

Promoting Nonsmoking: A Central Part of Diabetes Management

Edwin B. Fisher, Ph.D.

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Worldwide Tobacco

- 500 million of those alive today will be killed by tobacco
- Male prevalence:
 - 35% in developed countries
 - 50% in developing countries

Why Smoking and Diabetes??

Yearly Deaths Attributable to Smoking in US

- About 1 in every 7 or 8 deaths
- Total 442,398
- Cancer of Lung, Trachea, Bronchus 124,813
- Cardiovascular Disease 148,605

Centers for Disease Control & Prevention. Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States, 1995-1999. *MMWR* 2002 51: 300-303.

Why Smoking and Diabetes??

Among Adults with Diabetes, Smoking Associated with increased:

- Death by coronary heart disease
- Diagnosis of coronary artery disease
- Stroke
- Nephropathy
- Neuropathy

American Diabetes Association

Diabetes Care 2002 25: S80-S81

- The cardiovascular burden of diabetes, especially in combination with smoking, has not been effectively communicated to both people with diabetes and health care providers
- Only about half of individuals with diabetes are advised to quit smoking by their health care providers

Smoking is Simple

- Hand
- Mouth
- Inhale constituents
- x 20+ years
- Disease and Death

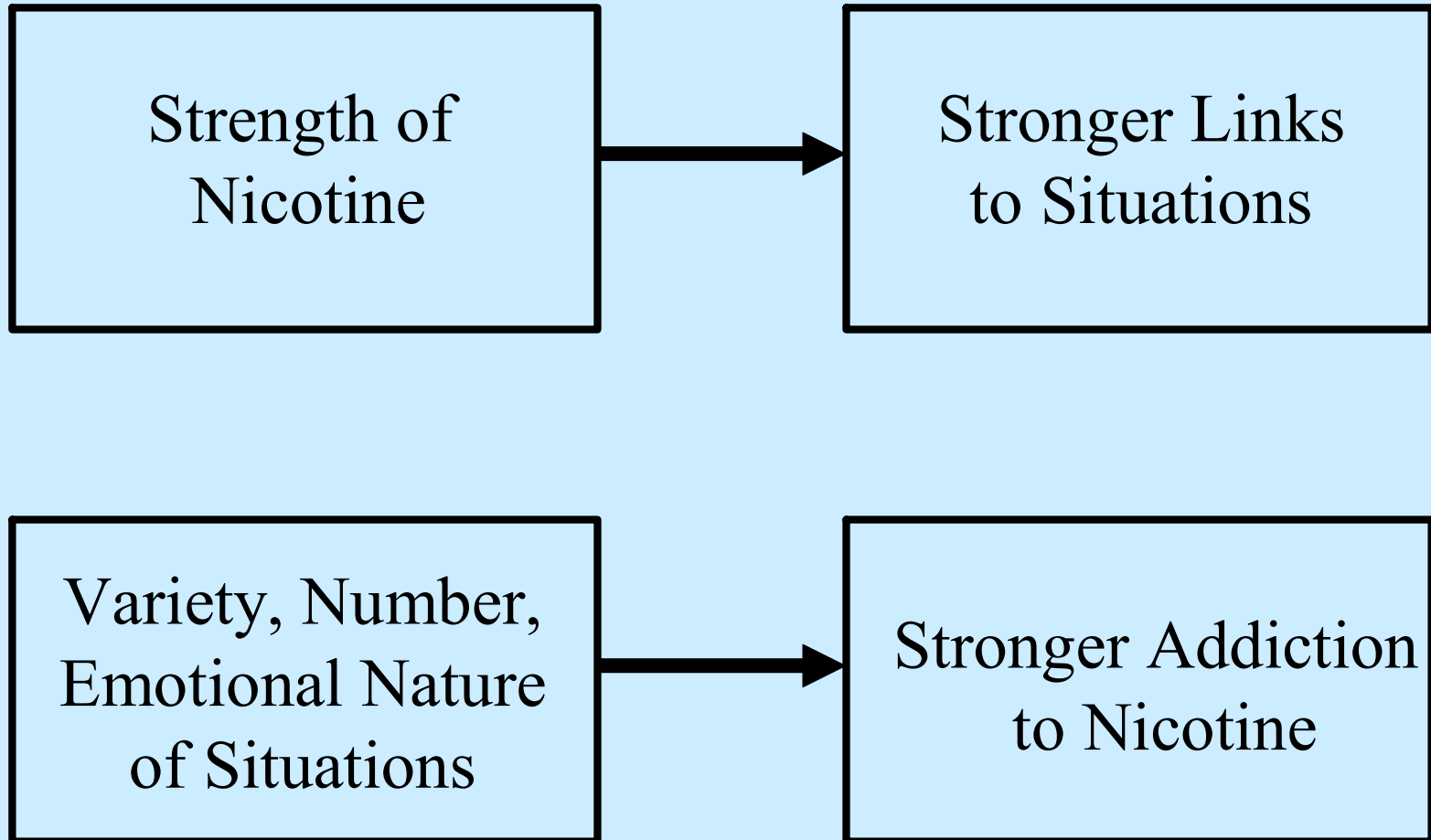
Smoking is Complex

- Genetics
- Psychophysiology of nicotine metabolism
- Personality and affect
- Social influences – peers, families, communities
- Economic influences
- Organizational influences
- Legal influences
- Marketing -- Economics of Smoking --
International Trade

Conditioning of Smoking

- Reinforcing Effects
 - Euphoriant -- mood elevating
 - Anxiolytic -- anxiety reducing
 - Stimulant
- Rapid delivery
 - 7 sec from inhalation to CNS
- Rapid clearance
- Thus, subtle titration
- Over 1 million conditioning trials in 20-year Hx
 - $7 \text{ puffs} \times 20 \text{ cigs} \times 365 \text{ days} \times 20 \text{ yrs} = 1,022,000$

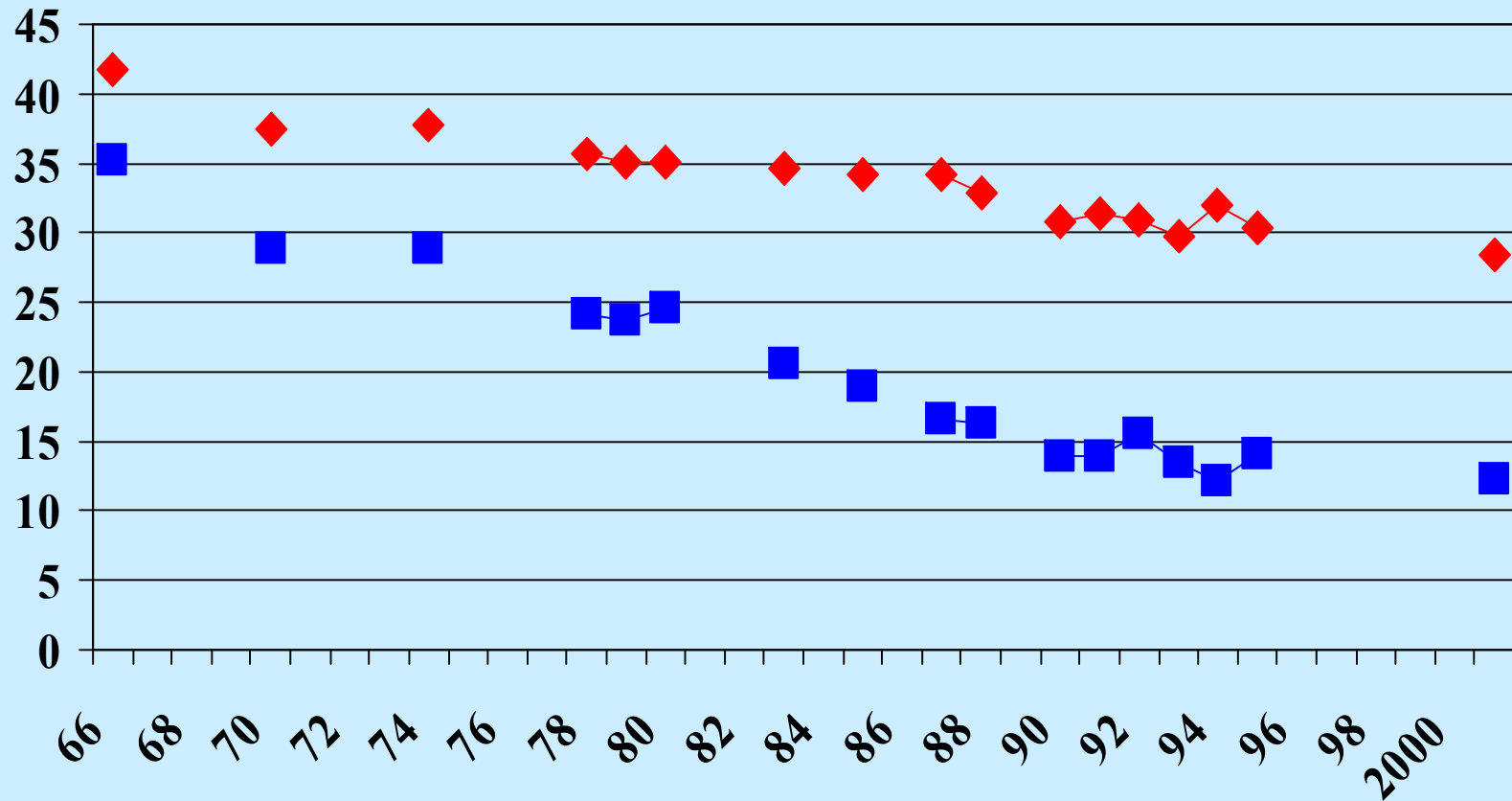
Addiction & Conditioning Aggravate Each Other



