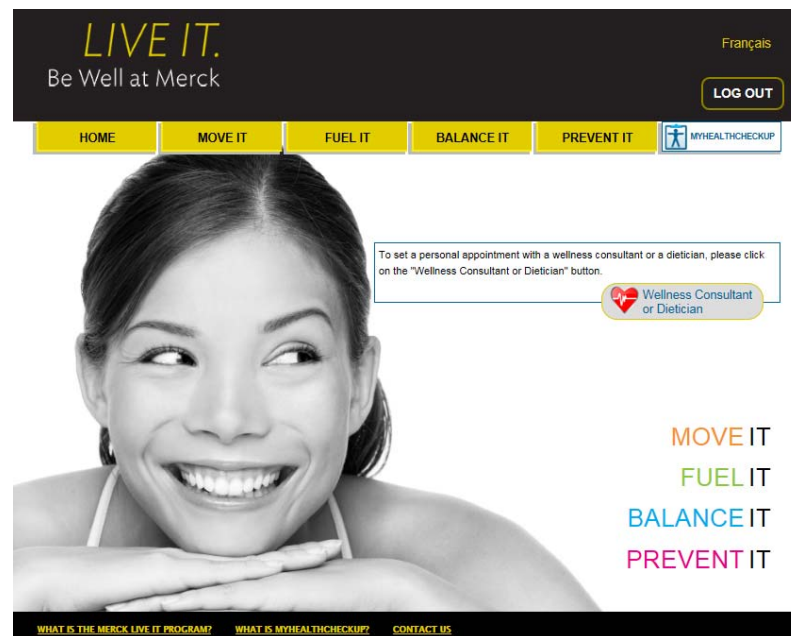


Implementing an on-site and web-based corporate health program using best practices: The Live It Merck Wellness Program



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¹ McGill Comprehensive Health Improvement Program ² Merck Canada

Background and Objective

- **The potential benefit of a workplace wellness program is heavily based on employee engagement.**
- **Merck Canada implemented a comprehensive workplace wellness program (Live It) based on best practices using a combination of on-site and web-based wellness activities.**
- **The objective of this study was to assess employee engagement in the Live It program when using best practices.**



What are Best-Practice Criteria?

Key Element	Live-It Program
Leadership support	Program sponsor is a high level executive
Biometric health screening	Yearly with blood testing; at least 2x/year for blood pressure, weight/waist and mental health
Comprehensive HRA	Multiple modality: web-based
Comprehensive communication strategy	Why wellness is a core business strategy, program management team, employee champions
Behaviour change programs	Lifestyle improvement challenges, health coaching, on-site lectures and workshops
Dedicated on-site staff	Merck program manager and wellness consultant
Incentive model	Health related prizes for participation and meeting goals

Study Design

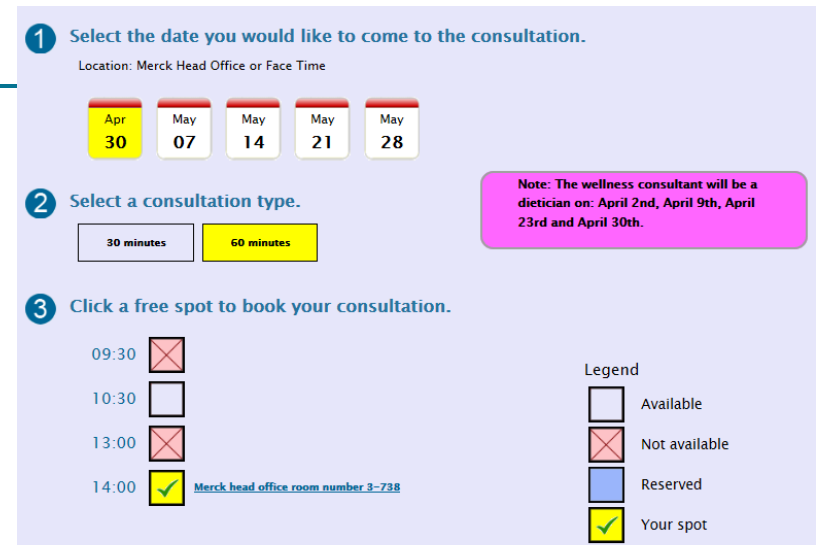
- **Approximately 730 Merck employees were invited to participate from offices across the country using recruitment stations, posters, and email announcements.**

**Participate!
Your Health Matters**





To register, participants created an online account.



