Promoting Healthy Diets and Active Lives to Hard-to-Reach Groups: Market Research Study

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Synopsis

Continued progress over the next decade in reducing premature morbidity and mortality from chronic disease will require that health communication efforts target a significant proportion of the American public that has not been influenced by the health promotion efforts of the 1980s. Focus groups conducted with members of the hard-to-reach American public showed that while being healthy seemed to be important to participants, and they were generally aware of what to do to stay healthy, they had a different operational definition of health than that used in health promotion programs. Participants seemed to believe that better health behaviors would build their resistance to acute illnesses, that is, keep them healthy, but that chronic diseases, such as cancer and diabetes, were due to fate and heredity and beyond their individual control.

The focus group results show that participants had not made the link between chronic disease prevention and the importance of diet, exercise, and weight control. Although most of them seemed to express a genuine interest in "doing better," they were not able to supply more than superficial examples of how such changes might be made. Surprisingly, there were more similarities than differences in participants' attitudes and beliefs, with the similarities cutting across boundaries of race-ethnicity, age, and sex. Interest in changing behaviors was only slightly more pronounced among female rather than male, and older rather than younger, participants. However, there was not much evidence from the participants that they were actively seeking health information or trying to reconcile conflicting knowledge and beliefs.

SUBSTANTIAL IMPROVEMENTS have been made in the nation's health profile since the first Surgeon General's report on health promotion and disease prevention, "Healthy People," was released in 1979 (*1*). But the gains have not been universal. As we look ahead to setting new goals and objectives for the year 2000, a special emphasis will be given to improving the health status of special populations who experience significantly higher disease rates and higher levels of risk than the general population (*2*).

To help guide future outreach efforts to these high risk populations, the Office of Disease Prevention and Health Promotion of the Public Health Service undertook a market research study to better understand how members of the hard-to-reach American public perceive health and the role of three of the key behavioral risk factors—diet, exercise, and weight control—in preventing or controlling certain chronic diseases.

Background

In 1984, an expert panel was convened at the Carter Center in Atlanta, GA, to provide direction for "Closing the Gap" of suffering, disability, and illness in the United States. The panel concluded that the burden of premature death in the United States is large and, in large measure, preventable. In fact, just three risk factors accounted for nearly three-quarters of premature deaths: smoking, high blood pressure, and "overnutrition" (*3*). In 1985, the Secretary's Task Force on Black and Minority Health identified six leading causes of death that together account for more than 80 percent of the excess mortality of blacks and other minority groups as compared with whites: cancer, cardiovascular disease and stroke, chemical dependency, diabetes, homicide and accidents, and infant mortality (*4*). All are associated with behavioral risk factors. Health promotion programs, therefore, are predicated on changing risk factors as a means for improving health status.

Diet. A scientific consensus on the relationship between diet and chronic disease has emerged. To reduce disease risks, scientific panels emphasize the importance of a low fat and cholesterol diet that can be achieved through an increase in the intake of fruits and vegetables, complex carbohydrates, and fiber and a decrease in the

Table 1. Percentage of the U.S. population following current dietary recommendations

Recommendation[1]	Daily practice
Reduce fat intake to 30 percent or less of calories	37 percent for women, 36 percent for men, reference *9*.
Consume less than 300 mg. of dietary cholesterol.	435 mg. for men, 304 mg. for women, reference *9*.
Carbohydrates should be 55 percent or more of calories.	46 percent for women, 45 percent for men, reference *9*.
Eat 20–30 grams of fiber daily.[2]	12 grams for women, 18 grams for men, reference *9*.
Eat 5 or more servings of fruit and vegetables daily.	51 percent eat at least 1 garden vegetable (other than potato or salad) 59 percent eat at least 1 fruit, reference *10*.
Eat 6 or more servings of breads, grains, and cereals daily.	Data not available.

[1]Recommendations from the National Research Council's "Diet and Health" report (reference *6*) unless noted.

[2]National Cancer Institute, 1986. (reference *8*).

intake of fatty foods. Recommendations for the public also include limiting sugar, alcohol, and salt consumption (*5–8*).

