



# Health & Productivity Union Pacific Railroad

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**Global Symposium Geneve  
Switzerland**

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**Union Pacific Railroad**

# Understanding Issues facing work environment and health status

# Turn of the Century

- Average Annual wage = \$430

Today: Nice kitchen refrigerator or 2 full time employees.

# Turn of the Century

Entire U.S. payroll (1900) = \$9 Billion

- We now spend twice as much on tobacco
- 10 times on Lawyers
- 20 times on Advertising

# Turn of the Century

## Jacob (1901-??)

- ★ Born - first wireless communications signal was sent across the Atlantic
- ★ 7 years old - First model T introduced
- ★ 12 years old - Federal Income Tax created
- ★ 20 years old - First radio broadcast
- ★ 40 years old - Television introduces
- ★ 63 years old - Before Surgeon General warned cigarettes are harmful.

# Information Management

There was more information produced between 1965 and 1995 than in the entire periods from 3000 BC to 1965.

# Information Management

At present, the worlds information is doubling every five years.

# Information Management

“Information Waste Management  
companies have experienced  
500% growth since 1990”

# Transition Era

- According to Michael Mazaar - Author and Futurist:

“Changes we are going to see over the next 20 years will seem pale in comparison”

# Transition Era

“Every few hundred years in western civilization a sharp transformation appears. Within a short decade society rearranges itself”

Peter Drucker

# Transition Era

“In a transition era - everything may be different institutions, education, politics, business and health care.”

# Transition Era

## Signs of a Transition:

- 1870 half of Americans worked on farms
- 2001 - # of people in prison and on parole nearly equal our number number of agricultural workers.

# Transition Era

- Most advanced computers are 100 times faster than when started.

# Transition Era

If the auto industry made similar advances a car would cost a penny and travel at the speed of sound.

# Knowledge Era

- Moving from an Industrial era to a Knowledge Era.

# Knowledge Era

## Components of a Knowledge Era:

- The acquisition
- Dissemination
- Use
- Storage
- Manipulation
- **of Information**

# Implications of a Knowledge Era

1. People become extraordinarily important. Talented, creative, innovative and healthy people who can thrive in this new era are going to make/break companies.
2. Knowledge era will change balance between employees and employers.
3. All employees will need requisite skills or will fall behind

# These Days Employers are Asking for. . . .

Better

Cheaper

Faster

Smarter. . . . . Employees

These days employees are  
becoming:

Older

Fatter

Sicker

Slower

“The significant problems we face cannot be solved at the same level of thinking we were at when we created them”

Albert Einstein

If knowledge era transition is not enough  
persuasion for addressing employee  
health lets look at:



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*"I was going to read all the great books but  
decided first to drink all the great wines."*

Harvard Business Review, May 2001 Vol. 79, No. 5

# Worksite Health Promotion

Needs to answer four Questions:

- Do poor health habits & modifiable risk factors impose financial burden
- Do improvements in risk factors result in reduction in costs?
- Can risk factors be modified and sustained over time?
- Do the benefits of modifying risk factors outweigh costs?

# (Some) Answers to Date:

- Literature Reviews - Pelletier
- Proof Positive - Chapman
- Meta-Analyses by Risk Factor - AJHP - O'Donnell
- HERO Article - Goetzel, et al.
- AJHP Financial Impact - Goetzel.

# Pelletier Reviews

- Four Updates Conducted
  - Prior to 1990
  - 1991-1993
  - 1993-1995
  - 1995-1998

## To Paraphrase Pelletier's Conclusion in 1995

“It is important to recognize that the 51 studies cited in the two earlier articles, the 26 studies cited in this article and a vast number of rigorous, randomized clinical trials conducted outside the worksite focus of this article, clearly demonstrate a substantial body of research demonstrating that health promotion and disease prevention are both health and cost-effective.”

“The methodology and the health impacts of our programs are probably of sufficient quality to satisfy all but the most conservative business-decision makers”.

Michael O'Donnell, Ph.D.

The Art of Health Promotion, vol1 #3, 1997

AMERICAN JOURNAL *of*

# *Health Promotion*

Volume 15, Number 5  
May/June 2001

Special Issue

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*The Financial Impact of Health Promotion*

Ron Goetzel, PhD

# Health Promotion Evaluation

The Effects of Disease Prevention and Health Promotion on workplace Productivity: A Literature Review.