Gave them access to an onsite biometric screening program, a wellness consultant, and the MyHealthCheckup e-health platform.

FUEL IT

NEWS & EVENTS

[LUF A FARMS - SIGN UP TODAY!](#)

[FUEL IT informational kiosks](#)

LUNCH & LEARNS

[Introduction: Eat well so you can Fuel It right!](#)
[How to read labels and shop smart](#)
[Meal planning and dining out](#)
[Pre and post exercise nutrition](#)
[Nutrition myths](#)

RESOURCES

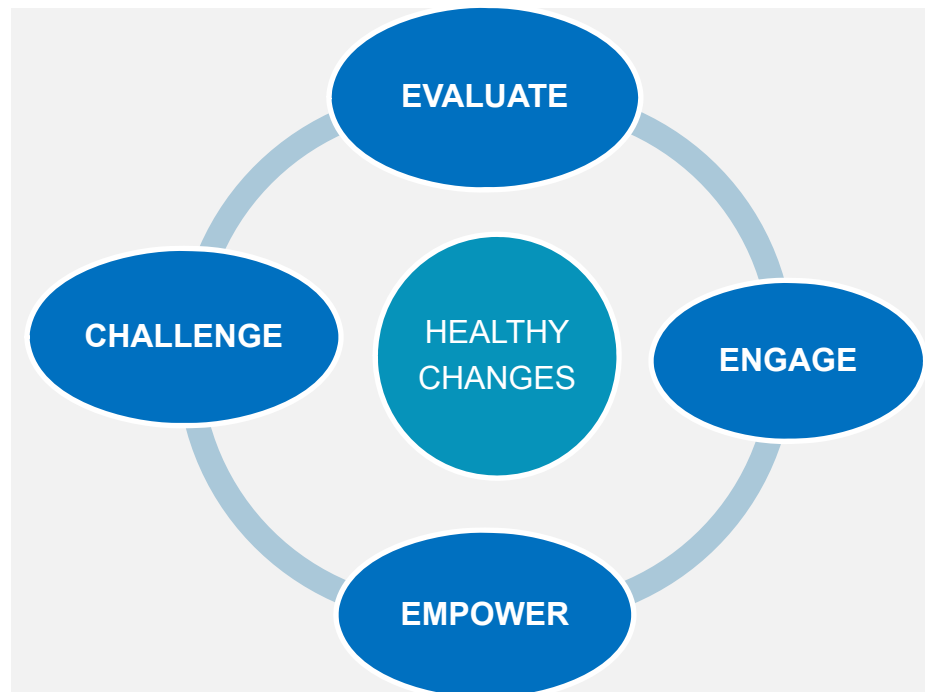
[FUEL IT Links](#)

[Websites Providing Menus \(Provided by Dietician Celine Saloumy\)](#)

[APPS Providing Menus \(Provided by Dietician Celine Saloumy\)](#)

The MyHealthCheckup platform

- **MyHealthCheckup used “gold standard” health assessments, scientifically based wellness education modules, and wellness challenges to help employees improve their health.**



