

# Bridging Domains in Efforts to Reduce Disparities in Health and Health Care

Shiriki K. Kumanyika, PhD, MPH

Professor of Epidemiology in Biostatistics and Epidemiology and Pediatrics

Associate Dean for Health Promotion & Disease Prevention

Director, Graduate Program in Public Health Studies

*University of Pennsylvania School of Medicine*



**CCEB**

# Objectives

- ❑ Setting the stage
- ❑ Potential advantages and disadvantages of disease-specific vs a population health focus
- ❑ Case example: integrating diet-related disease and population health concerns

# Race and Ethnic Categories, 2000

## □ “Race”

- black/African American
- American Indian, Alaska Native,
- Asian [Chinese, Japanese, Filipino, Asian Indian, Korean, Vietnamese, Other Asian]
- Native Hawaiian
- Pacific Islander [Guamanian or Chamorro, Samoan]
- Other (some other race)

## □ Hispanic ethnicity:

- Mexican, Mexican Americans, Chicano, Puerto Rican, Cuban, Other Spanish, Hispanic, Latino; not Spanish...

# Diversity Within and Among Minority Populations

- Ancestry
- Country of birth
- Years in U.S.
- Cultural practices and beliefs
- Region
- Neighborhood
- Childbearing
- Household composition
- Income and wealth
- Education
- Literacy
- Occupation
- Health care access
- Health care use
- Genetic/biological differences



Secretary of Health & Human Services:  
Margaret Heckler (1983 - 1985)

Released October 16, 1985

**Volume I:  
Executive Summary**

**Report of the  
Secretary's Task  
Force on**

**Black &  
Minority  
Health**

**Margaret M. Heckler,  
Secretary**

**U.S. Department of Health and  
Human Services**

- I. Executive Summary
- II. Crosscutting Issues in Minority Health
- III. Cancer
- IV. Cardiovascular and Cerebrovascular Disease
- V. Homicide, Suicide, and Unintentional Injuries
- VI. Infant Mortality and Low Birthweight
- VII. Chemical Dependency and Diabetes
- VIII. Hispanic Health Issues; Inventory of DHHS Programs; Survey of Non-Federal Community

# 60,000 “Excess Deaths”

- Difference between the number of deaths observed in the minority populations and the number that would have been expected if the minority population had the same age- and sex- specific death rates as the non-minority population

## Leading cause of death

**CARDIOVASCULAR  
DISEASE**

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**CANCERS**

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**HOMICIDE, SUICIDE, AND  
UNINTENTIONAL INJURIES**

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**DIABETES**

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**INFANT MORTALITY**

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**CIRRHOSIS OF LIVER**

## Modifiable risk factors

- Smoking
  - High blood pressure
  - High serum cholesterol
  - Obesity
- 

- Smoking
  - Alcohol
  - Diet
  - Environmental hazards
- 

- Alcohol and drug misuse
  - Handgun availability
- 

- **Obesity**
- 

- Low birth weight
  - Maternal smoking
  - Nutrition
  - Trimester of first care
  - Marital status, age
- 

- Alcohol

1985 Task Force

# 1985 Task Force Recommendations

- 1) Implement an outreach campaign, specifically designed for minority populations, to disseminate targeted health information, educational materials, and program strategies.
- 2) Increase patient education by developing materials and programs responsive to minority needs and by improving provider awareness of minority cultural and language needs.
- 3) Improve the access, delivery, and financing of health services to minority populations through increased efficiency and acceptability.

MMWR, 2/28/86 Vol 35(8);109-12



# Science Blog

Date: Saturday, February 21, 1998  
WHITE HOUSE FACT SHEET  
Contact: HHS Press Office (202) 690-6343

## **PRESIDENT CLINTON ANNOUNCES NEW RACIAL AND ETHNIC HEALTH DISPARITIES INITIATIVE**

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Today, President Clinton announced a new initiative that sets a national goal of eliminating by the year 2010, longstanding disparities in health status that affect racial and ethnic minority groups. The president announced that the Federal government will, for the first time, set high national health goals for all Americans, ending a practice of separate, lower goals for racial and ethnic minorities. To help reach these ambitious targets, the president also announced a five-step plan to mobilize the resources and expertise of the Federal government, the private sector, and local communities to eliminate disparities that for too long have been treated as intractable.

# 1998

A five-step plan that sets a national goal of eliminating health disparities in six areas by the year 2010:

- infant mortality
- cancer screening/management;
- cardiovascular disease;
- diabetes;
- HIV/AIDS rates;
- child and adult immunization levels

# THE N I H R E C O R D

May 2, 2000  
Vol. LII, No. 9

## C O N T E N T S

[Role of Nurse  
Practitioners  
Expands at NIH](#)

[Cogeneration Plant  
To  
Boost Fuel  
Efficiency,  
Cut Emissions](#)

[Kamini Mendis To  
Discuss Malaria  
Rollback Project](#)

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Screening for  
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for All NIH](#)

