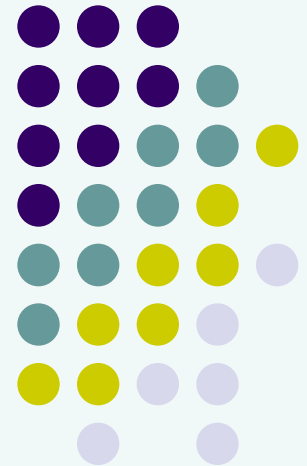


Initiating & Sustaining Healthy Behaviors – A Primer



Michael D Parkinson MD, MPH, FACPM
Immediate Past President



American College of Preventive Medicine



- National medical specialty society of public health and preventive medicine physicians (1954)
- 2,300 physicians: primary commitment, training and interest in disease prevention, health promotion and systems-based care improvement
- Public health & clinical perspective and training
- Major role in evidence-based prevention and application of prevention principles to clinical care, quality & cost
- www.ACPM.org

Where & How We Spend \$2.5 Trillion . .



"Give it to me straight, Doc. How long do I have to ignore your advice?"

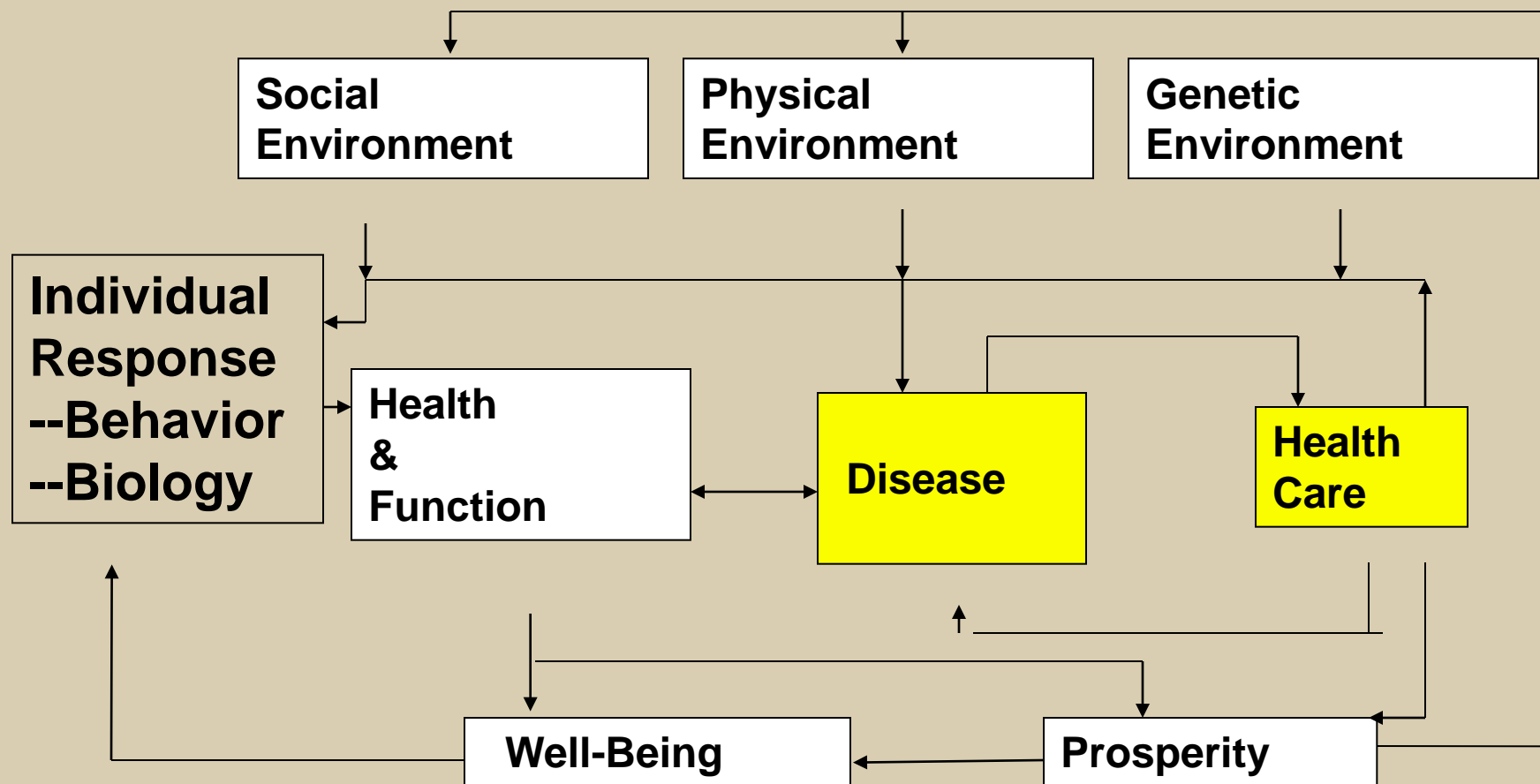
Mediterranean Diet, Nonsmoker, Daily Activity & No or Moderate Alcohol Use