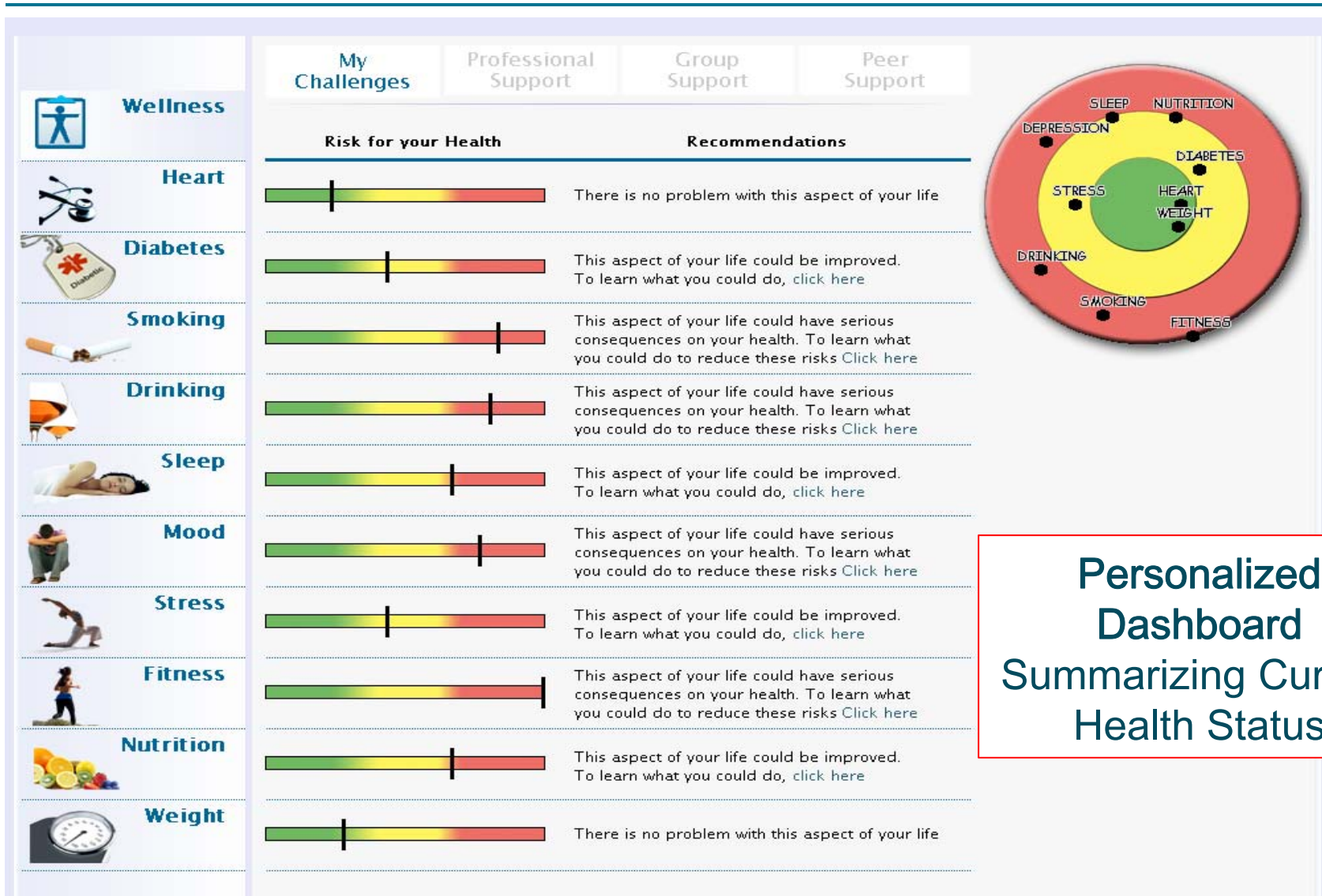
Biometric health screenings

- ✓ Demographics
- ✓ Medical history
- ✓ Medications
- ✓ Weight and waist circumference
- ✓ Blood pressure
- ✓ Cholesterol (Total and HDL), random glucose and hemoglobin A1c

9 baseline screening days held at head office and at national sales meetings



MyHealthCheckup e-health platform



Personalized Dashboard Summarizing Current Health Status

Evidenced Based Disease Management Strategies

Learning Modules

My blood pressure is too high

My cholesterol is too high

I have cardiovascular disease









Quizzes

What do I know about blood pressure?

What do I know about cholesterol?

What do I know about cardiovascular disease?


Documents

-  Common medications for cardiovascular disease
-  Common surgical procedures for cardiovascular disease
-  Cholesterol medication effects and side-effects
-  Foods that may increase or decrease LDL-cholesterol levels
-  How to boost your good cholesterol
-  Sexual activity after a heart attack
-  Simple ways to reduce sodium in your diet
-  Which blood pressure drug is best for you

Make Healthy Changes with Fun and Engaging Wellness Challenges

My Challenges


Wellness Consultant



Personal Exercise Challenge
Need some extra motivation to get fit?
Join our 8-week Physical Activity Challenge
[Select your next challenge](#)

[learn more](#)

GO



Team Healthy Weight Challenge
Need some help to eat better or lose weight?
Join our 8-week Healthy Weight Challenge
[Manage Team](#)