## Agency-Wide Action Plan Due by June Health Disparities Research Tops NIH Agenda

*By Carla Garnett*

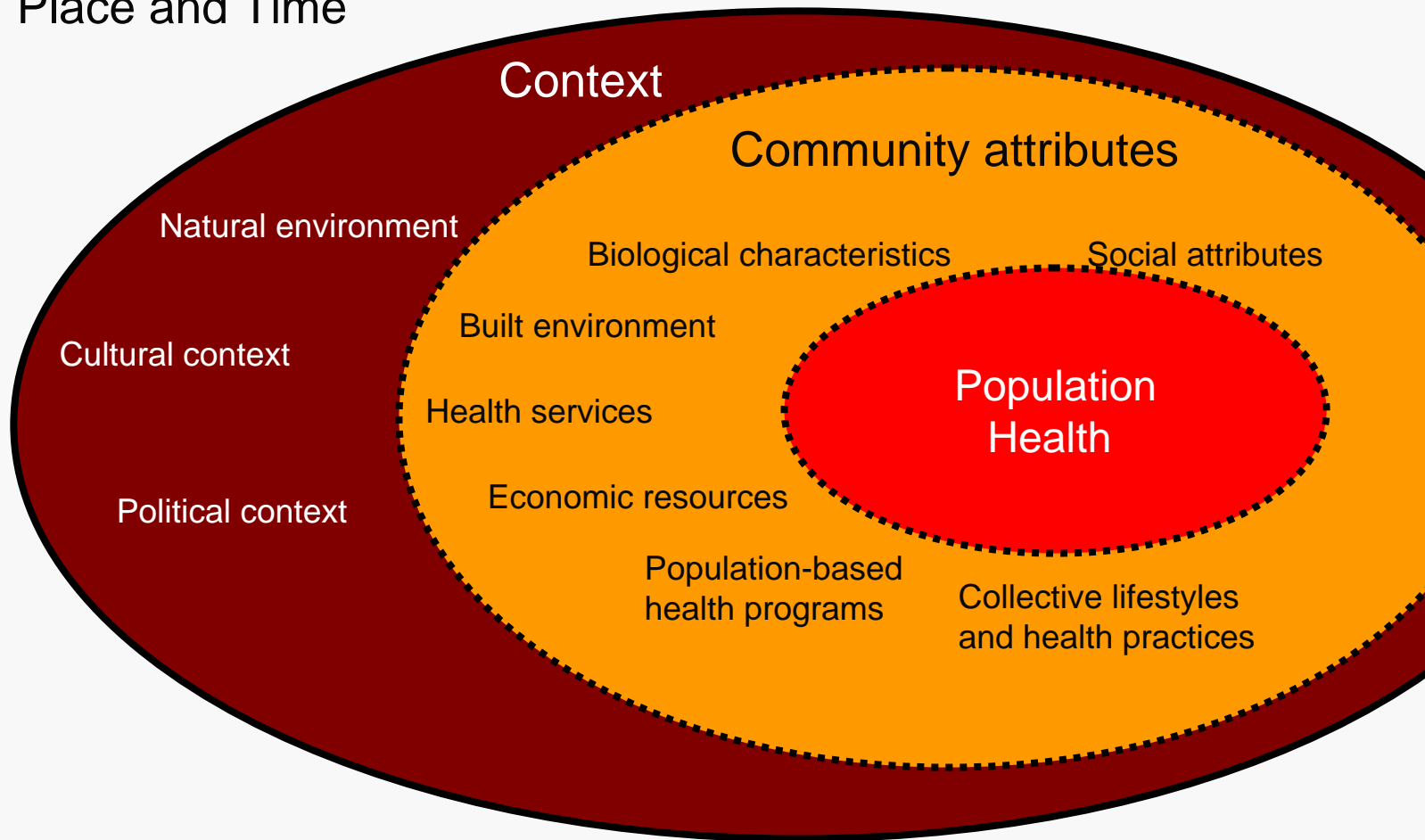
Some disturbing trends have surfaced in the nation's health: Rates for blindness due to glaucoma in African Americans are six times higher than the rates for whites. American Indians and Alaska Natives are nearly three times as likely as whites to have diagnosed diabetes; Hispanics and Latinos are almost twice as likely. African Americans and Native Americans show increased susceptibility to kidney complications of diabetes. Death rates from heart diseases are disproportionately high among blacks. Native Americans have a higher incidence of meningitis due to *Haemophilus influenzae B*. Stroke, a major health problem for the entire country, disproportionately affects minority citizens — particularly African Americans. Sudden infant death syndrome is more prevalent in minority populations — two and a half times more prevalent in

