Designing Evaluation Based on the Social-Ecological Model: Practical Considerations from the Field

California Nutrition Network for Healthy, Active Families

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Overview

- Networks are/should be seen as large-scale health promotion enterprises
- Therefore, they must take advantage of a huge amount of contemporary thinking (see bibliography)
- They must use multi-disciplinary approaches for intervention, evaluation
- They are dynamic, breaking new ground for “nutrition education”
- They also break new ground for “social marketing”

Guiding Principles for Health Promotion*

- Empowerment of individuals and communities over personal, socioeconomic and environmental factors that affect their health
- Participation of those concerned, at all stages
- Holistic—fostering physical, mental, social and spiritual health
- Intersectoral—agencies from relevant sectors collaborate
- Equity and social justice
- Sustainability beyond initial funding
- Multiple strategies—policy development, organizational change, community development, legislation, advocacy, education and communication—in combination

* World Health Organization, 2001

Nutrition Education, a Definition *

"Any set of learning experiences designed to facilitate the voluntary adoption of eating and other nutrition-related behaviors conducive to health and well-being."

* USDA, ~1994

Social Marketing, a Definition

California Nutrition Network Definition of Social Marketing

"…The use of commercial marketing approaches to achieve a social goal…

includes the traditional mix of advertising, public relations, promotion, and personal sales, and adds

Consumer empowerment, community development, partnership, media advocacy, and

policy-systems-and environmental change…"

What Is a Multi-Level Campaign?

National
(5 A Day, Food Stamp Outreach, Team Nutrition, Changing the Scene, Verb Campaign, etc.)

↕

State
(5 A Day, Nutrition Network, CPL, state agencies and organizations)

↕

Regions
(Media Markets)

↕

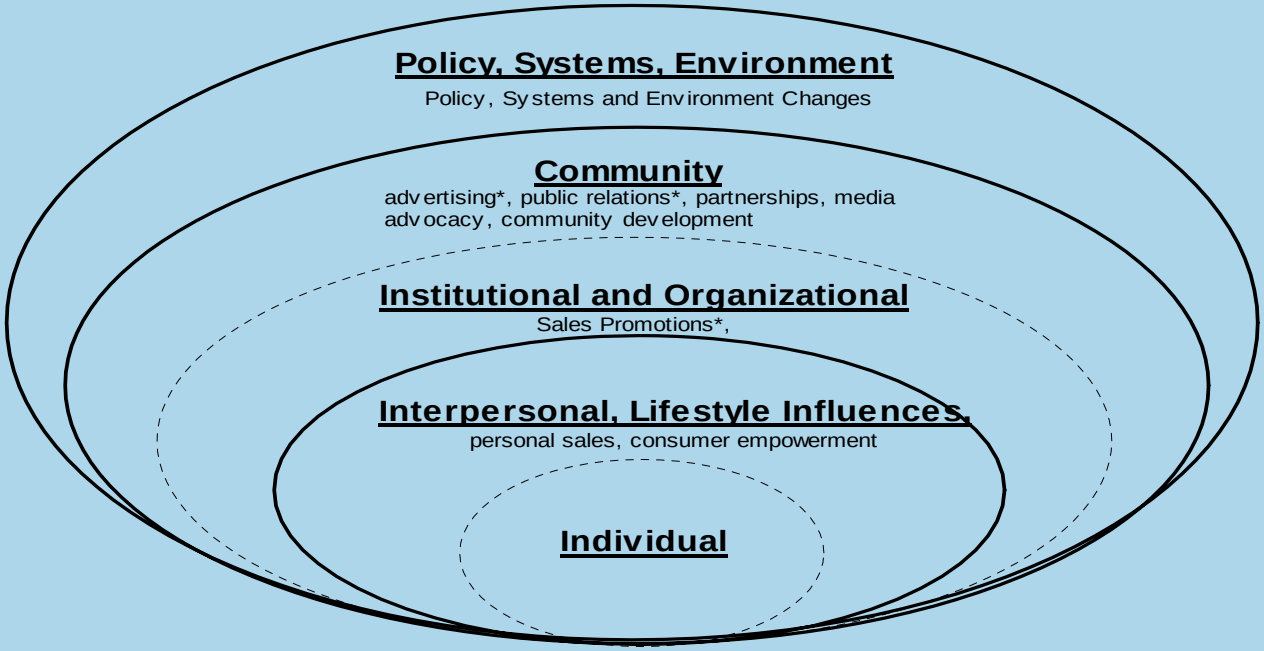
Counties, Cities, School Districts
(Local Governments)