American Journal of Health Promotion

Jan/Feb. 2001, Vol.15 (3)

Riedel, et. Al

146 references

**Table 3. (Abbreviated)**

**Summary and Comparison of the relative magnitude of the problems associated with 14 DP/HP areas, including incidence/Prevalence, direct medical costs, and performance loss.**

<b>Topic</b>	<b>Prevalence</b>	<b>Medical Costs</b>	<b>Performance Loss</b>
<b>High BP</b>	<b>High</b>	<b>High</b>	<b>Potentially High</b>
<b>Depression</b>	<b>Moderate</b>	<b>High</b>	<b>Moderate-High</b>
<b>Exercise (Back Pain)</b>	<b>Very High</b>	<b>Potentially Very High</b>	<b>High</b>
<b>Smoking Cessation</b>	<b>High</b>	<b>High</b>	<b>High</b>
<b>Adult Vaccine, influenza</b>	<b>Very High</b>	<b>Low-moderate</b>	<b>Very High</b>
<b>Stress Management</b>	<b>High</b>	<b>Very High</b>	<b>Very High</b>
<b>Minor Illnesses</b>	<b>Very high</b>	<b>Very High</b>	<b>Moderate</b>



## Fast Facts in The USA

<i>Miles of Track</i>	<b>38,654</b>
<i>Employees</i>	<b>51,905</b>
<i>Annual Payroll</i>	<b>\$2.8 billion</b>
<i>Purchases Made</i>	<b>\$4.1 billion</b>
<i>Locomotives Owned</i>	<b>6,847</b>
<i>Freight Cars Owned or Leased</i>	<b>157,090</b>

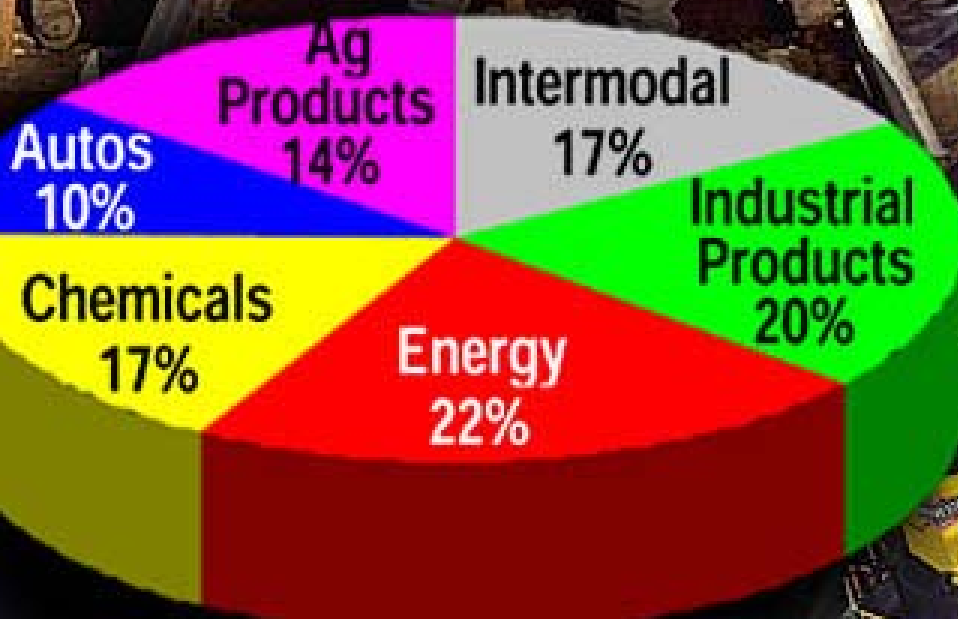


One of the largest railroads in North America

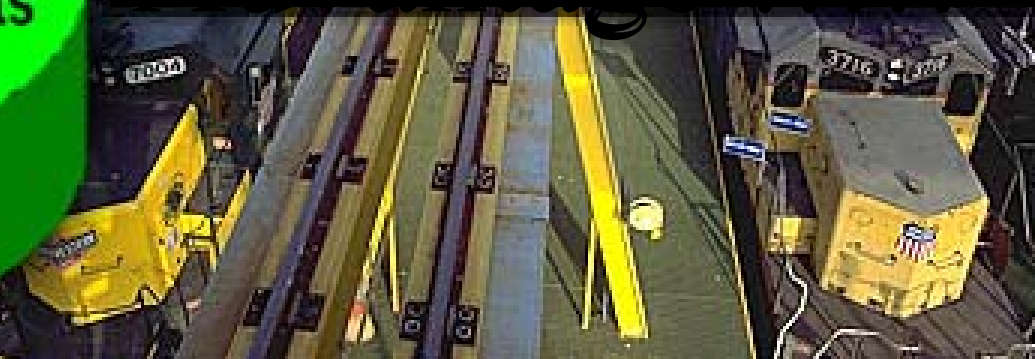
Operating in the western two-thirds of the United States