*“Some disturbing trends have surfaced in the nation’s health...”*

# Disparities in diseases or in population health?

Comparing two perspectives

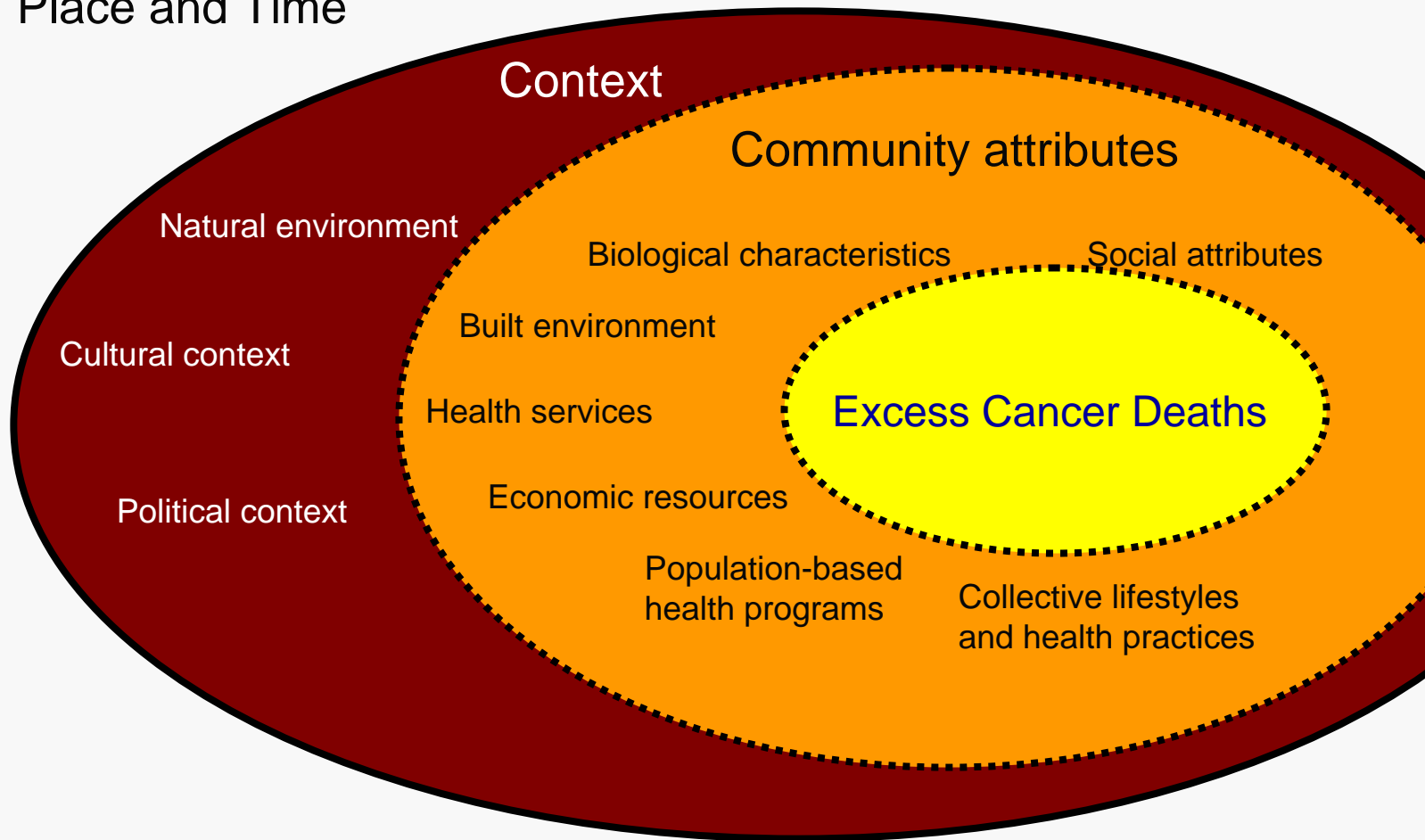
Place and Time  
Place and Time



## Influences on the population's health

Source: Friedman DJ, Hunter EL, Parrish RG. Shaping a Vision of Health Statistics for the 21st Century. Washington, DC: Department of Health and Human Services Data Council, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Committee on Vital and Health Statistics, 2002. (Accessed on February 5, 2004 at: <http://www.ncvhs.hhs.gov/21st%20final%20report.pdf> )