↕

Communities

What Are the Multiple Spheres of Influence and Social Marketing "Tools" in Each Sphere?

Social Marketing Tools by Level of Influence in the Social-Ecological Model



*Categorization in the specific sphere depends on how the construct was operationalized. Often Community and Instutional activities are very similar, and Interpersonal and Individual actvities are very similar.

Why *Not* Use an Experimental Evaluation?

- Many components *are* experimentally based
- Many components *are* evaluated quasi-experimentally
- This is a marketing model, w/ continuous feedback loops
- There's a changing secular environment, not controllable
- Interventions also are dynamic—constant learning, improvement, different stages of "maturity"
- An objective is to stimulate others' activity, not control it at baseline levels
- "Contamination" (*aka* synergy) is an objective, but not predicable
- Cost, complexity, "technology", even interest

What Is “Triangulation” in Health Promotion?[1]

- Health itself is multi-dimensional, e.g., physical, social, cultural
- So, health promotion is multi-dimensional
- So, evaluation methods must be multi-dimensional
- Qualitative may explain quantitative, and vice versa
- “Triangulation” is also called “mixed methods”

[1] Thorogood & Coombes, 2002, from Steckler (1992)

“Theory of the Problem”[1]

- Inadequate knowledge/belief by consumers
- Inadequate promotion, “selling” of the behaviors
- Inadequate access, high environmental barriers
- Inadequate policies, especially state, local, private sectors
- Inadequate attention by intermediaries
- Inadequate resources, understanding of solutions
- Inadequate leadership, infrastructure for change

[1] Thorogood & Coombes, 2000, from McLeroy *et al* (1993)

"Upstream Measures" to Evaluate (A Work in Progress!)

- Consensus on objectives, solutions
- Growth in agency participation, redirections
- Establishment of infrastructure at state, regional, local levels
- Establishment of sustainable fiscal and administrative systems
- More partnerships with state and community influentials
- Leadership to strategize, help mobilize effort, support and empower coalitions

“Midstream Measures” to Evaluate

- Increase in educational and promotional activity, empowered communities
- Refinement of policy and system change solutions, “getting focused”
- Development of specific end points and their measures
- Belief by consumers in 5-9 servings, 30-60 minutes, Food Stamps as a good resource
- Decrease in consumer perception of barriers; feelings of self-efficacy

“Downstream Measures” to Evaluate

- More favorable policies at multiple levels, sectors
- Healthier “environment” at community levels
- Less competition?
- Permanent changes in systems
- Behavior change in targeted consumer segments