Smoking and Distress

- More common among those who are depressed
- Quitting less likely among those who are depressed
- For sex and marital status, prevalence highest among divorced/separated men: 48.2% (Surg Gen Rept 1988)
 - Parallel to alcoholism, suicide
- Mental health outpatients (Hughes et al 1986):
 - 88% among schizophrenics
 - 49% among depressed
- 76% of male users of soup kitchen (McDade & Keil, 1988)

Prevalence of Smoking among US Adults by Education (< 12th, ≥ 16th), 1966 – 2001



2001 Data: Centers for Disease Control & Prevention. Cigarette Smoking among Adults – United States, 2001. *MMWR* 2003 52: 953-956.

Lack of Awareness of Risk

- Among auto accidents, HIV, homicide, air pollution, and smoking
 - only 22% of adults rated smoking as #1 cause of death
 - only 17% among smokers(American Lung Assoc, Gallup Org, 1992)
- Among adults with diabetes
 - “I have diabetes, I don’t have to worry about cancer”
 - “Smoking helps keep my weight down”
 - But smoking increases risk of CVD, most likely cause of death among those with diabetes

How to Help People Quit Smoking

State-of-the-Art for Smoking Cessation

- Quit date
- Extinguish key cues prior to quitting
- Plan for coping with temptations to relapse
- Cooperation and encouragement from family and friends
- Continued follow-up and encouragement from professionals
- Relapse prevention/Renewed efforts
 - Average successful quitter has relapsed 2 - 4 times

RSSM	Possible Examples
Individualized Assessment	Smoking as a vital sign
Collaborative Goal-Setting	“5 A’s” (Assess, Advise, Agree, Assist, Arrange)
Skills for quitting and staying quit	ALA’s Freedom From Smoking ® ADA Materials and self-help manuals
Follow Up and Support	Support lines Attention in diabetes support groups
Community Resources	Understanding of importance by family, friends Clean indoor air regulations Media Attention
Continuity of Quality Clin Care	Rx for Zyban®, Nicotine replacement Follow up and referral

Individualized Assessment

Smoking as A Vital Sign in Encounter Form

Indicate Smoking Status

Never smoked (less than 100 in lifetime)

Ex-smoker

More than 2 years Less than 2 years

Smoker

Planning to quit in next month

May quit in next 6 months

No plan to quit

Collaborative Goal-Setting

“5 A’s”