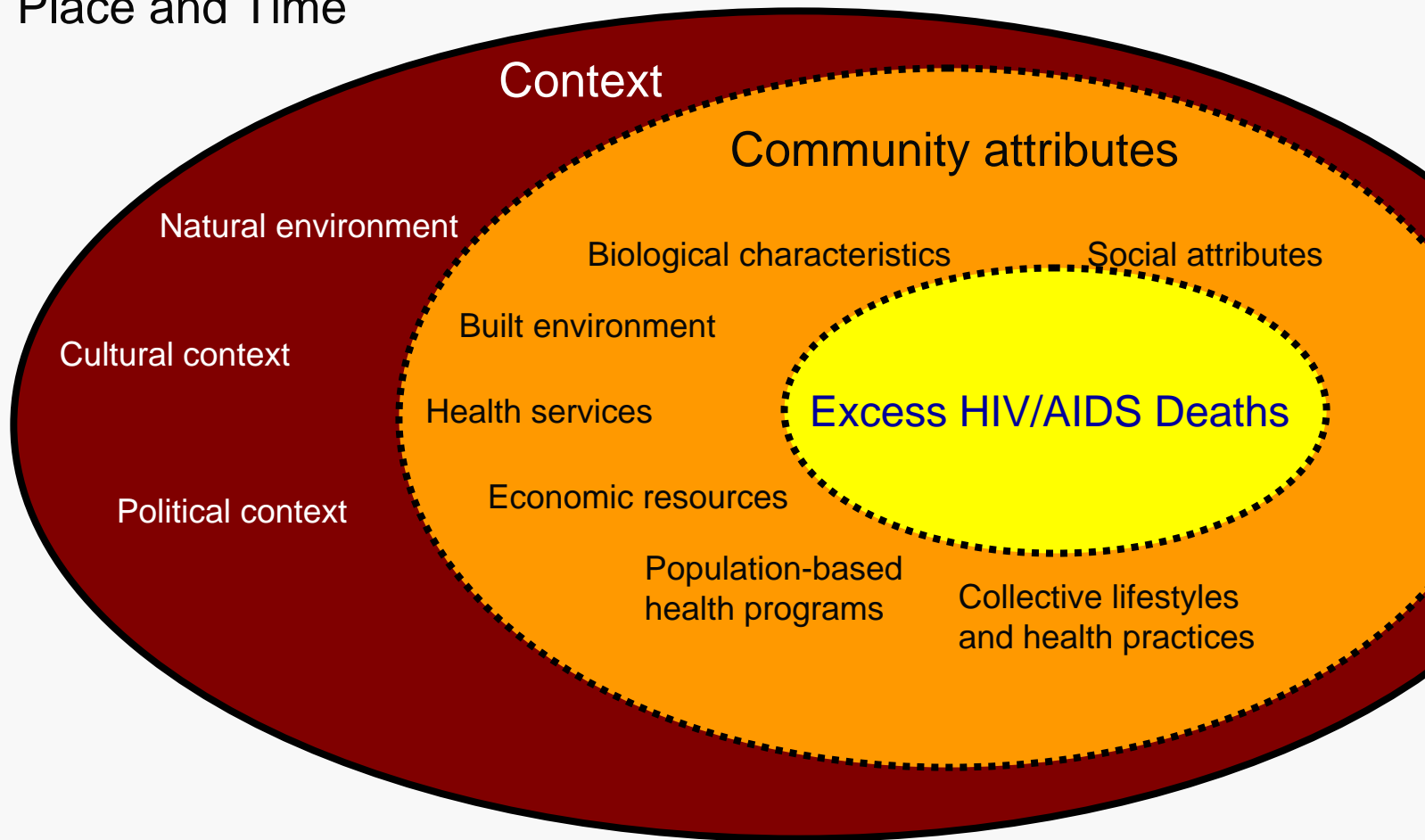
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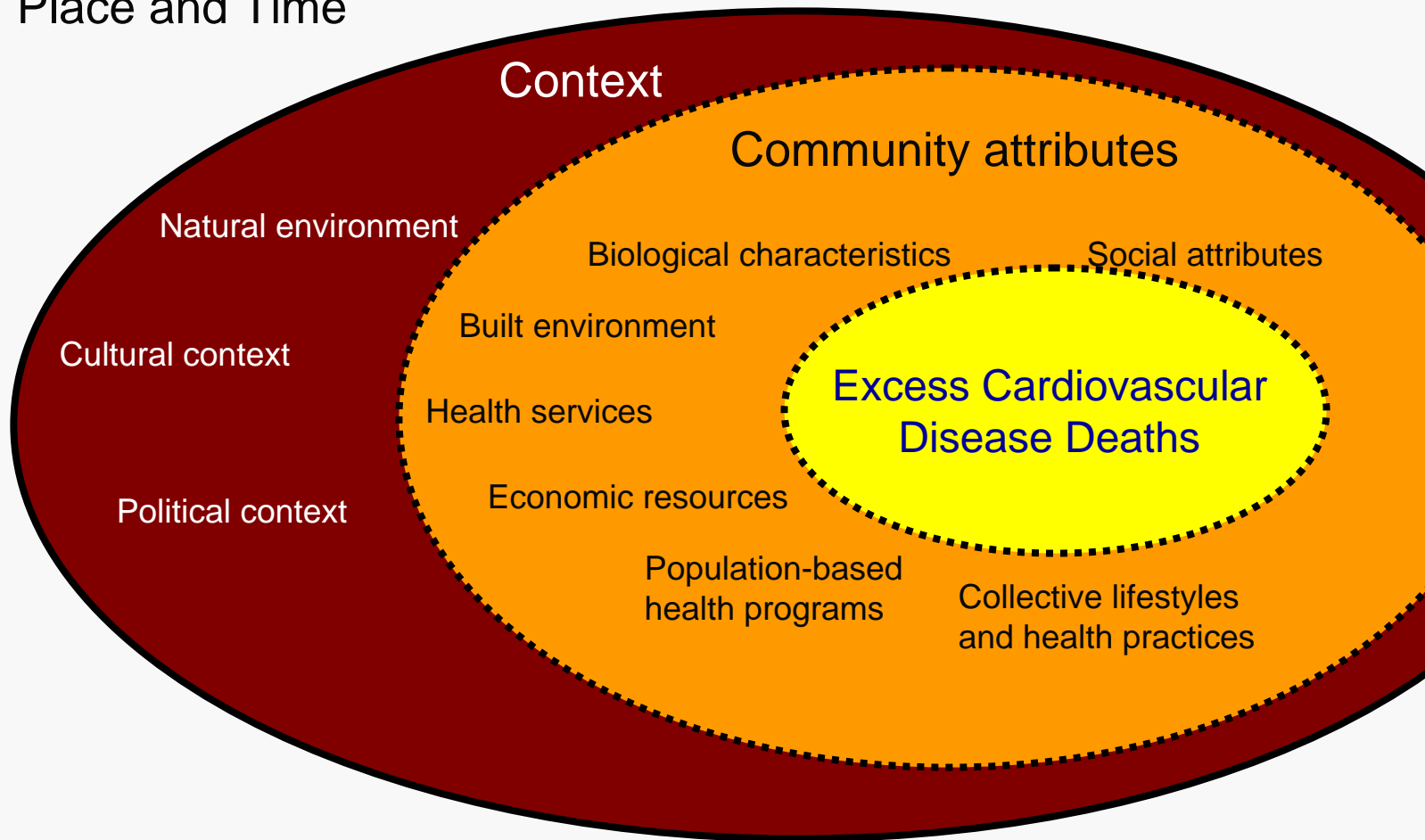
