	5.91 (2.688)	4.57 (1.042)		5.65 (1.536)	4.37 (1.338)		5.83 (1.374)	4.48 (1.355)	
Diastolic	N=48		<.001	N=49		<.001	N=34		<.001
	97.48 (8.837)	86.79 (9.065)		97.45 (8.449)	86.49 (8.412)		98.03 (9.196)	88.88 (10.778)	
Systolic	N=69		<.001	N=63		<.001	N=49		<.001
	153.81 (16.025)	139.48 (19.359)		156.19 (17.619)	143.00 (18.996)		155.96 (17.380)	145.71 (22.194)	

* Paired Samples t-test
Bonferonni correction alpha <.007

After participation in the program, statistically significant improvement was seen in both lifestyle and clinical values which were sustsained over time among those participants whom we were able to follow. In addition, data from the clinics provide independent verification that FHRI referrals to those without a medical home led to new connections to healthcare (data not shown in above report. The Living for Health® model deserves continued testing, refinement and reporting to enhance its potential for replication on a national scale.