The system serves 23 states

Freight Transportation



**Competitive Advantage !!!!!**



# UPRR Experience

- Started formal program in 1987
- Published over 20 article describing various aspects of program development, delivery and evaluation.
- Since 1990 Recipient of 9 National Awards including:
  - `Platinum Well Workplace Award (2001)
  - IHPM (2001
  - C. Everett Koop National Health Award (2001)

# 2001 BFDs Identified at UPRR

- Personal Injuries
- Fuel Costs
- Training
- Car Utilization
- Mexico Business
- Protection Guarantee
- Derailment Prevention
- **Health & Welfare**

# Ongoing/Previous Program 1990

- System Health Facilities
- Medical Self-Care
- Health Track

# System Health Facilities

- Company Sponsored Exercise Facilities 450 located throughout 23 States
- Most-Contracts with local Vendors
- Pay for usage experience-no individual memberships
- Medical and Liability form replaced with Par-Q

# Exercise

“CAUTION - Cape does not enable  
user to fly”



- Batman Costume

# Medical Self-care

- Program and results published in Worksite Health Premiere Issue Fall 1994
- Benefit:Cost Ratio \$2.77:1
- Part of Health Track Program

# Health Track

High risk identification/risk reduction program

10 risk areas:

- Obesity
- Asthma
- Blood Pressure
- Inactivity
- Stress
- Fatigue
- Diabetes
- Cholesterol
- Smoking
- Depression

# Newer Programs & Future Direction

- Menu
- Know Your Numbers
- Alertness Management Program Integration
- B.O.B. / R.O.N.

# Menu

- Change in our approach
- Restaurant example
- Not if, but WHAT?
- Employees can participate in multiple programs varying in intensity & time commitment.

Health Becomes...  
**peak productivity**

Physical Well-Being  
Emotional Well-Being  
Quality of Life



**Regional Health Coordinators  
and  
Occupational Health Nurses**

**Health Monitor  
Questionnaire  
(Health Risk  
Appraisal -HRA)**

**Personal Health Risk Reduction**

**Your Health  
Coach  
1-888-767-0169**

**24 Hour Action Line  
1-800-657-3367**

**System-Wide  
Smoking Cessation  
Program  
(B.O.B.)**

**Know Your  
Numbers  
Programs**

**Weight Control  
Pilot**

**SHIP  
Program**

**Mentor  
Training**



## MENU OF OPTIONS

### System-wide Smoking Cessation Program 2001

This program would provide one-on-one counseling, pharmacological assistance (Zyban), and educational materials to those with the desire to quit smoking.

### Short Behavior Change Survey

A quick survey that allows you to choose a behavior you wish to change and appropriate support for doing it.

### E-mail version of Health Monitor Questionnaire

You may receive a Health Monitor Questionnaire via email instead of a paper version through the mail!

### System Health Facilities Membership

Become a member of our System Health Facilities! Over 450 participating clubs located across the System for UP employees to use free of charge!

### Internet Behavior Change Program

HealthMedia.com is an interactive website featuring tailored messaging that can assist you in making a positive behavior change

### Online Health Monitor

Fill out a Health Monitor Questionnaire online.  
Log onto [www.Summexhealthmonitor.com](http://www.Summexhealthmonitor.com)

### Mentor program

Become a mentor and learn how to support others in making a behavior change.

### Your Health Coach

Call 1-888-767-0169 to talk with a qualified counselor about an unhealthy behavior that you are ready to change