Some pertinent data summarizing Americans' compliance with current dietary recommendations are shown in table 1. Although the National Research Council reports that well-educated and high-income people seem to be changing their diets to follow public health recommendations (*6*), data shown in table 1 indicate that, for the nation, no dietary recommendation is fully achieved.

Exercise. The current science base suggests that encouraging Americans to increase their level of physical activity and gain the subsequent health benefits is a sensible public health strategy. In fact, increasing evidence suggests that moderate physical activity, below the level recommended for cardiorespiratory fitness, can have significant health benefits, including a decreased risk of coronary heart disease. Small differences in the physical activity level among the most inactive populations are associated with the largest magnitudes of risk reduction. Thus the sedentary and least physically active segments of our population are likely to benefit most from becoming physically active (*11, 12*).

What is less clear, however, is how to get people to become active and stay active to accrue those benefits. Unfortunately, few Americans engage in regular physical activity despite the potential benefits. Less than 10 percent of the U.S. adult population exercises at the level recommended by the 1990 objectives: "exercise which involves large muscle groups in dynamic movement for periods of 20 minutes or longer." Less than half of the adult population exercises for the recommended time period at any level of intensity. The prevalence of physical inactivity increases as people get older, is slightly higher among women than men, and varies according to race, educational level, occupational status, and geographic location (*13*).

Table 2. Percentage of the U.S. population that is overweight, by sex and race-ethnicity

Race-ethnicity	Percent overweight
White:[1]	
Males	24.4
Females	24.6
Black:[1]	
Males	26.3
Females	45.1
Mexican-American:[2]	
Males	19.6
Females	39.1
Cuban:[2]	
Males	29.4
Females	34.1
Puerto Rican:[2]	
Males	25.2
Females	37.3

[1]Date from the National Health and Nutrition Examination Survey II 1976–80.
[2]Data from the Hispanic Health and Nutrition Examination Survey, 1982–84.

Weight control. Scientific panels concur on the importance of maintaining desirable weight as a means of controlling risks for chronic diseases. Striking a balance between energy taken in through food and energy expended through physical activity is the recommended means of maintaining a healthy body weight (*5, 6, 14*). However, for many Americans, the idea of maintaining body weight is closely associated with "going on a diet" to lose weight. In fact, in the Simmons Study of Media and Markets, 21.6 percent of adults stated they were on diets to lose weight. Controlling weight for health reasons was mentioned much less frequently with 5.4 percent controlling for cholesterol, 3.7 percent hypertension, and 2.1 percent diabetes (unpublished data from the Office of Disease Prevention and Health Promotion).

As can be seen in table 2, being overweight is prevalent in the United States, especially among black and Hispanic women.

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Methods

While the epidemiologic evidence linking mortality rates to preventable causes of diseases is essential to understand the potential of health promotion, these facts are not sufficient to persuade many people to change their health habits. It is unclear to what extent the public grasps these relationships and knows how to translate them into healthy lifestyle practices.

The term "hard-to-reach" was employed broadly in this market research study to apply to members of that segment of the general adult population whose diet, exercise, and weight control behaviors place them at increased risk of certain chronic diseases and for whom that increased risk is reflected in higher rates of disease and premature mortality. An issue, inherent in such an investigation, is to what extent members of this population have already been "reached" with health information and, if they have, why they have not acted upon this information.

Market research is becoming increasingly popular in health promotion because it provides a means of reaching beyond the knowledge and practices reported in surveys and leads to a better understanding of what might cause people to change. Focus groups, in particular, are useful for probing such things as fundamental beliefs, values, tastes, and emotions.

A market research design using focus group discussions was the approach used for this study. A literature review and target audience analysis established the burden of suffering associated with poor diet, exercise, and weight control behaviors, and identified the high-risk segments of the population who experience a disparity with the general population in both health status and health practice related to these three risk factors. This information was used to define the population for the focus group discussions: white, black, and Hispanic men and women, ages 25 to 64, with 12 or fewer years of education, and a family income that falls below the median but above poverty. (Limited resources precluded the inclusion of Asian-Pacific Islanders and other groups.)

A focus group plan was designed to answer the following questions:

- Where does health rank among other life priorities for this population?
- How is health perceived?
- What link, if any, is made between chronic diseases and diet, exercise, and weight control?
- What are the knowledge, attitudes, and practices of this population with respect to the three topic areas?
- Where is more information needed?
- How willing is this population to change behavior to improve health?