<u>Disease</u>	<u>Reduction Compared to US</u>	<u>Comment</u>
Heart Disease	64%* - 83%**	80% due to modifiable risk factors
Cancer	60%*	Approximates NCI estimates
Diabetes	91% **	No Type II Epidemic
All-cause Mortality	50%*	25 year Okinawa Program Similar Findings

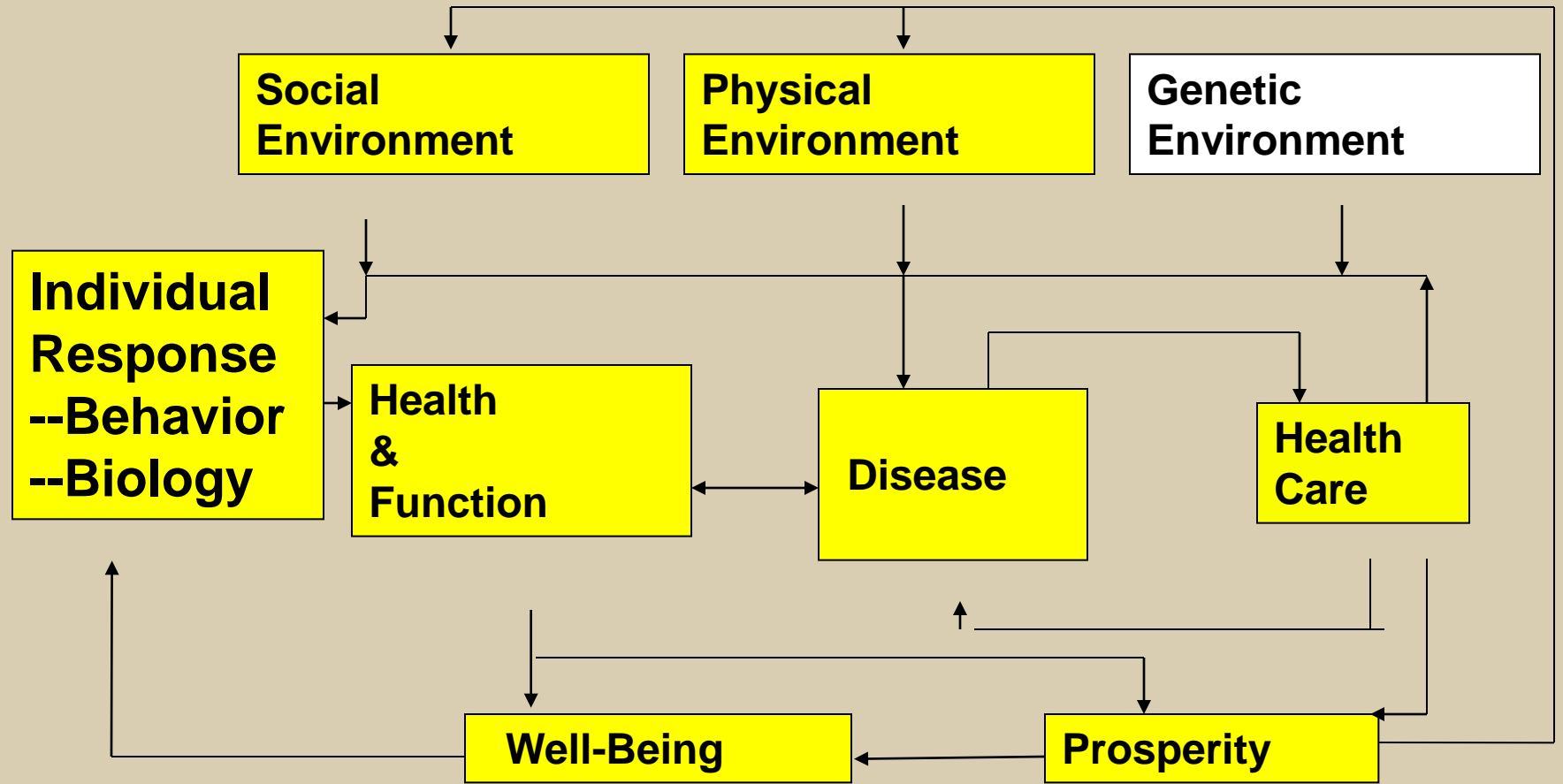
* Knooks et al and **Rimm, Stampfer, JAMA 2004;292:1433-1439