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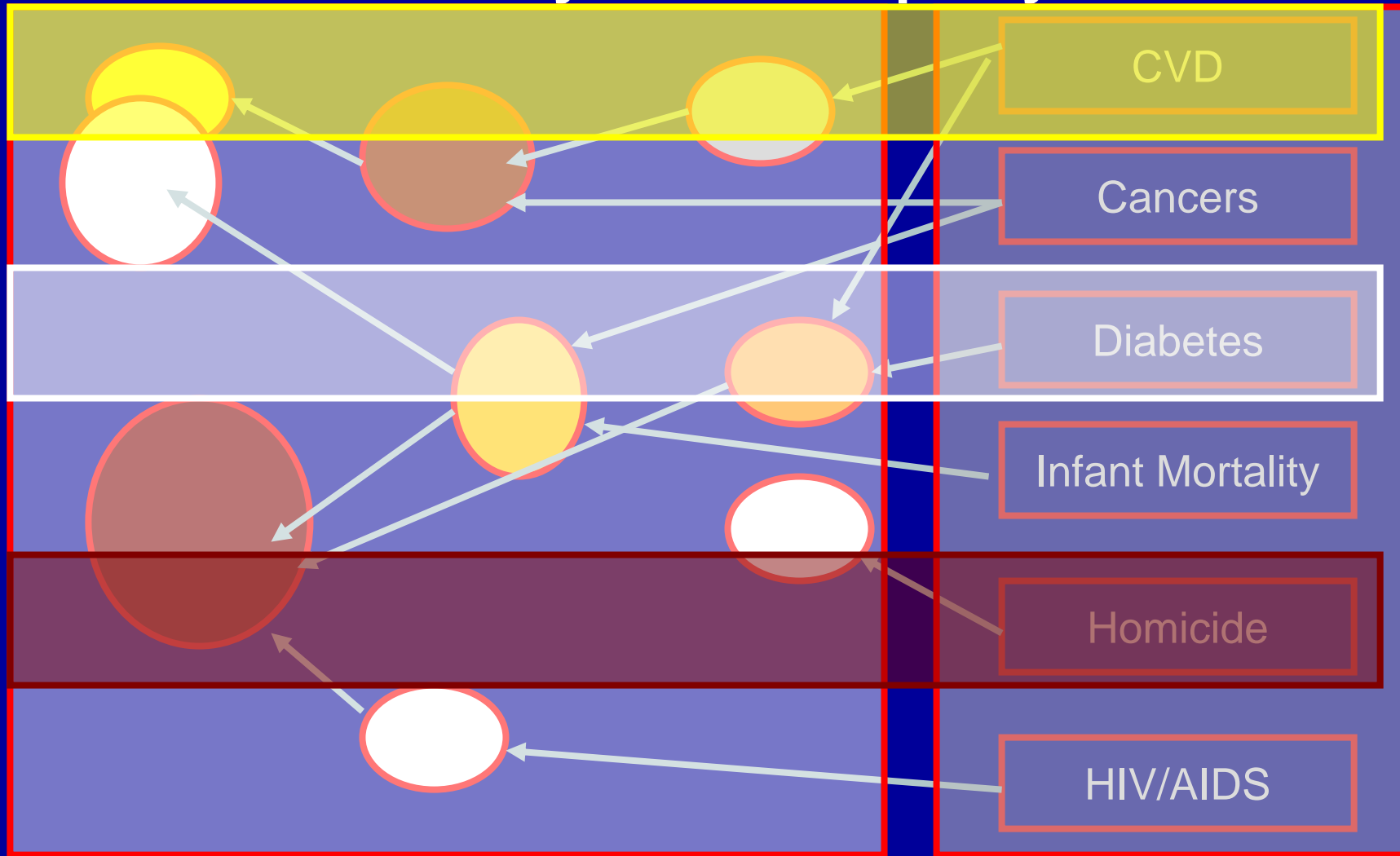
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# Pathways of Inquiry