1. Assess
2. Advise
3. Agree
4. Assist
5. Arrange

Assess Smoking

- Understanding of risks of smoking
- Check: Understand enormity of risk???
- Smoking patterns of family, friends
- Smoking, smoking related diseases, and alcohol abuse among parents, grandparents
- Previous and planned quit attempts

Advise to Quit

- **Precontemplation – Not thinking about quitting**
 - Quitting is most important thing can do to protect health – including diabetes management
 - Low-key re: risks
 - *Promise of help*
- **Contemplation – Maybe in next 6 months**
 - Pros (not Cons)
 - Emphasize doable
 - Overview of quitting

Advise to Quit #2

Tailor advice to:

Importance of quitting in diabetes

Previous answers

- If underestimate risk: enormity of risk
- If pessimistic: avg. quitter relapses 2 - 4 times, thus, “you can too”

Current symptoms

Lifespan phase (e.g., new parents)

Assist

- Emphasize doable
- Overview specifics of Action plan:
 - Step #1 — Set Quit Date
 - Step #2 — Using Medications
 - Step #3 — Staying Smoke Free
 - Plan for dealing with temptations
 - Recruit support and encouragement
 - Step #4 — Rehearse response to lapse
 - Lapse Paradox

Skills for Smoking Cessation

Skills

- Setting Quit Date – Individualized
- Coping with Temptations – Key is *specific* plans made *ahead of time* (Problem solving skills)
- Relapse prevention
 - Keeping lapses from becoming relapses
 - Avoiding lapses from premature sense of success
- Media Choices
 - Self help (video, web based, self-help manuals)
 - Groups – Freedom from Smoking®
 - Local Lung Association (white pages) for self-help and groups
 - 800 – 4 – CANCER for self-help materials
 - ADA – materials for smokers with diabetes

Follow Up and Support

Follow Up and Support -- Arrange Follow-Up

- Physician, staff member, volunteer, *Promotora*, CHW
- Phone, face-to-face, e-mail, web
- Timing
 - 24 - 48 hours post quit
 - 7 - 14 days
 - Ongoing prn
- Review:
 - Coping with temptations
 - Cooperation from others
 - Don't be undone by success

Community Resources

- Individuals are more likely to quit if norms in community support quitting
- Advertisements stimulate quitters' associations with smoking
 - Relaxing
 - Tough
 - Cool
 - Sexy
- Ongoing support from family and friends more likely in community that understands importance of not smoking

Neighbors for a Smoke Free North Side

Neighborhood and Peer-Based Promotion of
Nonsmoking

24-month program

Run through Grace Hill agency

Steering Committees in each Neighborhood

Diverse activities: mass media, door-to-door, self-
help manual, billboards

Local development of materials, e.g., local revision of
ALA brochure featuring neighborhood residents
and their quotations