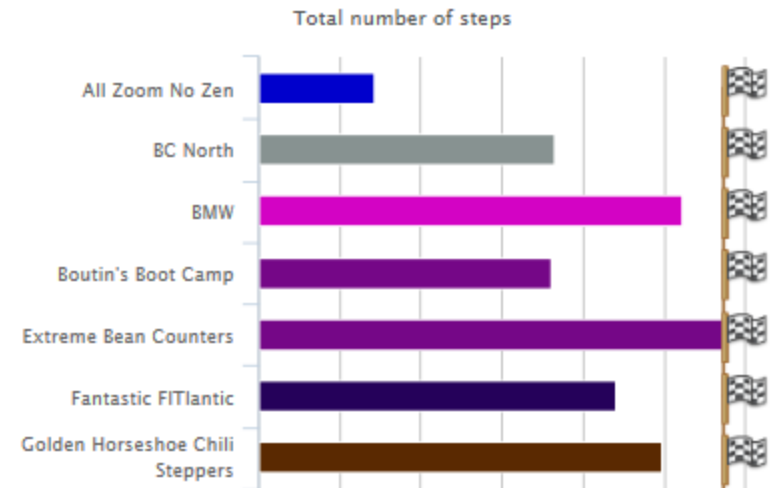
[learn more](#)

GO

Journey to Number 1: Team Physical Activity Challenge



10-week challenge with 27 teams led by team captains



Click a date to log or review your physical activity for that date

<< March 2014 >>

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Log your physical activity for

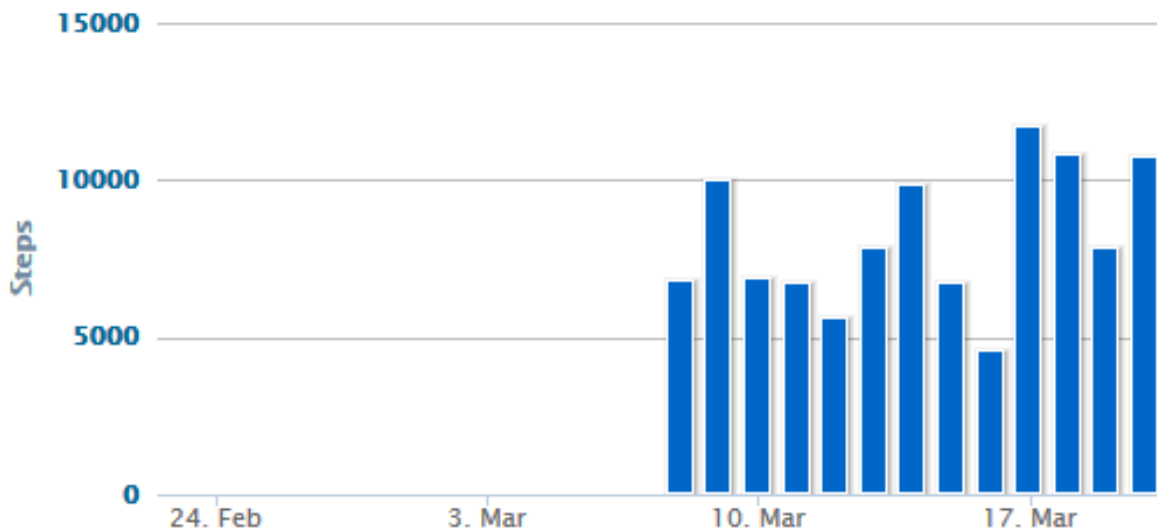
Date: **2014-03-07** Total Steps: **0**

Pedometer Steps:

Other activities	minutes
Cycling (med intensity or 13 mi/h) ▼	15
Choose Activity ▼	0
Choose Activity ▼	0
Choose Activity ▼	0
Choose Activity ▼	0

To completely erase informations for that day
set everything to zero then save

Activity for the last 30 days



Team Wall
Challenge Wall

remaining: 256

Rosemary wrote:
Hey Team, keep up the good work!

2015-04-13 04:58:51

Eric wrote:
Bravo! Nous sommes 5e et nous nous retrouvons en Estonie!!!