Context → Intermediate Risk Factors → Behaviors → Health and Diseases



# Policy Advantages

## DISEASE FOCUS

Hardest possible evidence that ethnic minority populations are disadvantaged

Keeps issue of minority health on policy agenda

Quantifies the problems

## POPULATION HEALTH FOCUS

Facilitates focus on optimal health of the population in question

Highlights relevant historical, cultural, and political contexts

Draws attention to diversity within ethnic minority populations

Integrates domains of knowledge and discourse

Incorporates critical non-medical health issues

# Practical Advantages

## DISEASE FOCUS

Matches NIH and other funding streams

Matches organization of medical specialties

Provides specific motivation for medical and health care specialists

Compatible with hi-tech solutions

Conveys potential for dramatic success through focused effort

## POPULATION HEALTH FOCUS

Facilitates endogenous solutions

Supports attention to assets and coping abilities

# Policy Disadvantages

## DISPARITIES FOCUS

Sets lack of “excess deaths” as the standard

Implies that health status of whites represents optimal health

Emphasizes relative risks more than absolute risks

Minimizes appreciation for intra-group diversity

Frames issues in medical/health system terms; de-emphasizes structural variables

## POPULATION HEALTH FOCUS

Makes it difficult to identify where to focus attention

Links status on policy agenda to less popular issues

Depends on actions in non-health sectors

Poor match for NIH and other funding streams

Associated with slow, incremental progress vs. quick fixes

# Practical Disadvantages

## DISEASE FOCUS

Inadvertently reinforces perception of minority group inferiority

Creates parallel tracks for pursuing separately problems with many common determinants

Leads to competing priorities and fragmentation of efforts

## POPULATION HEALTH FOCUS

Challenging to biomedical paradigm

Less enthusiastic about hi-tech solutions

Distal to outcomes

# Case Example

Nutrition-related health disparities

## Cellular and Biochemical Mechanisms That Play a Role in the Pathogenesis of Major Chronic Diseases

	Cancer	Athero- sclerosis	Obesity	Diabetes
Insulin resistance	-	+	+	+
Cell proliferation	+	+	-	+
Inflammation	+	+	-	+
Apoptosis	+	+	-	+
Changes in signal transduction, gene expression	+	+	+	+
DNA modifications/ mutations/genetic variation	+	+	+	+

A plus sign indicates association; minus sign, no specific body of evidence is available to suggest that a specific mechanism or pathway correlates with the indicated disease.

*SOURCE: adapted from Deckelbaum et al, Circulation, 1999*

## Common Themes in Current Dietary and Lifestyle Recommendations

Recommendations	ACS	AHA	ADA	AdiabA	NIH	AAP	USDA/ HHS/FDA
▪ Calories to achieve desirable weight	+	+	+†	+	+	+	+
▪ Total and saturated fat and cholesterol	+	+	+‡	+§	+	+	+
▪ Variety of foods; emphasize plant sources	+	+	+	+	+	+	+
▪ Moderate sugars and salt	+	+	+	+	+	+	+
▪ Adequate physical activity	+	+	+	+	+	+	+
▪ Do not smoke	+	+	+	NR	+	+	+
▪ Alcohol in moderation	+	+	+	+	+	NR	+