### SHIP II (System Health Facilities Injury Protocol)

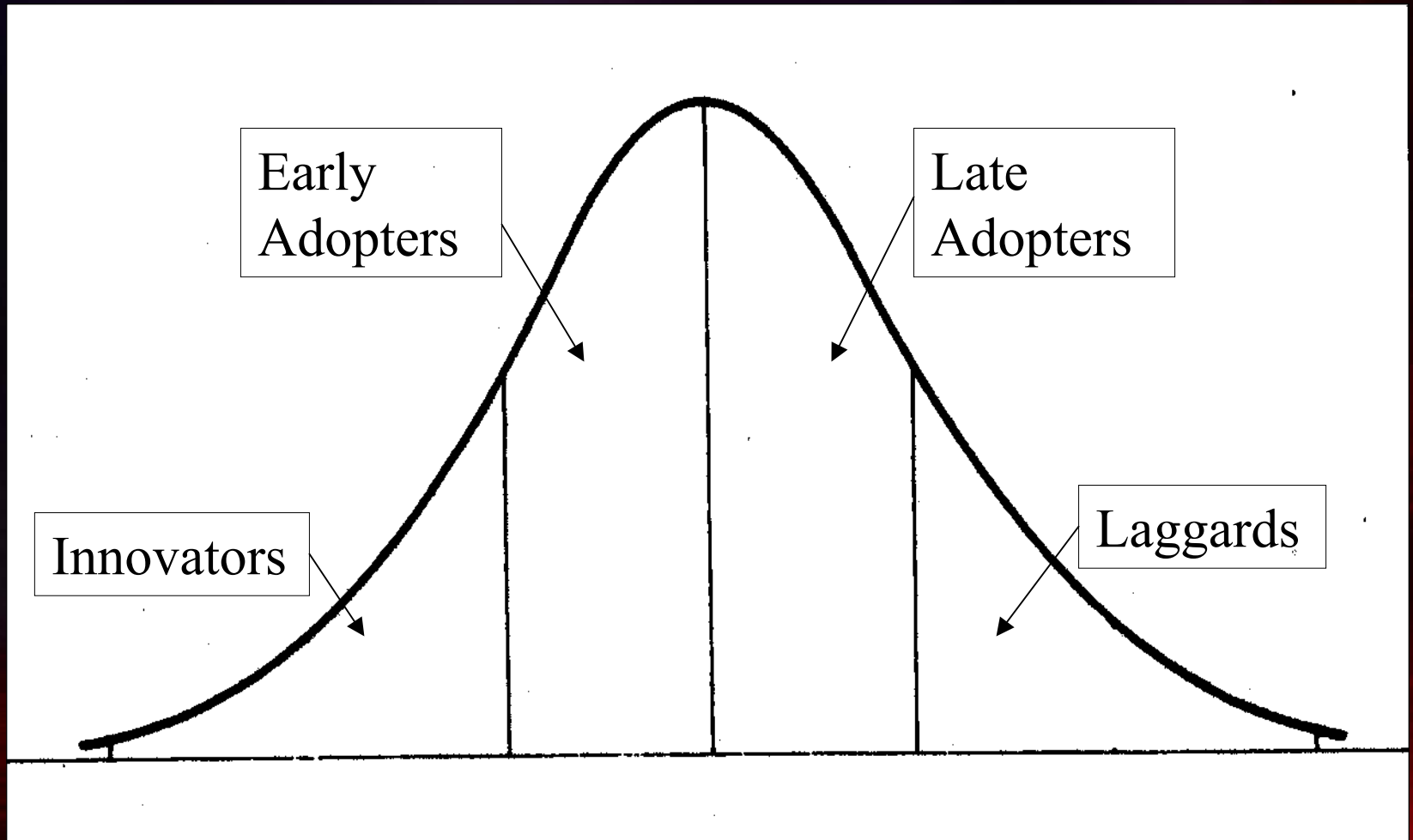
The SHIP II program is designed to help those employees who may be at-risk for injury because of low fitness levels. Some injuries may be prevented by improved fitness levels. SHIP II is designed to help improve overall fitness to possibly avoid an injury.



# Menu

- Benefits of Menu Approach
  - More options
  - Greater participation
  - Able to track progress
  - Possibly able to get HMQ filled out later.
  - Increase participation in HMQ new participants.

# Marketing Approach



# Know Your Numbers

- Broad-based Education Initiative
- Health related quantitative values all employees Should know
  - 30 Exercise
  - 24 BMI
  - 80+ Health Monitor Index
  - 8 Sleep requirements