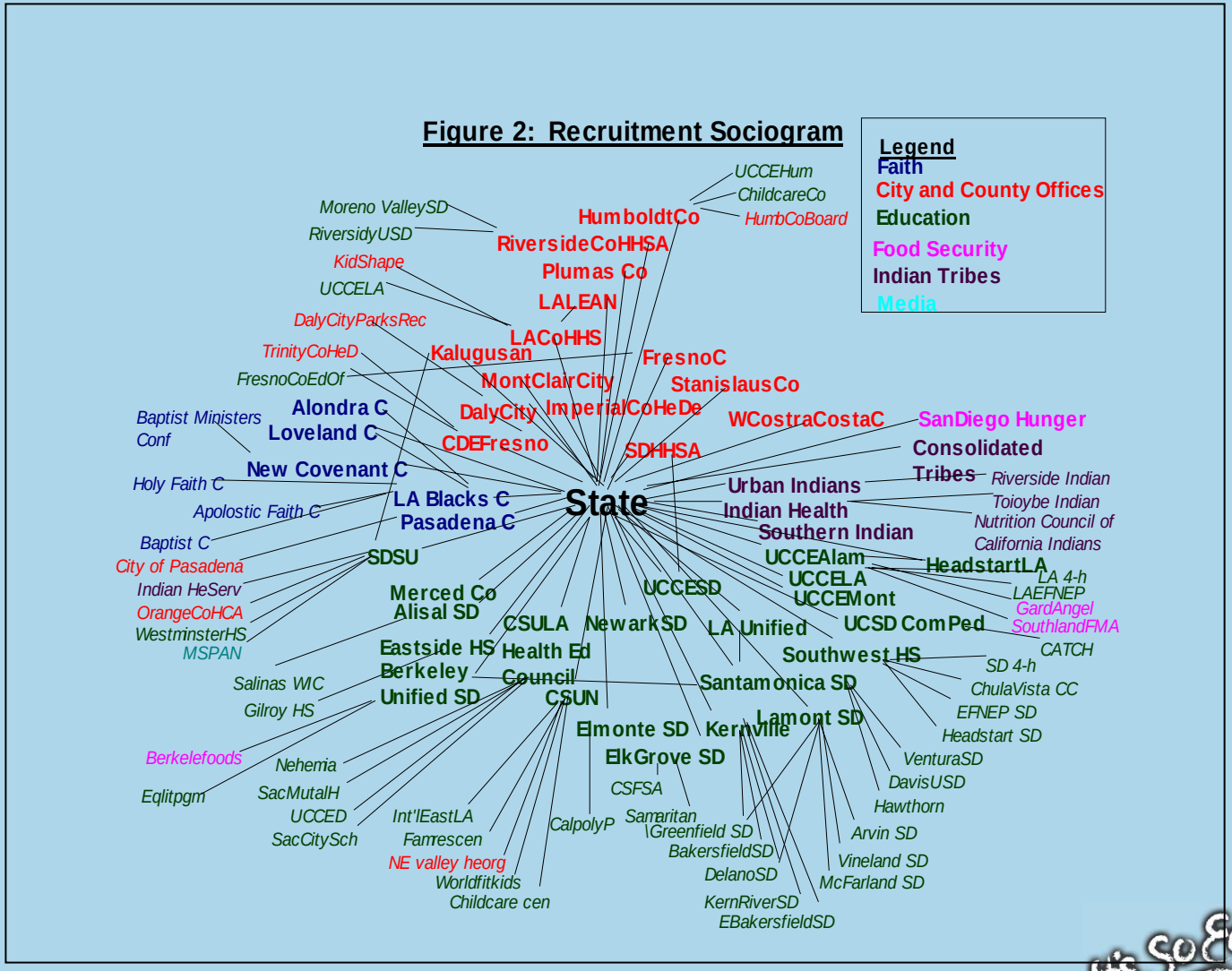
So, What *Are* the Data?

(Again, a Work in Progress!)

"Upstream Measures" since 1997 Campaign Launch

- Growth in State Agencies—from 1 to 6
- Funding—Federal Financial Participation reflects others' growth and focus
- Growth in collaboration by funders—foundations, state agencies
- Growth in regions—from 10 to 23
- Growth in partnerships—from ~200 to ~2,000
- Growth in numbers, collaborations and work scopes of leadership organizations
- Development and use of reporting system

State, Regional and Local Linkages Among Partners



“Midstream Measures” (2)

Table 5. Local and Statewide Sales Promotions October 1, 2000- March 31, 2001

Reach of Network Sales Promotion Activities
October 1, 2000 – March 31, 2001[1,2]