The objectives of the focus group discussions were to explore whether these concerns varied on the basis of age (25–45 years, 45–65 years), race or ethnicity, sex, weight, or geographic location.

While focus groups are a valuable research technique, it is important to point out their limitations. Focus groups, as a qualitative research method, do not utilize scientific sampling procedures, and the results cannot be generalized to the population. A market research firm recruited participants using a screening questionnaire which was based on selection criteria related to the demographic characteristics identified previously. Since no assumptions can be made about the representative nature of the sample, focus group findings need to be interpreted carefully.

Twenty-four focus groups, with approximately nine participants each, were held in nine cities across the country: Baltimore, MD; Philadelphia, PA; Miami, FL; Chicago, IL; New York City, NY; San Jose, CA; Oakland, CA; San Antonio, TX; and Richmond, VA. Eight focus groups were conducted for each of the three racial-ethnic populations: black, white, and Hispanic (two Cuban, four Mexican American, and two Puerto Rican). Groups were further segregated by age, sex, and level of income. A mix of overweight, average weight, and underweight persons were recruited for each group so that at least half of each group were people who reported that they considered themselves overweight. The last four focus groups held were asked to respond to several communication concepts about diet and exercise.

Results

Being healthy seemed to be important to members of the focus groups, and they seemed to have a general awareness of what to do to stay healthy. Furthermore,

Table 3. Ranking of 16 priorities by whites, blacks, and Hispanics who were focus group participants

Priority	Whites		Blacks		Hispanics	
	Males	Females	Males	Females	Males	Females
Being healthy	1	1	[1]2	2	1	2
Being happy with my life	2	2	[1]2	3	[1]4	4
Being happy with my family	3	3	3	4	2	3
Having a good love life	4	10	[1]8	6	5	[1]10
Having enough money	5	7	5	5	14	14
Making and keeping good friends	6	4	12	[1]11	12	7
Enjoying my free time	7	9	[1]11	[1]11	11	11
Being close to God	[1]8	5	1	1	3	1
Getting along with others	[1]8	6	[1]11	12	10	8
Enjoying my job	9	13	[1]8	9	8	9
Having a good job	10	12	4	[1]8	6	6
Living a long time	11	15	7	10	9	12
A good education for my kids	12	8	6	[1]8	[1]4	5
Looking good	13	14	9	7	[1]4	[1]10
Becoming rich	14	16	10	14	13	15
Having kids	15	11	13	13	7	13

[1]*Tied.

except for a few who made it clear that they preferred the status quo, most participants seemed to express a genuine interest in "doing better." This interest seemed to cut across racial and ethnic boundaries, but it was slightly more pronounced with female rather than male, and older rather than younger, participants. And most people had a good sense of what direction "doing better" should take. The chasm between awareness and practice, however, suggests that the link has not been made as to why diet, exercise, and weight control are important to disease prevention, nor how to really *do* the right things.

Perceptions of health. Participants were presented with 16 life priorities and asked to rank them in order of personal importance. The results of this process are shown in table 3 for white, black, and Hispanic men and women. In many ways, the focus group participants were remarkably similar in their responses, with all groups counting "being healthy" among their top three priorities, along with "being happy with my family." All agreed too that health and family happiness were more important than items such as "looking good," "becoming rich" or "living a long time."

Some revealing differences also appeared. Among black men and women and Hispanic women, "being close to God" was the first priority. They felt that "... He is the start of everything. If we want money, health, we need to be close to Him." Hispanic men selected health, family happiness, and closeness to God as their top priorities, stated that "being healthy" was a personal priority since health was necessary for them to fulfill their role as family provider and caretaker. White men and women selected health, family happiness, and "being happy with my life" as top priorities.

The meaning of health and sickness. Among all focus group participants, "health" incorporated more than physical well-being. "Health" also included mental and, for some, spiritual well-being. Many examples were shared of persons who suffered from chronic conditions but were thought to be "healthy" because of a positive outlook or attitude. To participants, "sickness" meant not being able to function or having to be dependent on others. Some participants, mostly men, included conditions such as alcohol or drug addiction in their definition of sickness, and Hispanic participants mentioned feelings of sadness or unhappiness.