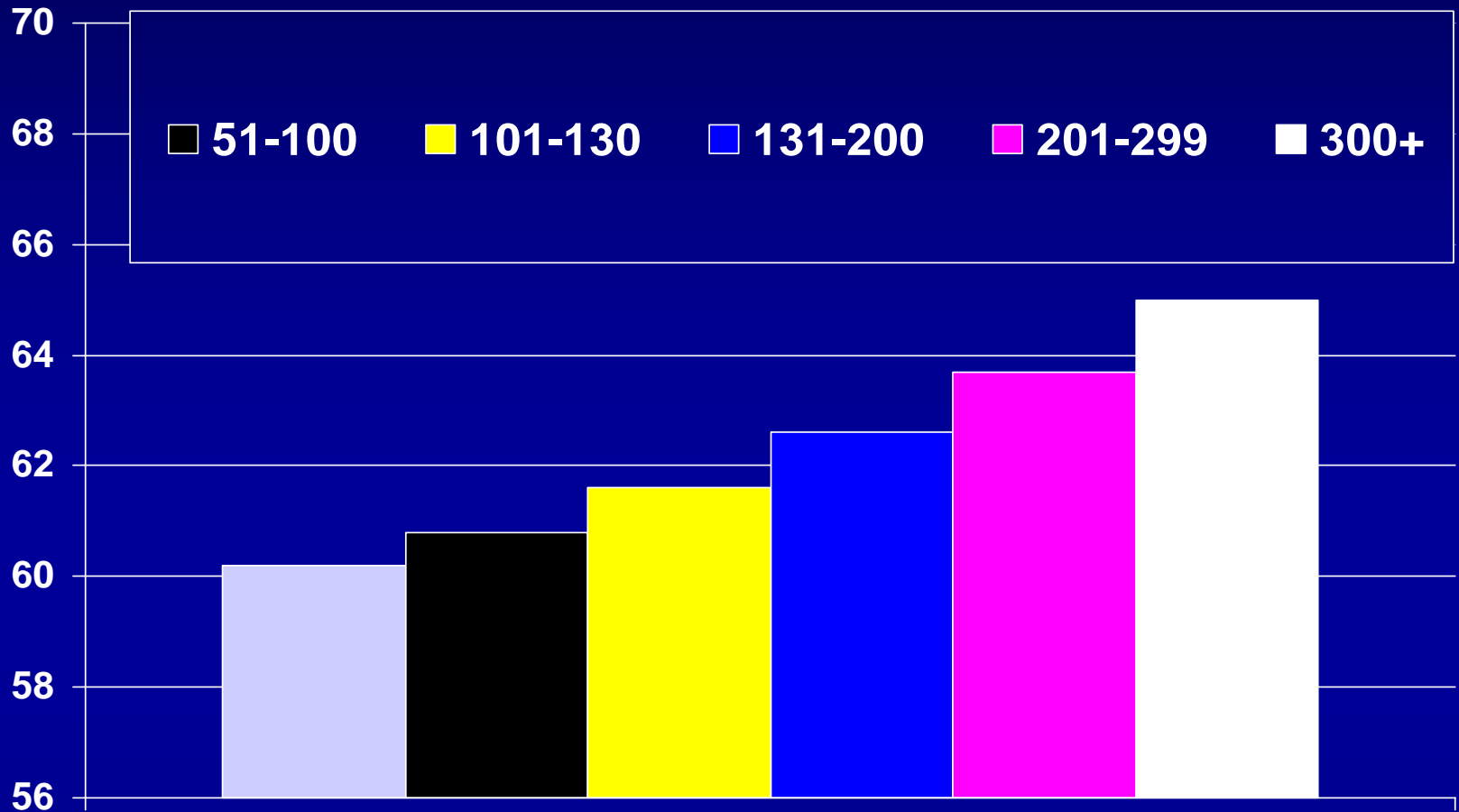
**SOURCE:** Deckelbaum et al, *Circulation*, July 1999

# Dietary Adequacy and Quality

- ❑ Hunger and food insecurity
- ❑ Excess risk for overeating, including both psychosocial and environmental variables
- ❑ Adoption of harmful dietary patterns
- ❑ Loss of protective dietary patterns
- ❑ Limited food access
- ❑ Priorities that compete with healthful eating
- ❑ Limited access to dietary counseling



# Healthy Eating Index by % Poverty Index



# Disparities in Social Context: Ethnic Targeting of TV Ads

Total Number of Food Advertisements by Market			
Number of Advertisements	African American Market (n = 1033)	General Market (n = 2029)	P Value
Number of food advertisements (as % of all advertisements)	251 (24.3)	302 (14.9)	.001
Mean number of food advertisements per 30 minutes	3.97	2.42	.01

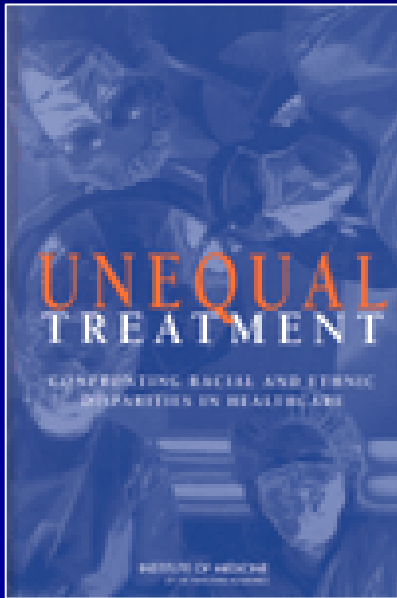
Henderson VR, Kelly B. J Nutr Educ Behav. 2005 Jul-Aug;37(4):191-6.

# Type of Packaged Food Product Advertised by Market

	African American Market	General Market	
Number (%) of Packaged Food Advertisements			
Food Category	(n = 94)	(n = 148)	P Value
Candy/sweets	34 (36.2)	7 (4.7)	.001
Soda	10 (10.6)	3 (2.0)	.004
Meat/eggs/mixtures	7 (7.4)	2 (1.4)	.015
Bread/grain/cereal/pasta	2 (2.1)	26 (17.6)	.001
Desserts/sweet breads	1 (1.1)	21 (14.2)	.001
Fruit/vegetables/ 100% juice	1 (1.1)	12 (8.1)	.018

Henderson VR, Kelly B. J Nutr Educ Behav. 2005 Jul-Aug;37(4):191-6.