	Activity	Number of Events/Activities	Direct Contacts (Duplicated Count)
Promotions	**STATE**		
	Safeway “Eat Like a Champion”(Feb)	na	500,000
	5 a Day Across the USA (Mar)	na	na
	Latino Farmers’ Market Promotions	na	26,000
	Latino Festival Promotions	na	75,000
	LOCAL, SAAR N=127		
	Grocery Promotions (% of Activities)	**102**	**6,650**
	Taste Tests (15%)	15	na
	Retail Tours (37%)	38	na
	Other: Give Recipes, Posters, etc. (36%)	37	na
	Farmer’s Market Promotions (% of Activities)	**147**	**7,078**
	Taste Tests (23%)	34	na
	Food Preparation/Cooking Demos (29%)	42	na
	Retail Tours (6%)	9	na
	Other: Give Recipes, Posters, etc. (100%)	192	na
	Other Sales Promotions (% of Activities)	**209**	**446,228**
	Sports Events (9%)	18	2,100
	Health Fairs/Festivals (56%)	117	39,913
	School and Youth Organization-Based	na	400,000
	Other (35%)	74	4,215
	TOTALS	**458**	**1,060,956**

[1] Promotions include certain timeframes selected to advance specific messages or themes. They provide paid and voluntary support of special events, materials and incentives; and they work with multiple partners, especially at “point of sale” or “point of choice,” to gain maximum media and consumer attention, so as to stimulate interest, acceptance, trial or repeat “product purchase.”
[2] Includes CNN’s Project LEAN Regions, *Power Play!* Regions, LIA’s and Special Projects; excludes Healthy Cities and Communities and Cancer Research Projects.
na = not available

"Midstream Measures"

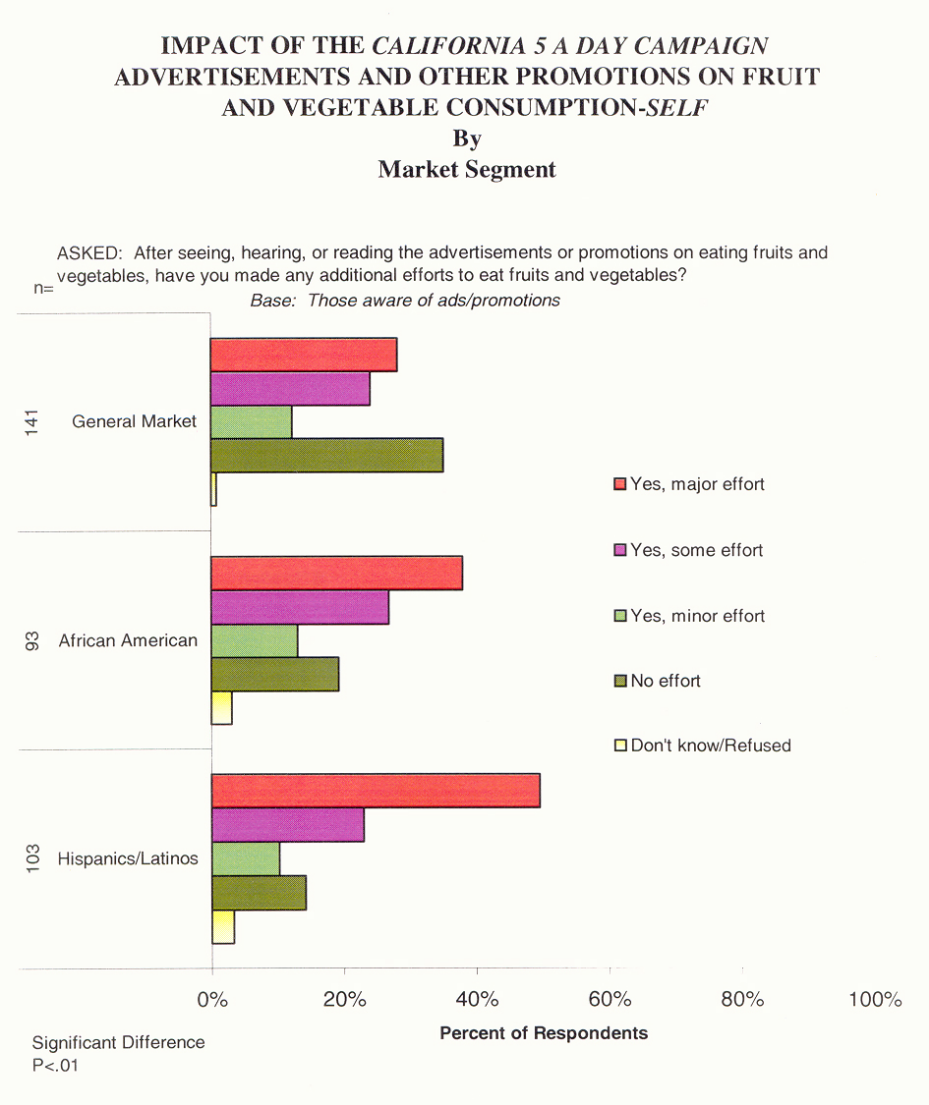
Table 2. Reach of Local and Statewide Public Relations Activities Conducted in Year 05, Part I.