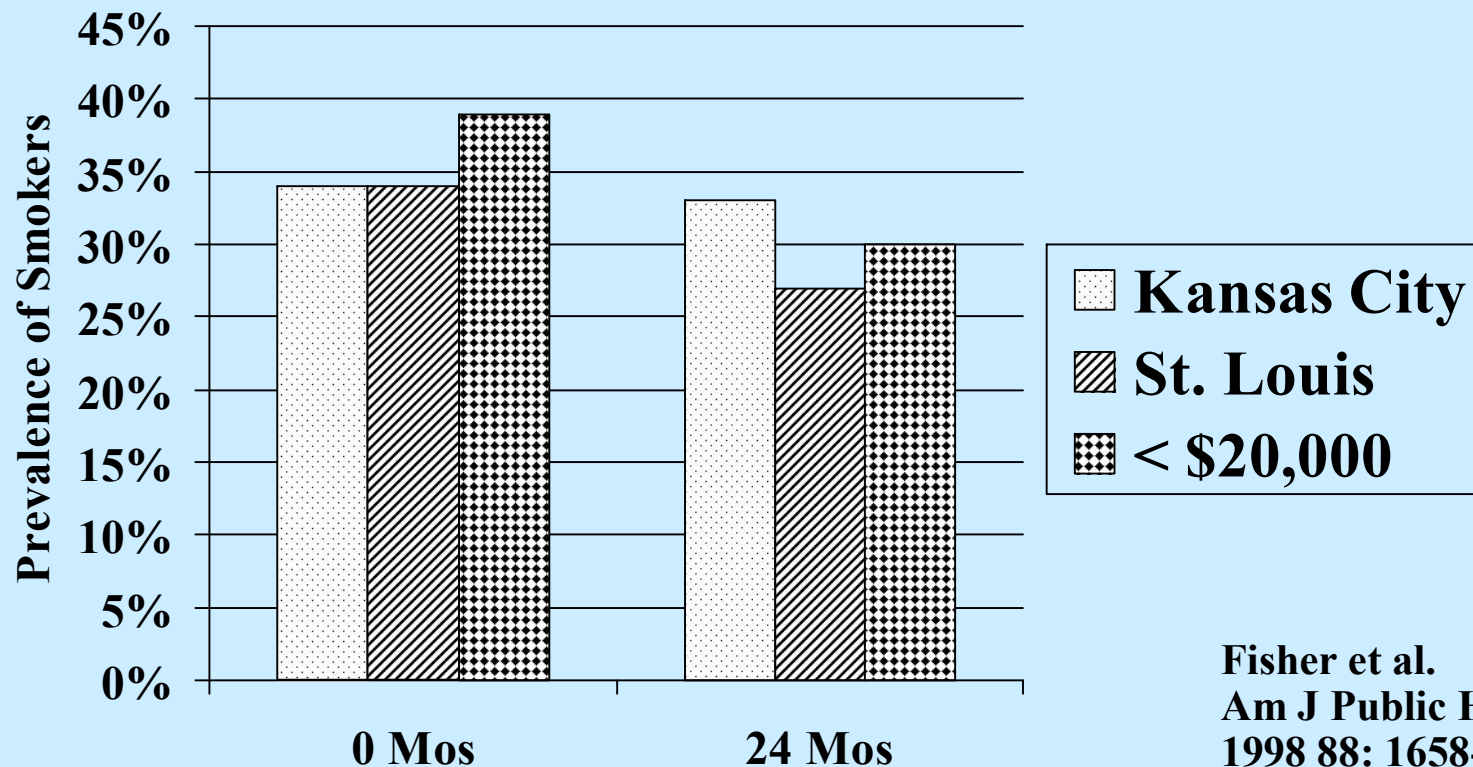
Neighborhood Tailoring of Intervention

- American Lung Association:
 - Brochure: *Don't Let Your Dreams Go Up in Smoke*
- Neighborhood Steering Committee:
 - *Don't Let Your Lives Go Up in Smoke*
 - Neighborhood residents and their own words
 - *“I took a look at the billboards in my neighborhood, especially near the schools. Guess what -- those smiling people pushing cigarettes were all Black. The tobacco companies are using Black people to sell their drugs to other Black people. What is going ON?”*

Neighbors for a Smoke Free North Side

Evaluation by random-digit surveys in

- Kansas City Comparison Neighborhoods
- St. Louis Intervention Neighborhoods
- St. Louis < \$20,000 Annual Income



Fisher et al.
Am J Public Hlth
1998 88: 1658-1663

Continuity of Quality Clinical Care

Zyban® very similar to Welbutrin®

- Antidepressant mimics nicotine in the brain
- Not limited to those who are depressed
- May “uncover” depression – individual switches from Nicotine for depression to Zyban®