Health behavior linked to sickness. In the view of focus group participants, health behaviors were followed to avoid communicable illnesses, such as colds or the flu. Such behaviors often reported were eating right, getting enough rest, getting fresh air, and drinking water. Upon closer examination, even the specifics of eating right, such as low-fat diets, were related by participants to the general notion of building "resistance" and not "catching something."

Disease linked to fate and heredity. While participants stated that they felt they could exert some control over not becoming sick, they felt chronic diseases were outside their control because they were associated with heredity and fate.

> Like diabetes is a disease, but it's inherited—it's genetic. I think 'disease' is something you have no control over, like cancer is another example.

> One can maintain themselves, stay healthy all their lives, but if you're going to get a disease, it's inevitable.

'When discussing what it would take to change their practices, participants wanted to have very specific, personalized instructions that they could fit neatly into their lifestyles. Suggested ideas for programs emerging from the focus groups discussions included groups similar to Alcoholics Anonymous that could offer free, unconditional support . . .'

> I have seen people who have taken very good care of their lives get cancer and die. I have seen people abuse their bodies and live longer than my parents (who died). So I think we have less control.

Health behaviors not linked to disease prevention. Healthy behavior were not linked, in the minds of most participants, to avoiding chronic diseases since such diseases were viewed as largely uncontrollable. Nor were such behaviors generally linked to indicators of health status. For example, several obviously overweight participants proudly stated that doctors had given them a "clean bill of health," and one participant succinctly stated, "I'm healthy, but I'm not physically fit."

So, although participants correctly grasped that all diseases cannot be avoided through healthy behavior, they did not seem to understand the potential role that diet, exercise, and other healthy behaviors can play in reducing risk for disease or improving the management of chronic conditions.

Beliefs juxtaposed to the facts. When some participants were asked to respond to an educational concept that linked healthy behaviors to reduced chances of chronic diseases, it was viewed as "old news"—even when they had not raised such relationships in the previous discussion. It would seem that, even though they professed the knowledge, it was not being reconciled with the strongly held belief that disease is largely outside personal control.

Eating habits of focus group participants. Among the 202 focus group participants, only a few prepared and ate the traditional three meals a day. Instead, participants reported eating on the run, snacking, and families eating in "shifts."

Skipping breakfast. When asked what they ate on a typical day, many participants said, "I skip breakfast," but actually they meant that they did not sit down to a meal at home. Instead, breakfast consisted of coffee, doughnuts, soda pop, and cookies bought at convenience stores, fast food restaurants, or lunch wagons and snack bars at work.

Lunch, junk, and fast food. Sandwiches were the favorite choice for lunch, with participants in four focus groups reporting doughnuts were their lunchtime favorite. Nearly all reported a love of what they called junk food.

> I like a lot of junk foods, for example, potato chips, M&Ms, I like all that stuff . . . for lunch I eat a pastry.
>
> I get up every morning about 6:30 and stop at a restaurant on the way to work and get pop, cookies, doughnuts, whatever . . . eat junk from 7:30 in the morning till noon, then I have lunch.
>
> I like pizza for lunch, with maybe a milk shake, large fries, and a couple of other snacks.

Eating on weekends. Focus group participants reported that, for many, weekends brought changes in eating habits. The change reported most often was eating a bigger, "sit down" breakfast with family. Among blacks and Hispanics, eating Sunday dinner with relatives is still an important tradition.

Superficial awareness of healthy diet includes misconceptions. While participants were able to cite the appropriate dietary "buzz words," such as fiber and oat bran or low fat and skinless chicken, they held a number of misconceptions associated with diet. For example, participants referred to good and bad cholesterol as something they thought was found in food. Commercial health claims add to confusion. Furthermore, participants were confused and skeptical about health claims made about certain food products on television commercials. Examples from advertising were regularly cited to support the perception that "healthy" food is more expensive food. Prominently mentioned were the heavily advertised cereals that are "high fiber with nuts and raisins," but at "$4.50 a box" are much more costly than "plain old" cereal.