Reach of Network Public Relations Activities
October 1, 2000 – March 31, 2001[1,2]

	Activity	Number of Media Outlets	Media Impressions/ Indirect Contacts (Duplicated Count)
Public Relations	**STATE**		
	Latino-Specific Media Tour, Fall, 2000 (included TV, radio, print)	143	13,670,000
	Drew University Press Release	na	5,000,000
	Press Release "Overweight Obesity Levels Reach Epic Proprtions", Oct 2000	na	na
	LOCAL, N=127		
	TV PR Events	**23**	**na**
	TV Interviews/Stories	16	na
	Food Prep/Cook Demos	7	na
	Radio PR Events	**26**	**600**
	Radio Interviews/Stories	25	na
	Radio Remotes	1	600
	Print PR Events	**1,200**	**na**
	Feature Articles/Bylines	1,113	na
	Press Releases	78	na
	Press Interviews	9	na
	Other PR Events	**148**	**3,234,569**
	TOTALS	**1,540**	**21,905,169**

[1] Public Relations include outreach activities designed to secure news attention in the print or electronic media.
[2] Includes CNN's Project LEAN Regions, *Power Play!* Regions, LIA's and Special Projects; excludes Healthy Cities and Communities and Cancer Research Projects.
na = not available

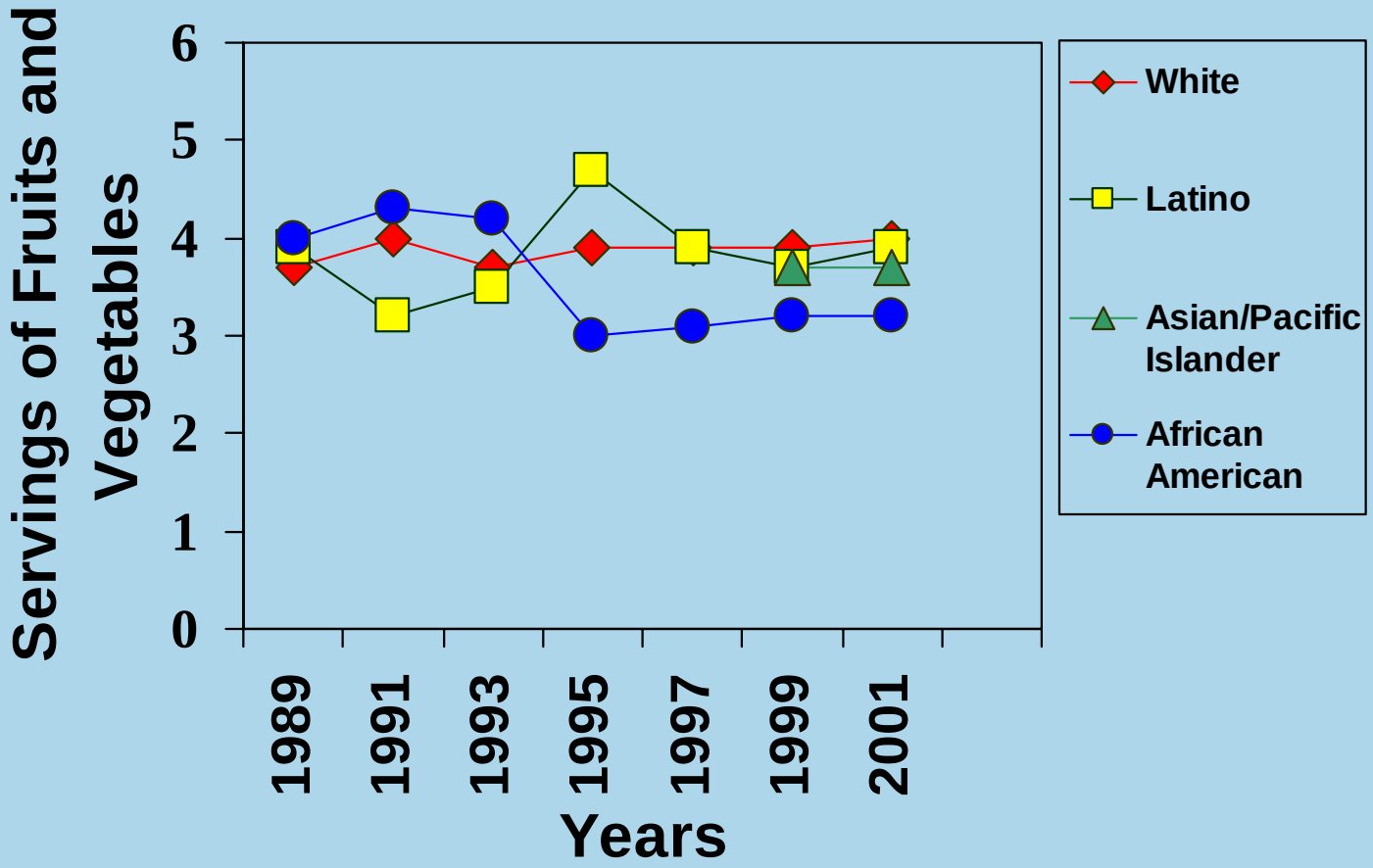
"Midstream Measures"—
Self-Reported Impact by Targeted Segments (6)
Based on Ads, What Efforts Did You Make to Act?



"Downstream Measures"