The True Determinants of “Health” and “Disease” Where & How We Live, Learn, Work and Play



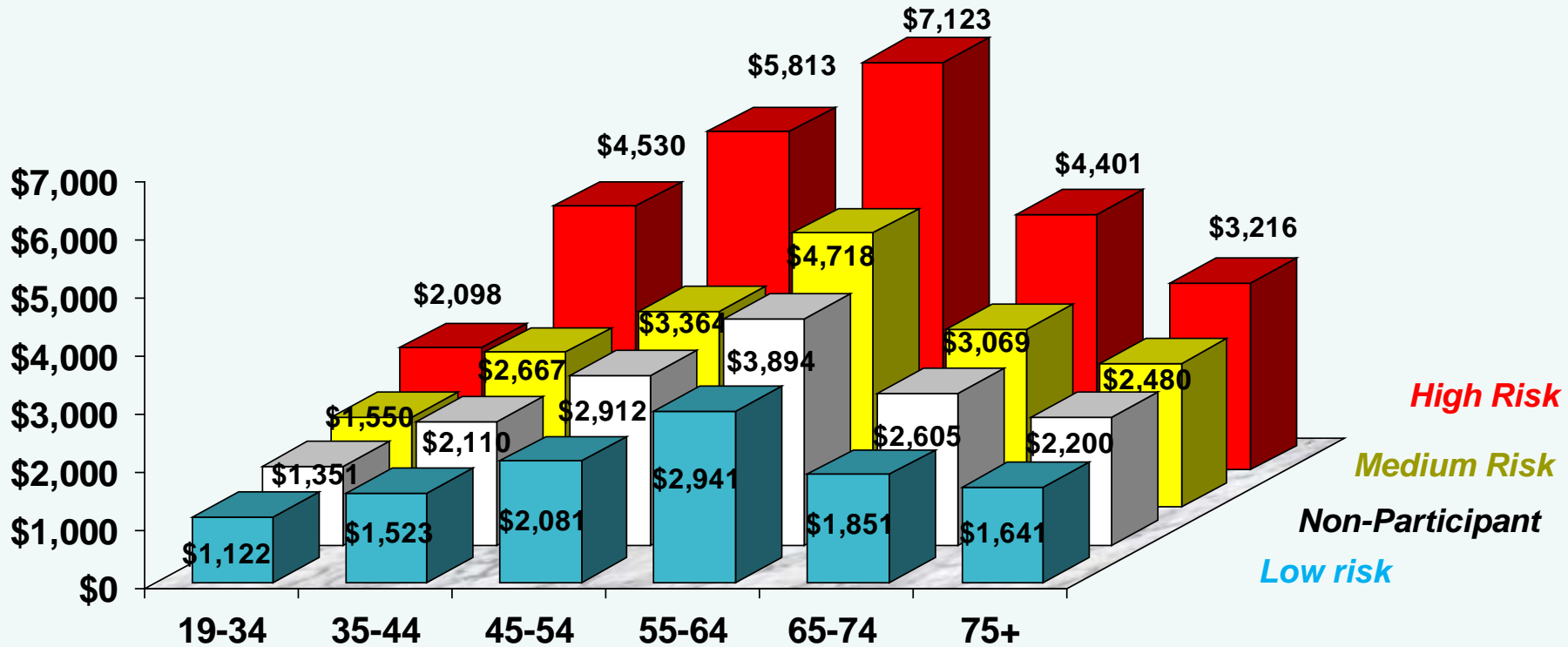
Evans, R. G., Barer, M. L., & Marmor, T. R. (1994)
Why Are Some People Healthy and Others Not?. New York: Aldine De Gruyter