2015-03-11 16:43:19

Results

730 eligible employees

688 (94%) registered on the Live It website

567 (78%) had their risk assessed at one of the 9 risk screening days

Completed online assessments

- ✓ **667 heart/diabetes**
- ✓ **510 stress**
- ✓ **465 sleep**
- ✓ **396 nutrition**

Baseline characteristics of Merck employees

Baseline Characteristics	Men (n=283)	Women (n=384)	All (n=667)
Average Age (years)	47	45	46
Known Cardiovascular Disease	1.5%	0.5%	0.9%
Family History of CV Disease	20%	22%	21%
Diabetes	5.3%	0.5%	2.5%
Smoker	4%	3%	4%
Blood Pressure (mmHg)	128/82	117/78	121/80
Taking anti Hypertensive(s)	12%	5.4%	8.2%
Total/HDL Cholesterol (mmol/L)	4.9/1.3	4.9/1.7	4.9/1.5
Body Mass Index (kg/m²)	27.0	24.7	25.7
Physical Activity (Weekly METS)	2,297	1,944	2,093

Risk factors for Merck employees at baseline

Risk Factor	
Overweight	37%
Obese	14%
Lack of physical activity	34%
Moderate stress	42%
High stress	15%
Moderate insomnia	27%
Severe insomnia	6%
Mild/moderate depression	8%
High depressive symptoms	2.5%

10-week physical activity challenge

536 (73%) employees registered for the challenge

474 (88%) tracked their activity at least 1 time

By end of challenge
76% were tracking consistently

High level of engagement likely the result of

- ✓ Senior management support
- ✓ Comprehensive communication
- ✓ Dedicated onsite staff
- ✓ Incentive program

Changes in Exercise by Weight Category

	Ideal Weight	Overweight	Obese
n	99 (57%)	56 (32%)	20 (11%)
Steps (per week)	12,310	12,721	9,395
Exercise Before (METs/week)	2,208	2,076	1,383
Exercise After (METs/week)	2,467	2,474	1,836
Change in Exercise	↑ 12%	↑ 19%	↑ 32%
Moderate Exercise time / week	↑ 1 hour	↑ 1.5 hours	↑ 2 hours

Impact of Physical Activity on Weight

	Ideal Weight	Overweight	Obese
n	99 (57%)	56 (32%)	20 (11%)
Steps (per week)	12,310	12,721	9,395
Change in Weight	+ 0.5 lbs	- 2.8 lbs	-2.2 lbs

Impact of Physical Activity Challenge on Blood Pressure

	All	BP Not at Target
n	176	13
Systolic (pre/post)	120.4 / 119.1	148.8 / 139.5
Diastolic (pre/post)	78.9 / 77.5	92.1 / 84.8

Impact of Physical Activity Challenge on Depression

	All	Depression (Mild to Moderate)
n	156	14
CES-D Before	6.48	21.5
CES-D After	5.06	12.0
Change	-22%	-44%