Understanding current dietary recommendations. Participants in two focus groups of black women and two of white men were asked to respond to rough concepts of educational materials intended to illustrate a healthy diet. First, participants were asked what they should eat every day to consume a healthy diet. All were quite vague on this point and, when pressed,

spoke in terms of eating something from each of the four food groups. Though this concept is viewed by nutritionists as inadequate to explain current dietary recommendations, it was the only framework available to these focus group participants.

Alternative ways to present a healthy diet. The participants were shown two different approaches to conveying information on the dietary recommendations. The New American Diet concept showed a variety of foods in the approximate proportion that is recommended and was described as follows: "The New American Diet is low fat, high fiber. Every day eat 5 or 6 ½-cup servings of fruit and vegetables; six or more servings of whole grain breads, cereals, and legumes; about 6 oz. of protein for 150 lb. person; and low fat dairy products for calcium." The second approach used pictures of healthy main dishes, snacks, and beverages on one side and their unhealthy counterparts on the other crossed out by the international "no" symbol. No words were used on this "yes/no" chart.

Virtually all the participants preferred the New American Diet concept saying that it not only shows what foods to eat but makes clear the approximate quantity of what should be eaten. They were able to associate what they saw to what they were currently eating.

> Tells me I'm not getting enough fiber, getting too much protein.
>
> It tells me I don't eat enough vegetables right now.
>
> "I eat about three of those things once a week."

Black women found the information believable and most thought the eating pattern was achievable. White men found it believable, but thought it might be difficult to follow because of their own food preferences or because of limited food choices at work. Most participants through it looked affordable.

> Meat is expensive and I could eat a lot cheaper by eating more fruits and vegetables.
>
> Looks like we should be able to afford to eat like that.

Reactions to the "yes/no" chart were more likely to tap into guilty feelings about foods that are enjoyed, raise concerns about how hard it would be to achieve, and made participants feel it was meant for someone else, such as a "health nut," rather than themselves. White men again cited the ready availability to them of the "no" foods in the convenience stores and snack bars where they eat during their work day.

Physical activity patterns of participants. The physical activity patterns reported by focus group participants were consistent with what would be expected from the epidemiologic data, that is, they were largely sedentary. Reading, visiting with friends, and watching television were popular pastimes. In general, most participants felt that they got adequate exercise through daily activities, either at home or at work.

> I don't sit down very much. I carry the laundry to and from the house, or I walk around the house carrying the kids.
>
> I probably get most of my exercise from my job, because I do a lot of sheetrock work, along with painting, and that's really physical.

Black and Puerto Rican men of all ages reported more sports activities than other focus group participants. Similarly, participants in California, Texas, and Florida seemed to get more physical activity, both planned and incidental, than their counterparts in colder climates. However, several older Cuban women in Miami reported that they gained weight when they moved to the United States because they walk less.

Exercise equals sweat. Exercise generally meant higher levels of physical activity to focus group participants and was highly associated with calisthenics, health clubs, gyms, exercise equipment, and sweat. Lower levels of physical activity, such as walking, were seldom reported as exercise except by some older, female participants. Overall, there seemed to be confusion over what was and was not exercise.

Many barriers to exercise. Participants consistently cited the lack of time and money as barriers to exercise. It seemed that most felt that any efforts to be more active would be made with disbelief or only grudging support from family.

> Eating habits would go over fine. Exercise would go over like a lead balloon ... my husband likes the sofa too much.

In addition, older participants acknowledged that they became less active over time.

> A few years back I played basketball but I stopped as the ball got faster and I got slower.

Benefits of exercise. Participants in four focus groups, which included black women and white men, were asked to respond to 10 statements about exercise. Participants in all groups selected: exercise makes me feel

better, exercise makes me look good, and exercise is boring. They indicated that knowing what exercises were safe and "for them" would be important.

Perceptions about weight control and health. As mentioned previously, there was a mix of participants in each group who considered themselves heavier than average, about average, and thinner than average. Weight was mostly associated with personal attractiveness. The primary health impact of weight control reported by participants was the generally vague perspective that they felt better when they weighted less. It seemed hard for most participants to separate notions of weight from their perception of health in general, that is, if they couldn't see or feel anything wrong, then they were healthy.

> It's alright for me to be fat just so long as I don't smoke.
>
> Nobody's ever told me that if I lost weight I would be healthier because there is nothing that they can find in any of my physicals that says there is anything wrong with me ... my doctor says 'you might feel better and have more energy' ... but I have all the energy I need.