Fruit and Vegetable Trends

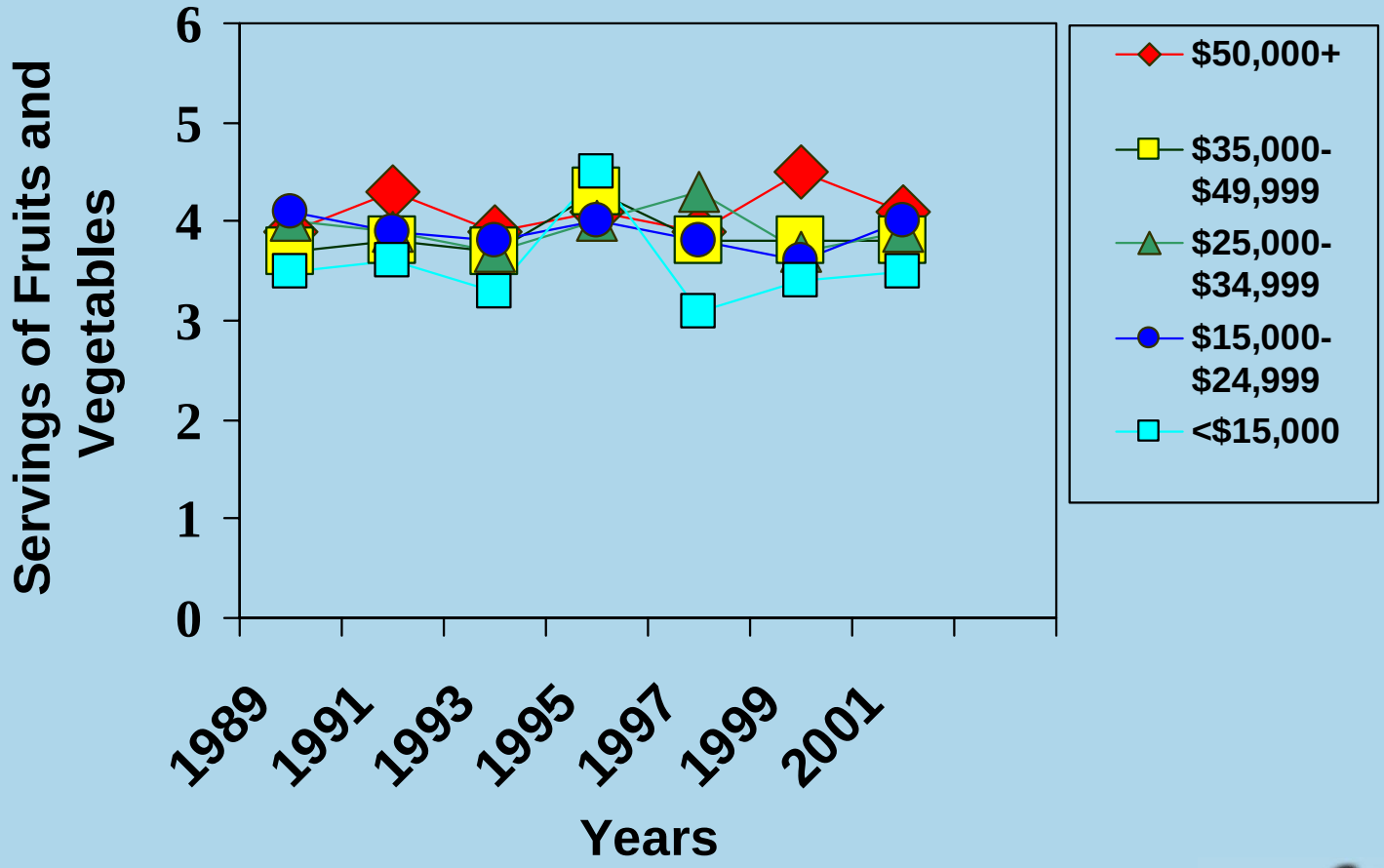
by Race/Ethnicity



"Downstream Measures"