Nicotine Replacement

- Gum, patches OTC
- Inhaler by Rx

Ongoing Follow Up

- Should continue to praise and assess for many years

Population Approaches

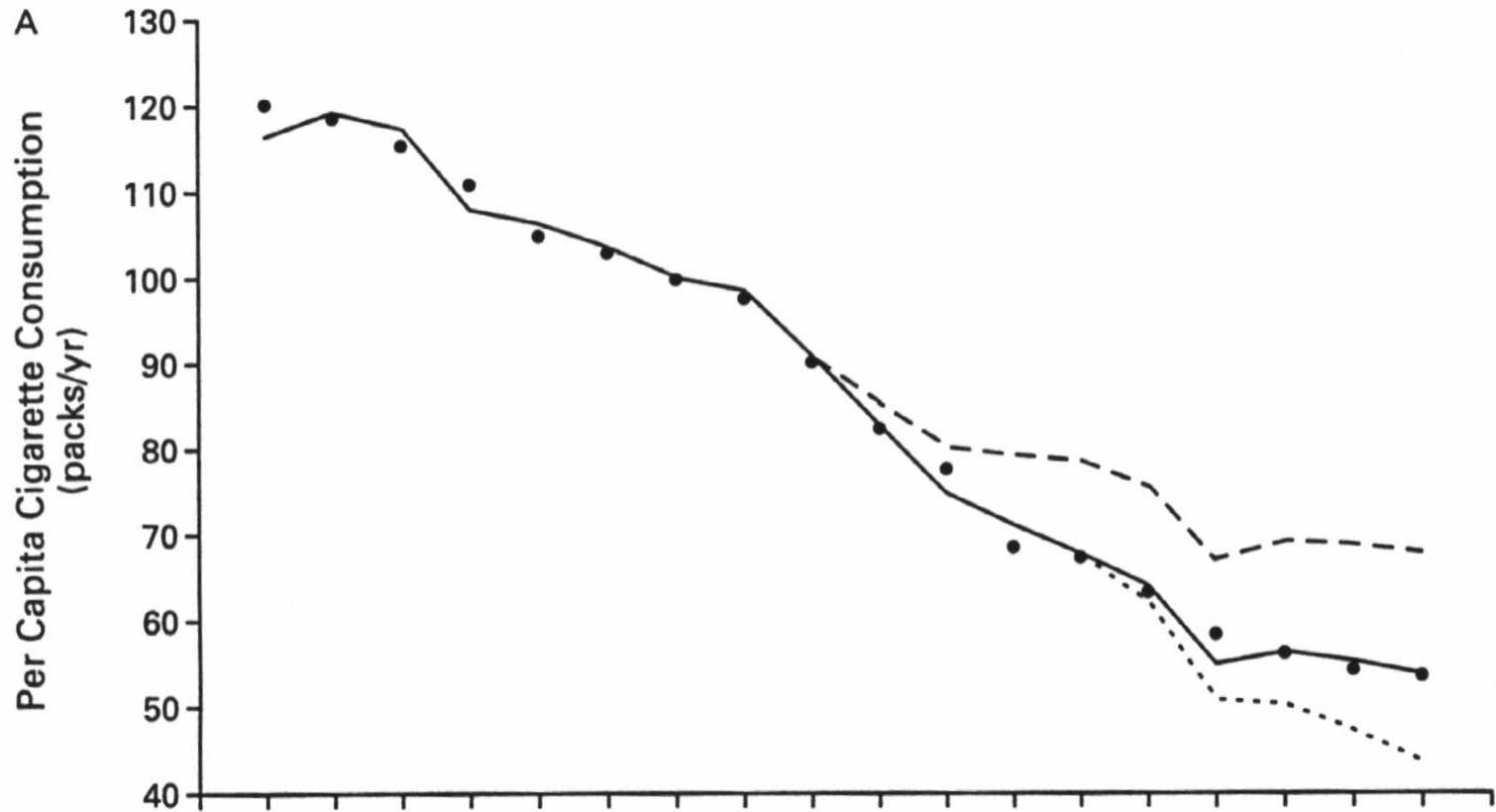
Key Fact in Smoking

- No intervention is successful with 50% of those to whom applied
- Approximately 50% of adult, regular smokers in US have quit
- Average successful quitter has failed 2 - 4 times
- *Aggregate of multiple interventions*

Population Approaches

- Taxation
- Public education and counter-marketing
- Community based coalitions
- Services for smoking cessation
- Smoking prevention aimed at youth
- Multicultural programs