CES-D = Centre for Epidemiologic Studies Depression Scale

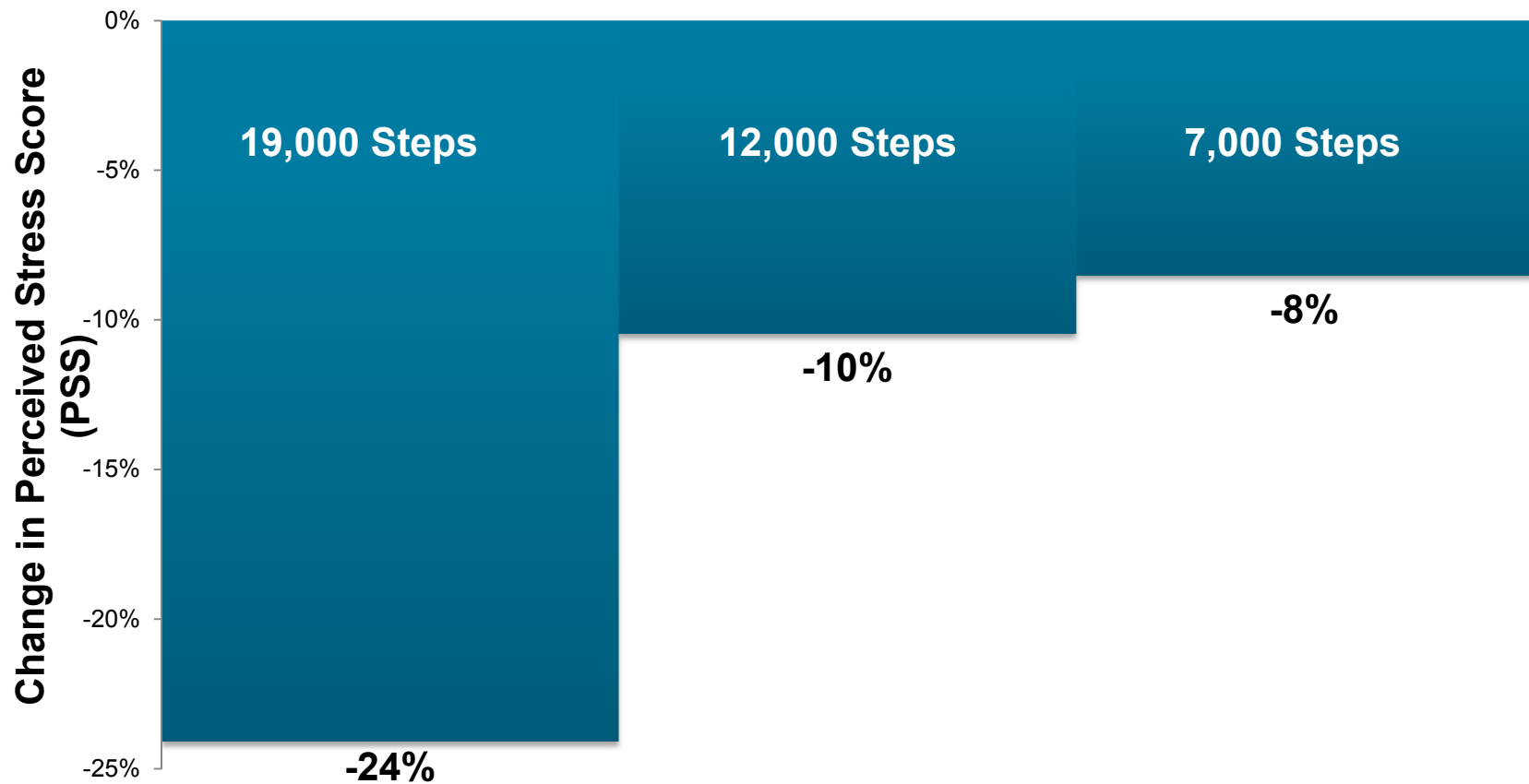
Impact of Physical Activity Challenge on Stress

	All	Moderate Stress (PSS = 13-20)	High Stress (PSS ≥ 13-20)
n	167	84	17
PSS Before	13.50	15.85	23.41
PSS After	10.93	12.62	15.76
Change	-19%	-20%	-33%

PSS = Perceived Stress Score

Impact of Physical Activity Challenge on Stress Among Merck Employees: More Exercise = Greater Reduction in Stress

Average Daily Steps (Tertiles)