Fruit and Vegetable Trends

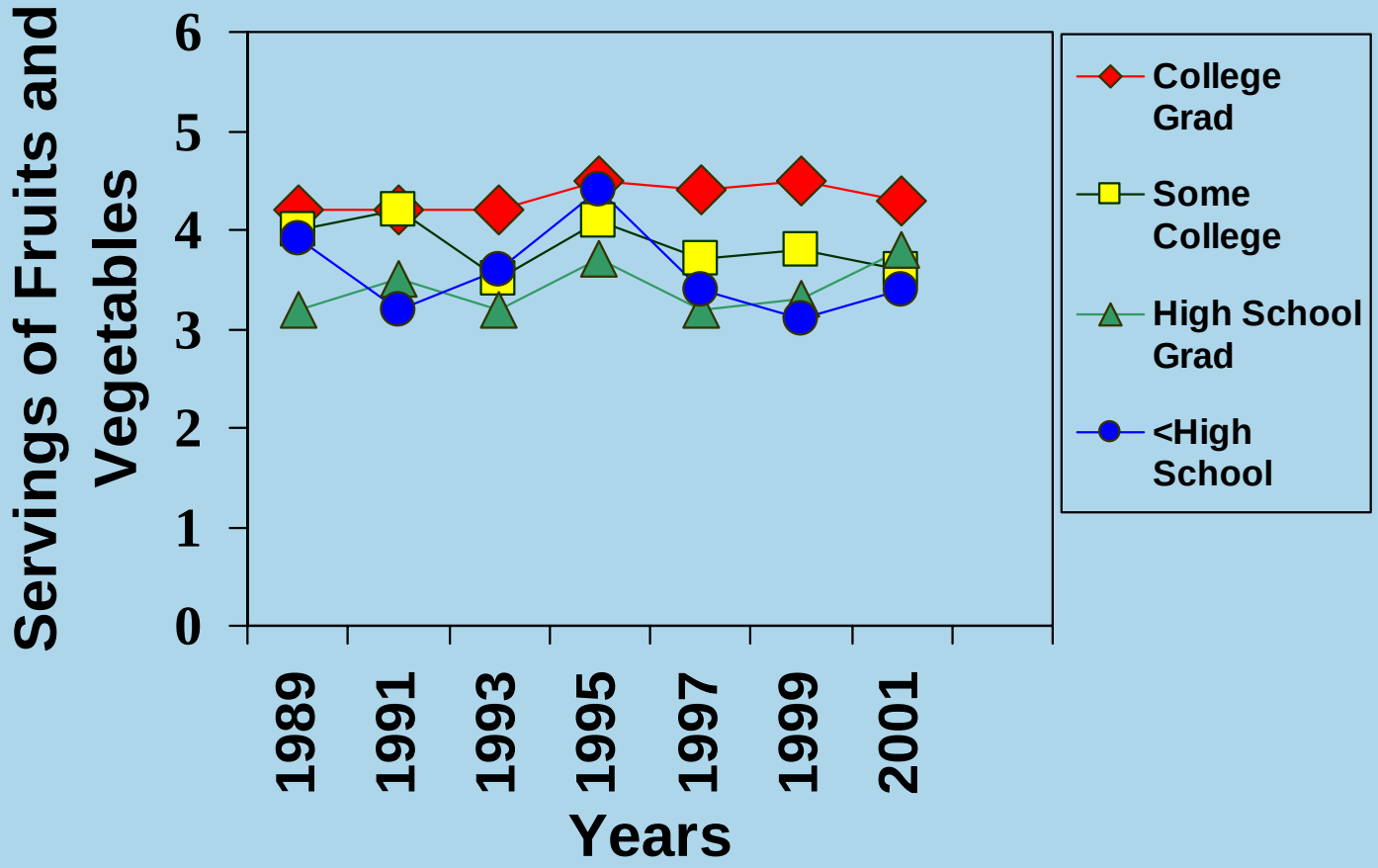
by Income



"Downstream Measures"

Fruit and Vegetable Trends

by Education Level



So, What Are the Challenges Now? (Food Stamp and Other NAP Programs, Community Food Security) Using the Social-Ecological Model

- As a dynamic field, knowing the “sticky” issues/endpoints in the beginning
- Possibly, develop criteria for “stickiness”?
- Assessing the current situation (baseline) for those sticky issues
- Selecting measures for each “sphere of influence”
- Gaining consensus on measures from all stakeholders, not just evaluators
- Collecting, managing and interpreting data
- Monitoring the environment, then attributing results (advanced statistical modeling versus “common sense”?)
- Setting realistic expectations, e.g., may be more (or less) than dose/response

And a Good Start Would Be:

- Funders, FSNEP's and stakeholders getting on the same page
- Role delineation for each
- Evaluators working with, learning from implementers' experience
- Agreement on where "the field" is, policy-, organization-, intervention- and evaluation-wise
- All that considered, adoption of common mission, purpose
- Agreement where possible, flexibility and feedback loops for the rest
- A plan, with benchmarks and timelines