Effects of California Campaign on Consumption

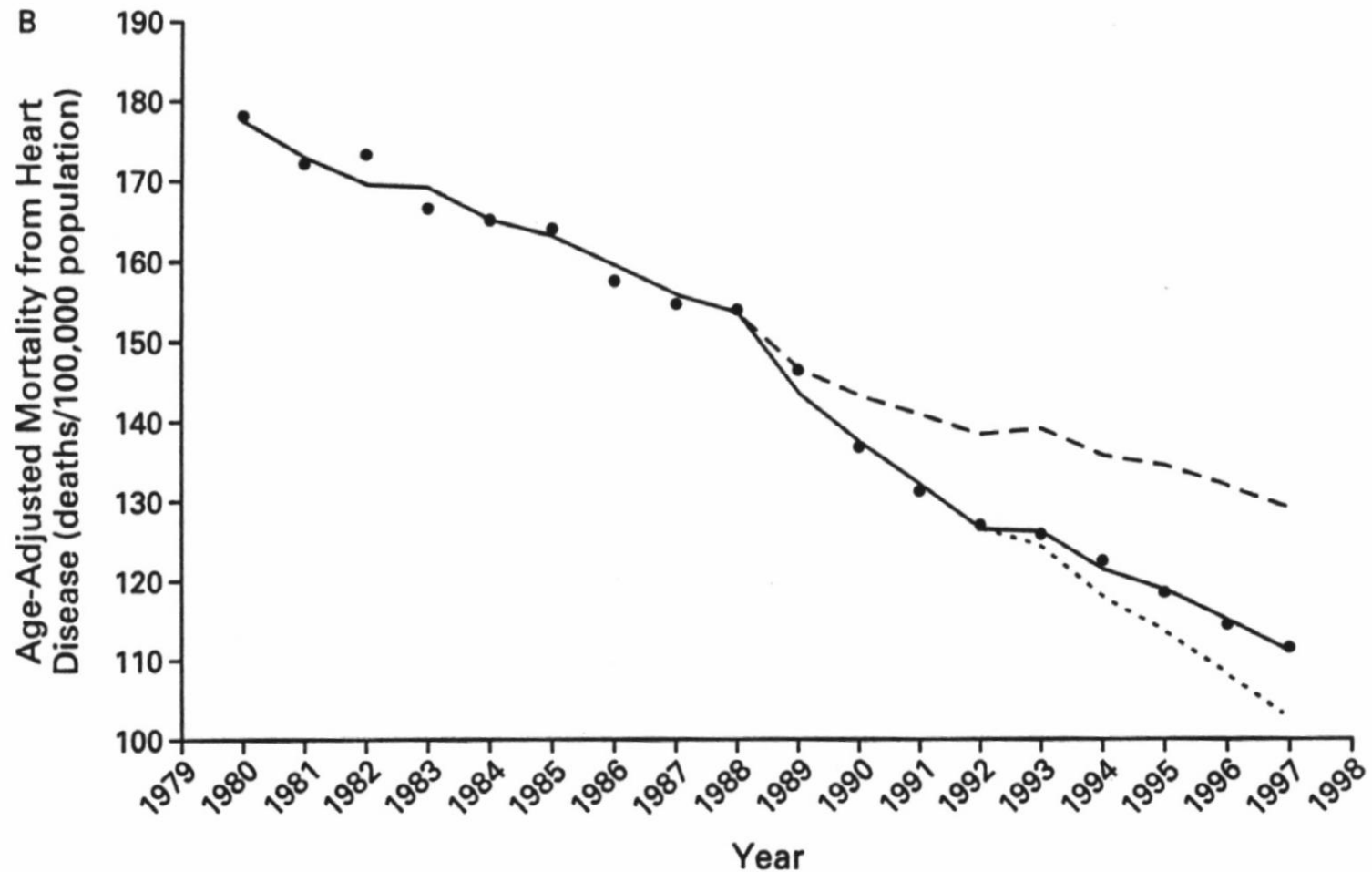


Solid line = actual

Dashed line = projected on basis of trends in other states

Dotted = projected if no trimming of program in 1992

Effects of California Campaign on CVD Mortality



Solid line = actual

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