Hispanics, however, did link weight control to diabetes, and several black male participants reported that weight control could be used to control high blood pressure.

Views about ways to lose weight. When focus group participants were asked to advise a friend about weight loss, they were able to come up with may reasons for doing so, such as, looking prettier or more handsome, going out more, feeling better, but were at a loss to provide concrete, sound weight loss advice. The proffered advice, such as "cut out sweets," "drink water," "go vegetarian," "don't lay down after a meal," "don't eat late at night," did not convey the connection between diet and physical activity that is recommended for weight control. Participants were not able to give examples of friends or acquaintances successfully controlling weight and did not seem to have a good grasp on how to manage these behaviors in their own lives. Diet programs advertised on television were mentioned frequently, although usually rejected by participants as costly and ineffective.

Family support for weight loss. For the most part, men in the focus groups felt their wives would support and join them in their weight loss attempts. However, several Hispanic men noted their wives or girlfriends would be suspicious of weight loss and would believe they were trying to make themselves attractive for another woman. Men also stated they would be very supportive of the weight loss attempts of women in their lives.

The women had a slightly different view. White and black women felt they might get some verbal and emotional support, but would not be able to get husbands to join them in diet and exercise habits. Some have had their efforts sabotaged with their husbands being supportive "until I put on that cute little dress he doesn't want me to wear" or expressing concern that "my resistance would go down" and "I would catch everything." Hispanic women said their husbands almost always would support and participate in their weight loss efforts.

Discussion

The health messages of the past decade appear not to have shaken the deeply held belief of the hard-to-reach Americans in the focus groups that chronic diseases such as heart disease, cancer, and diabetes are largely due to fate and heredity and, therefore, are beyond one's individual control. The focus group results suggest that any health promotion effort aimed at this population needs to acknowledge the interplay of biological risk factors, such as family history, with behavioral risk factors, that is, diet, exercise, and weight control, in the design of health messages. In the words of an older woman in San Jose, one of the few participants who seemed to grasp the concept that is so central to health promotion, "If you know your family has a history of heart disease, then you have the opportunity to maybe control your life by not eating fatty foods."

The focus group results also suggest that members were interested in doing the right things and staying healthy, accompanied by a certain amount of frustration at not knowing what's right for them, how to do it, and how to integrate such changes into their daily lives. People were making some efforts, but there was not much evidence that they were actively seeking health information or trying to reconcile conflicting messages.

More similarities than differences were apparent in the participants' attitudes and beliefs about health, their reported behaviors and practices, and their perceptions about the link of healthy behavior to the prevention of chronic disease. However, further segmentation of the study population for communication strategies could be indicated from the research, based on age, sex, or racial and ethnic variables.

When discussing what it would take to change their practices, participants wanted to have very specific, personalized instructions that they could fit neatly into their lifestyles. Suggested ideas for programs emerging from the focus groups' discussions included groups similar to

Alcoholics Anonymous that could offer free, unconditional support, and the Tupperware model, that would dispense recipes and cooking demonstrations to people in their own living rooms.

In addition to the broad findings discussed in this paper, the focus group results yielded clear implications for health messages, including the following:

- Specific information needs to be presented about how the risk of chronic disease can be reduced, even if people have a family history that puts them at high risk;
- Presenting information about what ought to be eaten, rather than what should be avoided, is more appealing to people;
- The lack of a clear public health recommendation on the appropriate amount of physical activity is reflected in the lack of understanding or attention given to exercise by the public;
- Most people, especially women, do not consider the role of exercise in weight control;
- Programming needs to be personalized, supportive, and skills-based for this population.

Expanding the reach of health promotion efforts will require a response to the informational and motivational challenges posed by this population. An additional challenge will be how well we are able to address the context in which health information is received. An older man in Oakland summed it up when he identified "education and environment" as the two critical factors to making changes. The people we talked to cited their families, their jobs, and the neighborhoods where they lived both as supports and barriers to healthy changes. If health communication efforts are to have a sustained impact, then a unified approach should be taken that reinforces sound choices, making a healthy diet and active lifestyle the norm for the 1990s.

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