The True Determinants of "Health" and "Disease": Community, Home, School & Workplace Cultures



Evans, R. G., Barer, M. L., & Marmor, T. R. (1994)
Why Are Some People Healthy and Others Not?. New York: Aldine De Gruyter

Behaviors Drive Medical, Disability, Absenteeism, Worker's Comp, & Total Employer Costs



Edington. Am J Health Promotion 15(5):341-349, 2001

Risk Cluster Analysis



Health Measure	Cluster 1: Risk taking (N=6688)	Cluster 2: Low Risk (N=3164)	Cluster 3: Biometrics (N=3100)	Cluster 4: Psych (N=3927)
Smoking	31%	0%	16%	27%
Alcohol	10%	0%	3%	5%
Physical activity	28%	0 %	19%	26%
Safety belt usage	36%	0 %	22%	31%
Body mass index	27%	25 %	38%	27%
Systolic blood pressure	9%	0 %	81%	23%
Diastolic blood pressure	5%	0 %	61%	20%
Cholesterol	19%	19 %	27%	22%
HDL cholesterol	34%	10 %	33%	24%
Self-perceived health	13%	0 %	9%	28%
Life satisfaction	4%	0 %	2%	73%
Stress	9%	0 %	2%	76%
Illness days	21%	0 %	12%	26%
Overall Risks				
Low risk (0-2 risks)	50.2%	97.6%	26.5%	18.9%
Medium risk (3-4 risks)	35.7%	2.4%	48.9%	35.9%
High risk (5+ risks)	14.1%	0	24.7%	45.2%
Average Number of risks	2.8	0.6	3.6	4.4

Top 10 Prescription Drug Categories* Health Behavior & “Stress-related”?



- Cholesterol lowering
- Anti-ulcer
- Antidepressants
- High blood pressure
- Diabetic drugs
- Asthmatic drugs
- Anti-inflammatory
- Osteoporosis and related drugs
- Pain medications and narcotics
- Anti-seizure

* Caremark 2006 TrendsRx Report

Top 20 Depression-, Stress- and Sleep-related Prescription Drugs*

LEXAPRO	TRAZODONE HCL
ZOLOFT	ADDERALL XR
FLUOXETINE HCL	CONCERTA
ALPRAZOLAM	AMITRIPTYLINE HCL
EFFEXOR XR	CYMBALTA
WELLBUTRIN XL	BUPROPION HCL
AMBIEN	DIAZEPAM
PAROXETINE HCL	AMBIEN CR
CITALOPRAM HBR	LUNESTA
LORAZEPAM	SERTRALINE HCL

* Lumenos plan 2006 data

Rockwell Had It Right “Medical Home” Re-visited



“McLipitor Syndrome”*

"I call it the McLipitor Syndrome. Patients feel they can eat whatever they want as long as they take a statin drug to lower cholesterol. Because of time constraints, physicians may spend little time counseling lifestyle change, which can work as well as or better than the best drugs for heart disease, obesity, diabetes and high blood pressure."