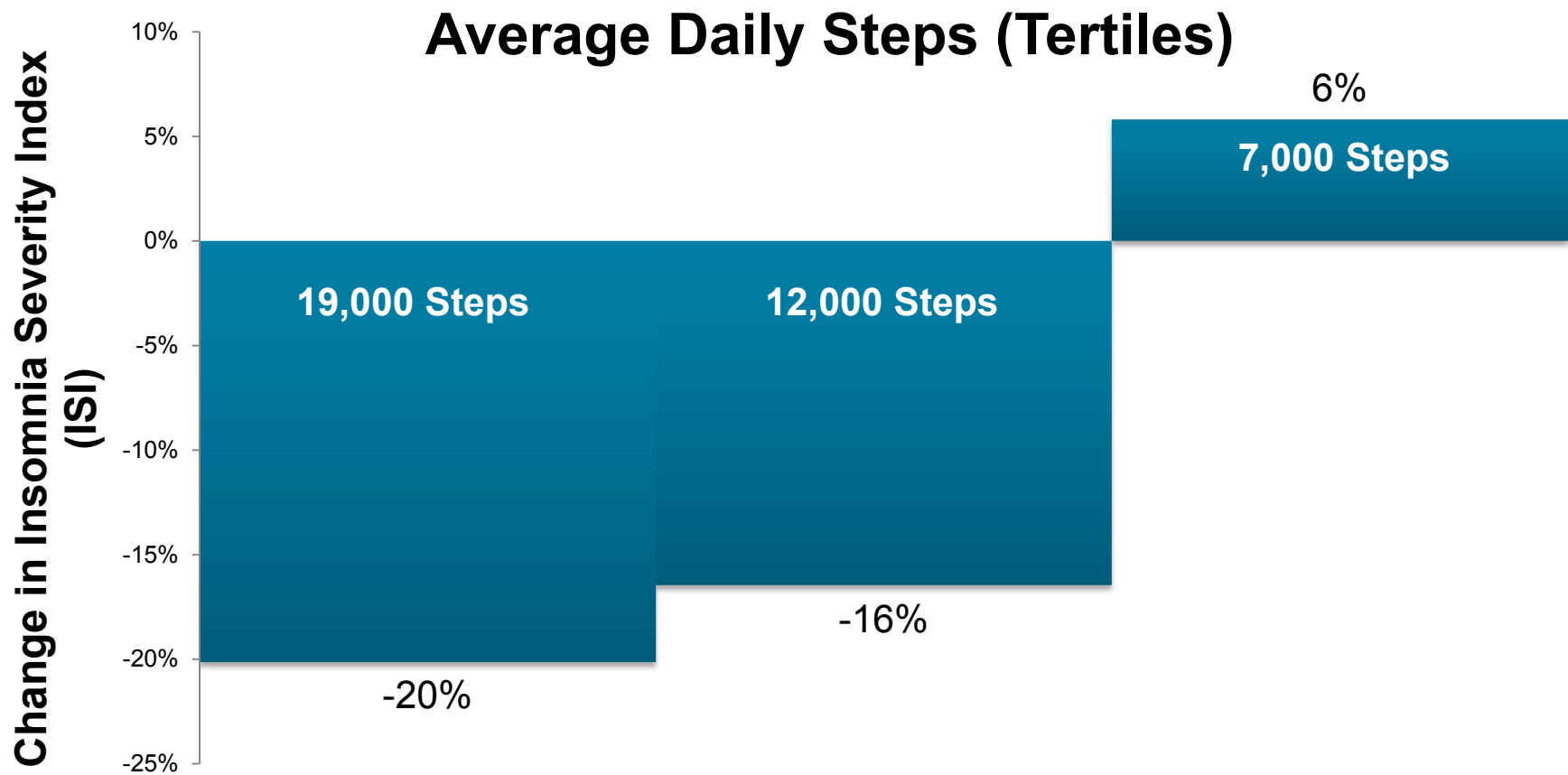


Impact of Physical Activity Challenge on Sleep

	All	Light Problems (ISI = 8-14)	Moderate-to-High Problems (ISI ≥ 15)
n	164	50	9
ISI Before	6.23	10.40	17.33
ISI After	4.74	7.40	11.78
Change	-24%	-29%	-32%

ISI = Insomnia Severity Index

Impact of Physical Activity Challenge on Sleep Quality Among Merck Employees: More Exercise = Greater Reduction In Insomnia



Key Points from Focus Groups

- **The launching of the program was well accepted by employees and is perceived as shifting corporate culture, attitudes, and practices in a way that promotes employee health and wellness.**

“I’m okay to go for a walk to run, to go at the gym, anytime during the day and this is perceived as being positive.”

- **The Physical Activity Challenge was successful in increasing awareness and the activity level of participating employees.**
- **Features including the biometrics, pedometer, on-line tracking and access to a wellness consultant facilitated initiation and engagement in the challenge.**

“The whole thing took on a life of its own and people were continually challenging each other back and forth.”

What's next?

- ✓ Healthy eating/weight challenge (just completed)
- ✓ Group weight loss program (May/June 2 groups)
- ✓ Stress management program (Sept/Nov)
- ✓ Re-assessment of health risks (Sept)
- ✓ Including spouses/families
- ✓ Long-term health impact
- ✓ Long-term financial impact

Evidence Supporting the Effectiveness of the Merck Live It Program

- ✓ **High participation rates**
- ✓ **High completion rates**
- ✓ **At baseline, Merck employees who follow a healthy lifestyle enjoy better physical and mental health**
- ✓ **Employees who complete health challenges improve their physical and mental health**
- ✓ **Strong dose response: The more employees participate the more their metrics improve**