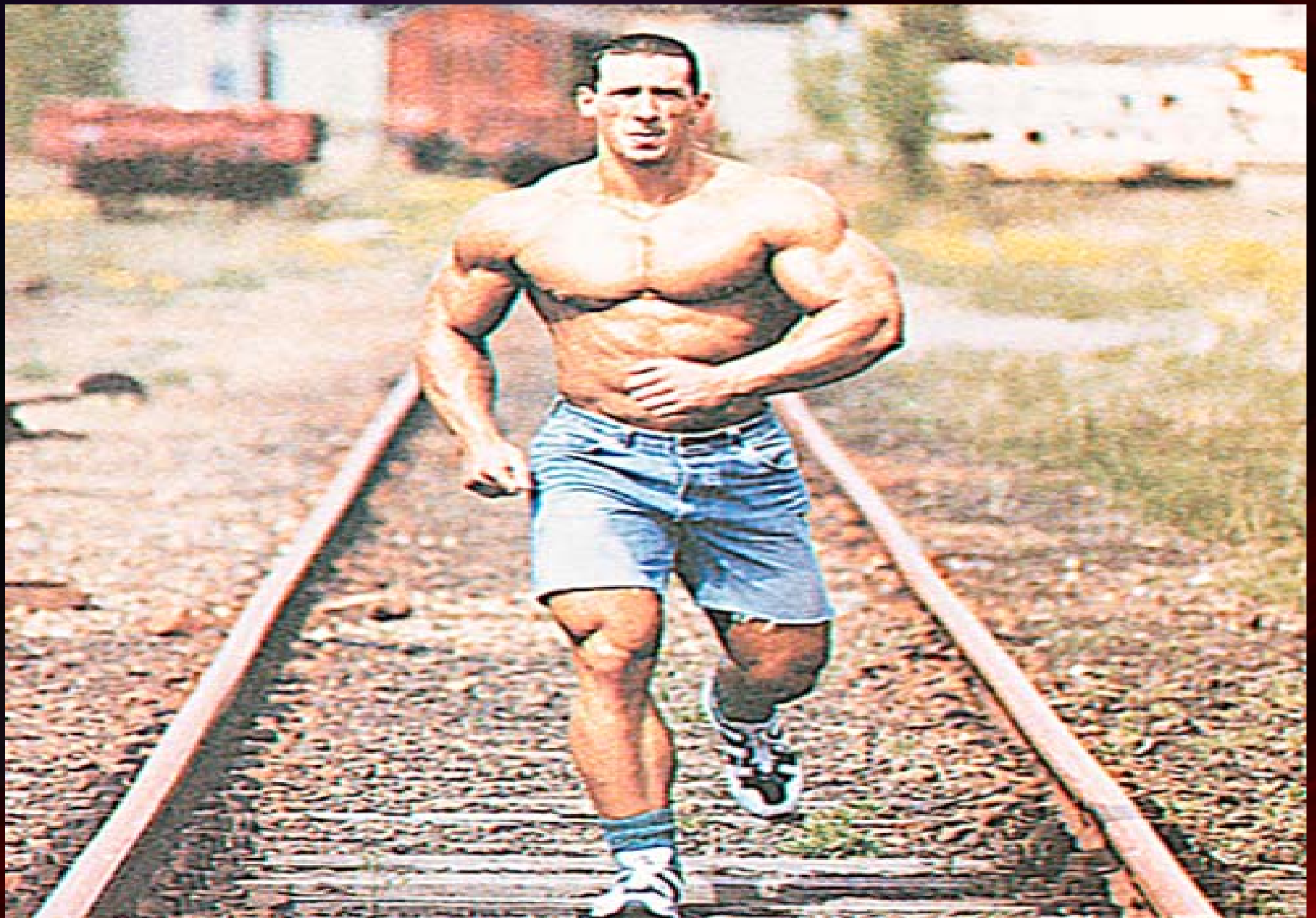
# Alertness Management Integration

- Education
- Strategies
  - Lodging
  - Napping
- Scheduling
- Cultural Changes



**Regenarize** possesses the same properties with more bang for the buck. Snooze away and grow lean and hard. Stacks well with any of S.A.N. cutting edge supplements or works great by itself.  
*32. fl. oz.*





**While it make make you hard. . .it *may* also make you do stupid things!**

# Menu Item

B.O.B. (Butt Out & Breathe)

R.O.N. Reduce Overweight Now

- 4 components:
  - Readiness review
  - Pharmacological assistance
  - Behavior Change support materials
  - Periodic assessments

# 2001 Koop Application

★ Cost Scenario study - **Projected costs of Four Different Program Scenarios of the Effectiveness of Health Promotion, in Constant 1998 Dollars.** AJHP Sept/Oct 2000, Vol. 15, No.1

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Current Costs (1998, in millions)	381.9	381.9	381.9	381.9
Projected Costs (2008, in millions)	99.6	88.5	78.9	22.2
Increased Costs, 2008-1998				
Millions	481.5	470.4	460.8	404.1
Percentage	26.1%	23.2%	20.7%	5.8%
Difference from Scenario 1				
Millions	\$0.0	\$11.1	\$20.7	\$77.4
Percentage	0.0%	2.9%	5.4%	20.3%