*Mark Goldstein, MD, NY Times Magazine Letter to Editor Feb 11, 2007

Emerging MD Consensus? “Conservative Prescribing”



- Think beyond drugs
 - Seek nondrug alternatives as first not last resort
 - Treat underlying causes, not symptoms
 - Look for prevention opportunities not just treatment
- More strategic prescribing
- Heightened adverse effects vigilance
- Caution and skepticism regarding new drugs
- Shared agenda with patients
- Weigh long-term, broader impacts

*Schiff, Galanter, “Promoting More Conservative Prescribing”, JAMA 2009 301:865-7.

MD Behavior Change Competencies: A Blue Ribbon Consensus Panel



- Growing evidence of effectiveness that lifestyle and behavior change is effective for both prevention and *primary treatment* of chronic disease – and docs most trusted in system!
- Representatives of major primary care (ACP, AAFP, AAP) and related groups convened by ACPM
- Physician competencies for prescribing lifestyle medicine* - initiation and sustainment

*Lianov L & Johnson M; JAMA 2010;304(2):202-203

What Works to Improve Behaviors



- Create sense of self-efficacy – “Am I capable of changing . . anything??!”
 - “What CAN I do that’s reasonable and worthwhile to make my life a “little bit” healthier? Are you confident . . And competent?”
- *Listen* . . choose 1 behavior & reasonable goal
- Know “what and how to do” – in supportive environment
- Incentives to start . . . And recurrent ones to maintain
 - From economic to social/environmental/cultural *expectation*
 - “*We always do that here . . That’s the “ABC” family, school, work way*”
- Communicate the goal & commitment to self & others
- Create support network at home, work, among friends either “real” or “virtual” to praise, cajole, not disappoint!
- And the next goal . .now it’s the “way I live”!

Or Simply Put . . . Behavior Change Equals* **



Motivation x Ability x “Hot Trigger”

*B.J. Fogg, PhD, Stanford

**Or . . . “cognitive behavioral therapy and motivational interviewing”

Behavior and Social Interactions

“Genes not only spread, but behavior spreads, and many behaviors have **big effects** on your health.”

- *Nicholas A. Christakis, MD*



“When people are free to do as they please, they usually imitate **each other.**”