# Health Services Delivery

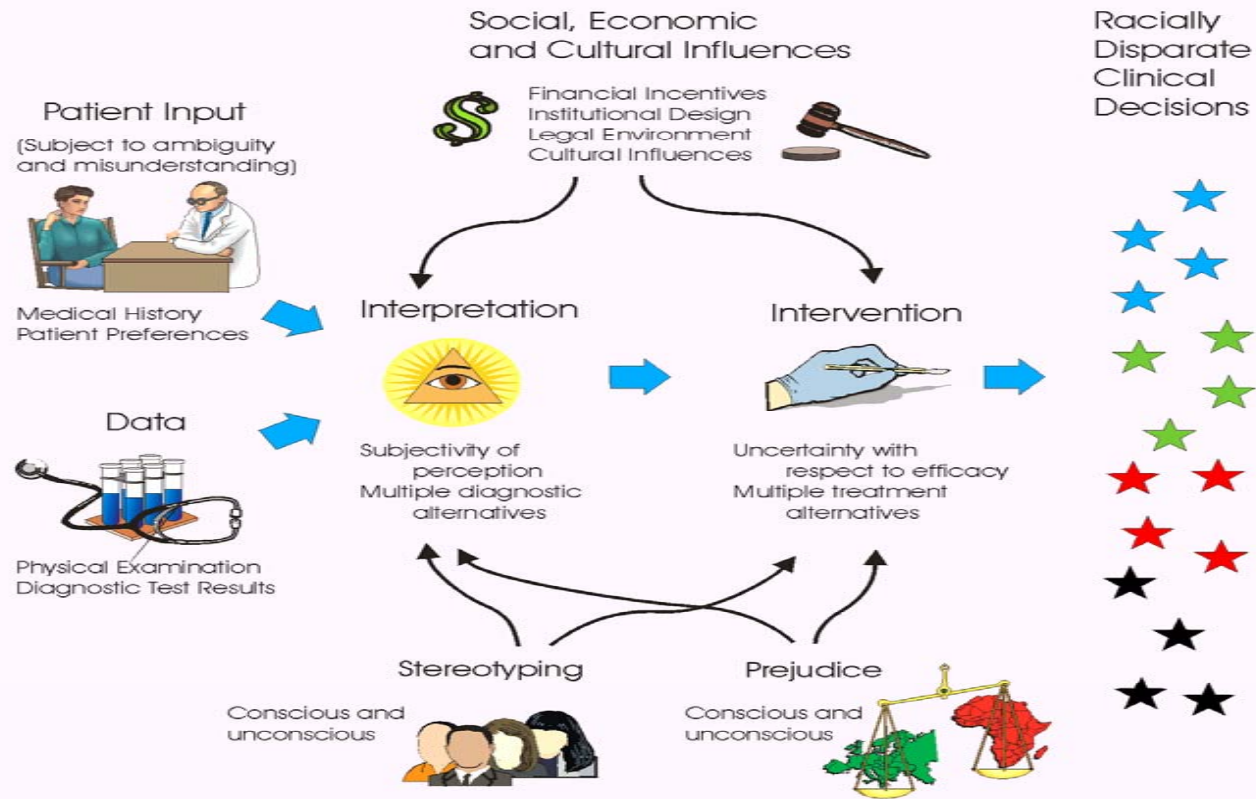


Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment. Confronting racial and ethnic disparities in health care. Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care.*

Board on Health Sciences Policy. Institute of Medicine. 2002 Washington DC: National Academy Press. [www.nap.edu](http://www.nap.edu)

# Clinical Discretion

As exercised by clinical caretakers, gatekeeper physicians, and Managed Care Organization UM's



# Disparities in Health Care Delivery: Differences in Reported Dietary and Exercise Counseling by Race/Ethnicity and Birthplace

- ❑ Foreign born respondents were less likely to report counseling than were US-born respondents (18% vs 24%,  $P.001$ ).
- ❑ After adjustment, foreign-born blacks and Latinos were less likely to report dietary counseling than US-born whites
- ❑ Results were similar after additional adjustment for level of leisure physical activity and in a subgroup analysis incorporating occupational activity.

# Key Conclusions

- ❑ Holistic focus on the health of minority populations does not necessarily follow from emphasis on disparities relative to whites
- ❑ Separate disparities converge on the same communities of interest
- ❑ Among the separate or parallel disparities foci, there is substantial overlap in the biological, behavioral, environmental, scientific, and health care delivery domains
- ❑ The challenge before health professionals is how to leverage the advantages of the disparities focus and the population focus for the improvement of the health of ethnic minority populations

# Health Disparities Reflect Social Disparities

- ❑ “One thing of course we must expect to find, and that is a much higher death rate at present among Negroes than among whites: this is one measure of the difference in their social advancement”
- ❑ “Therefore, in considering the health statistics of the Negroes, we seek first to know their absolute condition rather than their relative status; we want to know what their death rate is, how it has varied and is varying and what its tendencies seem to be; with these facts fixed we must then ask, “What is the meaning of a death rate like that of the Negroes of Philadelphia? Is it, compared with other races, large, moderate, or small...?”
- ❑ “Finally we must compare the death rate of the Negroes with that of the communities in which they live, and thus roughly measure the social difference between these neighboring groups...”

*W.E.B. DuBois, The Philadelphia Negro, A Social Study, originally published in 1899, University of Pennsylvania Press; page 148 of 1996 edition*