# Relationship between Health Risks, Health Care Costs and Reportable Injuries

- Most significant predictors of injury besides age and tenure are:
  - health status
  - tobacco use
  - stress
  - weight
- Weight was significant for the 45+ years age group

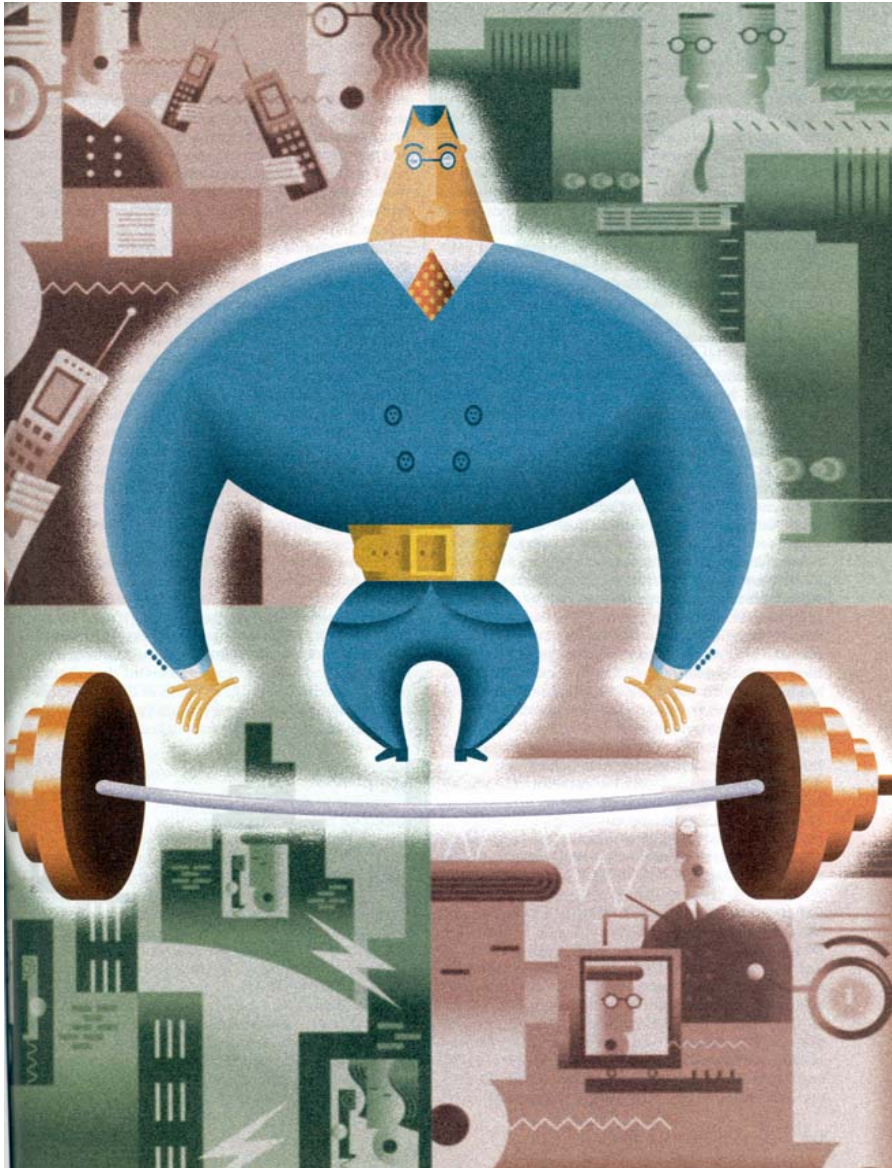
# A Competitive Advantage

Understanding our health costs and success in developing and implementing interventions can give us an a competitive advantage

- UPRR Health Costs can be lower than competitors
- UPRR Employees are more productive



# The Making of a Corporate Athlete



By Jim Loehr  
and  
Tony Schwartz

Harvard Business Review  
January 2001



CLOSE TO HOME JOHN McPHERSON



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The growing interest in health and fitness has had an effect on even the longest-standing traditions

**Facing a tough audience?**



# Implications of a Knowledge Era

1. People become extraordinarily important.  
Talented, creative, innovative and healthy people who can thrive in this new era are going to make/break companies.
2. Knowledge era will change balance between employees and employers.
3. All employees will need requisite skills or will fall behind

**Never underestimate the power of people!**