- *Eric Hoffer*

Social Interactions = Connections

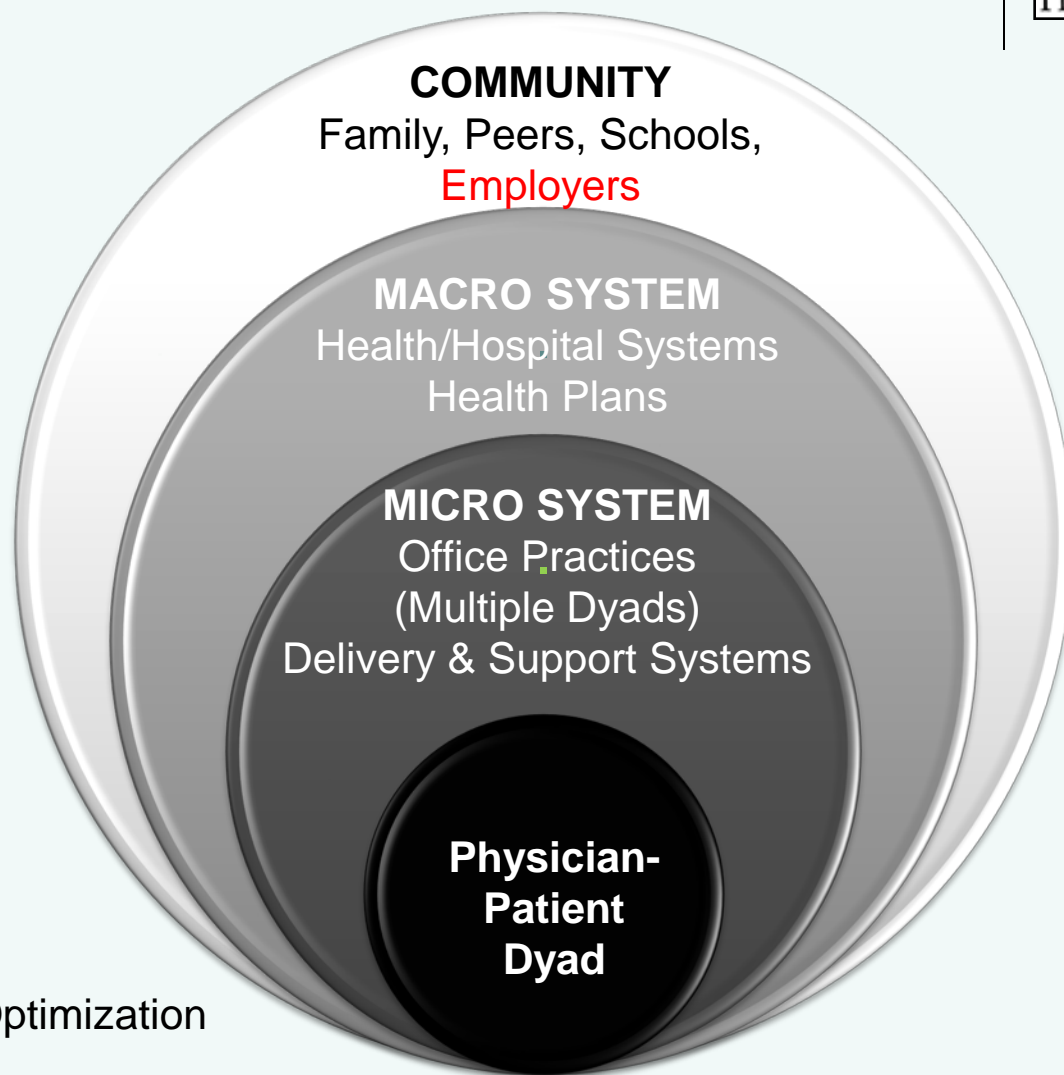


We spend time with people who are “like us,” and this has a tremendous effect on our behavior.

- If a co-worker in the office quits smoking, it **increases** the likelihood that another co-worker will quite by **34%**
- If a close friend is obese, your chances of becoming obese **increase** by **57%**

The human brain does “mirroring” and “imitating”

Prevention Systems Cascade*



*ACPM Aspirin Optimization
Project, 2007

Tool: Food as Medicine - HyVee Leads



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Prominent Physician Organization Endorses NuVal™ Nutritional Scoring System

BRAINTREE, MA (January 19, 2010) - The American College of Preventive Medicine (ACPM), a leading organization of some of the country's top physicians committed to preventing disease and promoting health, has officially endorsed the NuVal Nutritional Scoring System as an easy and effective way to help consumers learn about the foods they buy.

NuVal gives all foods a score from 1 to 100; the higher the score, the higher the food's overall nutrition. All NuVal scores are provided on the supermarket shelf, making it easy for consumers to compare the overall nutrition of the foods they buy at a glance.

"ACPM supports evidence-based and meaningful nutrition labeling that can guide consumers to healthier eating," said ACPM President Mark B. Johnson, MD, MPH, FACPM. "ACPM has reviewed the NuVal nutritional rating system and found that it meets the ACPM criteria for support."

Johnson noted that with the rising rates of obesity and diabetes, NuVal could be helpful in guiding people to the most nutritious food in a supermarket. "We believe that arming consumers with easy-to-understand, at-a-glance, information about the nutritional quality of the food they purchase, at the point of purchase, can have a significant impact on changing their eating behaviors," Johnson said. Johnson added that ACPM received no financial compensation for its endorsement, which was purely merit based.

This marks the first time an independent medical/public health organization with national stature has endorsed a non-federal nutrition guidance system, said Dr. David Katz, director and co-founder of the Yale Prevention Research Center and one of the principal inventors behind the NuVal system.

"When we created NuVal, our primary goal was to address the public health crisis related to food choices, including obesity and diabetes, with a simple solution that was accessible to everyone." Dr. Katz

Closing Wisdom!



- Twain: “Quitting smoking is easy. I’ve done it a hundred times.”
- Edington: “Change the environment – and behavior follows”
- Medical education
 - “See one, do one, teach one”
- Grade school “champions”
 - Reward desired behaviors – who gets the “star” on the forehead today? Why? And who else sees it?
- Align 3 “I’s”: Incentives, Infrastructure & Info to make “right thing to do the easy thing to do!”

Backups

National County Health Rankings – Starting Point?



- National and state ranking of health outcomes and factors
 - Methodology originated in Wisconsin by David Kindig, MD and Center for Population Health
 - RWJF supported national analysis and dissemination
 - www.countyhealthrankings.org
- Logical place for leading health systems to understand and address determinants of health – and drivers of care/costs

Snapshot 2010: Linn, IA Health Outcomes



	Linn County	Error Margin	Target Value*	Iowa	Rank (of 99)
Health Outcomes					35
Mortality					36
Premature death	5,670	5,312-6,028	4,566	5,943	
Morbidity					49
Poor or fair health	11%	10-13%	8%	12%	
Poor physical health days	3.0	2.6-3.3	1.9	2.8	
Poor mental health days	2.9	2.5-3.2	1.6	2.7	
Low birthweight	6.4%	6.0-6.7%	5.4%	6.7%	

Snapshot 2010: Linn, IA

Health Factors



Health Factors					33
Health Behaviors					58
Adult smoking	18%	16-20%	14%	21%	
Adult obesity	29%	26-32%	26%	28%	
Binge drinking	21%	19-24%	14%	20%	
Motor vehicle crash death rate	10	9-12	12	15	
Chlamydia rate	351		74	290	
Teen birth rate	30	29-32	19	32	

Snapshot 2010: Linn, IA

Clinical Care



Clinical Care

4

<u>Uninsured adults</u>	9%	8-11%	9%	10%
<u>Primary care provider rate</u>	116		119	100
<u>Preventable hospital stays</u>	56	54-58	51	69
<u>Diabetic screening</u>	88%	86-90%	89%	85%
<u>Hospice use</u>	33%	30-37%	44%	34%

Snapshot 2010: Linn, IA

Social & Economic Factors

Social & Economic Factors

31

<u>High school graduation</u>	85%		100%	87%
<u>College degrees</u>	28%	27-28%	21%	21%
<u>Unemployment</u>	4%	4-4%	3%	4%
<u>Children in poverty</u>	12%	10-13%	9%	14%
<u>Income inequality</u>	41		37	42
<u>Inadequate social support</u>	16%	14-19%	10%	16%
<u>Single-parent households</u>	8%	8-8%	5%	8%
<u>Homicide rate</u>	1	1-2	0	2

Snapshot 2010: Linn, IA

Physical Environment

Physical Environment

95

Air
pollution-
particulate 7
matter
days

0 2

Air
pollution-
ozone 1
days

0 0

Access to
healthy 34%
foods

50% 31%

Liquor
store 0.3
density

0.4