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INSIDE

PATH TO FITNESS

A $200,000 collaboration to encourage teens, especially at-risk minorities to keep their "feet moving, up and down, up and down" to reduce the long-term risk of heart disease has just began at Hillcrest High School. Page 2.

Newsday / Donna Dietrich

Paul Fardy oversees a workout in the Hillcrest High School gym.

Getting a Workout at School

High schoolers learn importance of fitness

By Zachary Margulis

"Keep your feet moving, up and down, up and down, that's it," Katie Haltiwanger chants to her aerobics students as rock music blares. In the next room, people pump weight machines, ride exercise bikes and stretch for the next round. It might look like Jack LaLanne, but it's really Hillcrest High School.

Haltiwanger is one of 13 research assistants working on a just-started $200,000-collaboration between Queens College and the Jamaica school to reduce the long-term risk of heart disease for high school students, especially at-risk minorities, through a five-day-a-week program of exercise and classroom education.

Kids in the program, called Physical Activity and Teenage Health, do about 22 minutes of exercise and get about 10 minutes of classroom instruction every school day.

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With close supervision, a relaxed fitness-club atmosphere and blaring music, the kids are eating it up.

"You get a good workout," says Otis Blount, a junior who also runs track. "You go home sore."

But the real reason for the project is an academic study masterminded by Queens College Professor Paul Fardy.

The idea grew out of a concern over teen health shared by Fardy, a physical education professor, and Kevin McDermott, Hillcrest High's assistant principal.

Fardy especially wanted to focus on fixing poor health care and improving knowledge about health-related issues among minorities.

"The statistics were so alarming and Hillcrest was a perfect microcosm for the school system," McDermott says. "Dr. Fardy does all the scientific stuff and I make it happen."

About 80 percent of Hillcrest's students are racial or ethnic minorities, according to principal Nicholas Coletto.

The research will study the effect of the PATH program on kids' health. Fardy and his team from Queens College have tested incoming students for cholesterol levels, body fat, blood pressure and health knowledge. Then they divided the group into two subgroups of about 300 kids each. One will be the "control group," which will go through regular physical education classes. The other kids will go through the PATH program.

Each year, both groups will be tested again and the results will be compared.

Results from a pilot study with just 80 participants last year showed significant reductions in cholesterol and better eating and fitness habits. In this year's program, however, there is more intensive exercise and less classroom time, Fardy says.

If the study shows continuing success, Fardy hopes PATH will be a model for programs in New York City and perhaps nationwide. Though the federal government has not provided any grant money, the U.S. Office of Minority Health, part of the Department of Health and Human Services, has provided technical support.

In addition, the President's Council on Physical Fitness helped arrange the donations of exercise machines from private sources, McDermott says.

Very little research exists on adolescent minority health; the study will break new ground in that area, Fardy says. Furthermore, no one has tracked cardiovascular indicators from adolescence to adulthood.

"The long-term nature of the program is unique in the nation," says Teui Doong, an Office of Minority Health official based in Washington, who flew into Queens for a demonstration of PATH.

"We have snapshots, but nothing comprehensive over time," Fardy adds.

Past studies have shown that people living in socially and economically disadvantaged neighborhoods like Jamaica face more health risk factors, from subtle ones like alcohol and tobacco advertising to overt abuse and street violence, Fardy said. In addition, adolescence, while little studied, is an important stage of development.

"We felt it was a particularly relevant time to make choices that influence long-term lifestyle," Fardy says.

In the short term, the students are getting hooked on fitness. They love the fancy machines — and some parents even want to set up a health club at night, according to principal Coletto.

"I go to Lucille Roberts [health club], but I get much more from doing this," says Jade Howard, a 16-year-old junior, as she heads for the locker room.

Zachary Margulis is a free-lance writer.

Newsday / Donna Dietrich

Paul Fardy oversees a workout in the Hillcrest High School gym. Fardy hopes the teens in his program will learn better eating habits and be healthier.

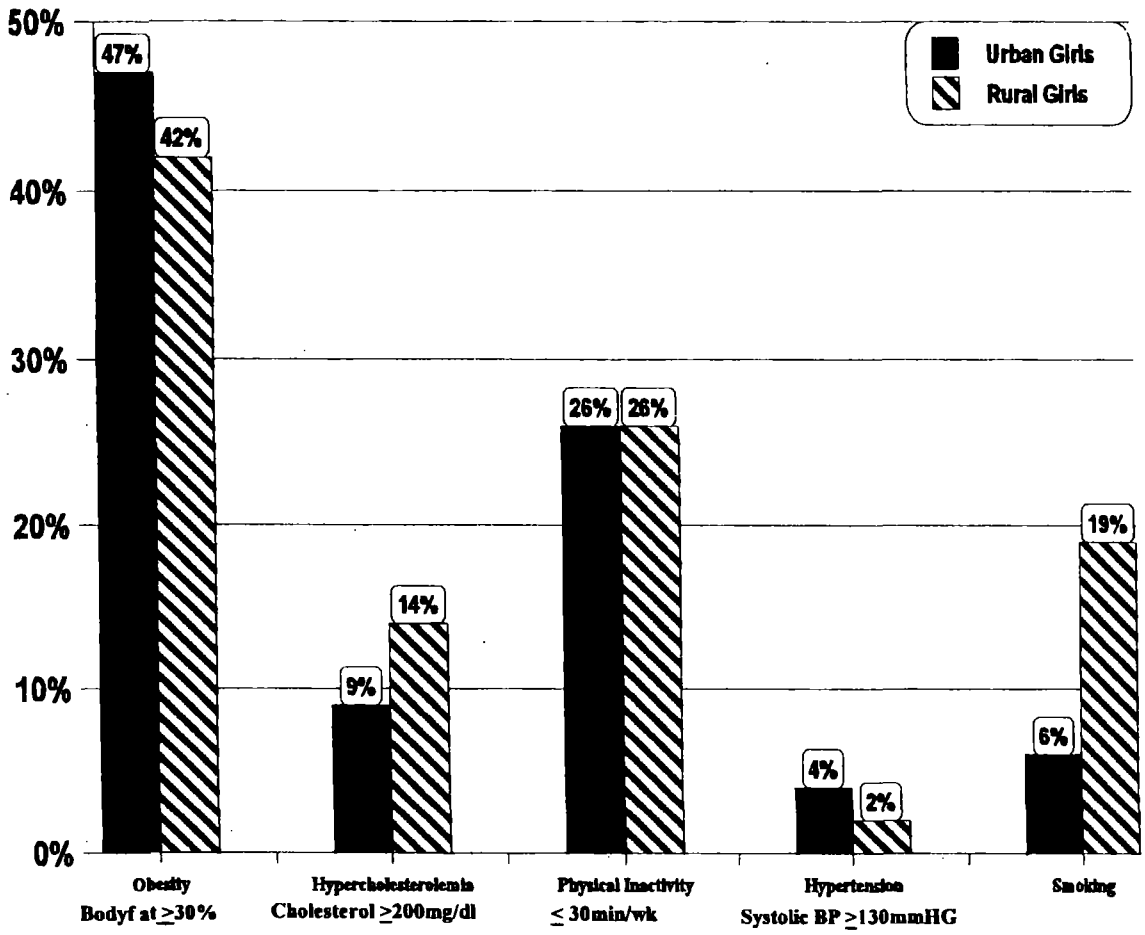

Figure 1. **Comparison of Elevated Risk Factors - Girls**

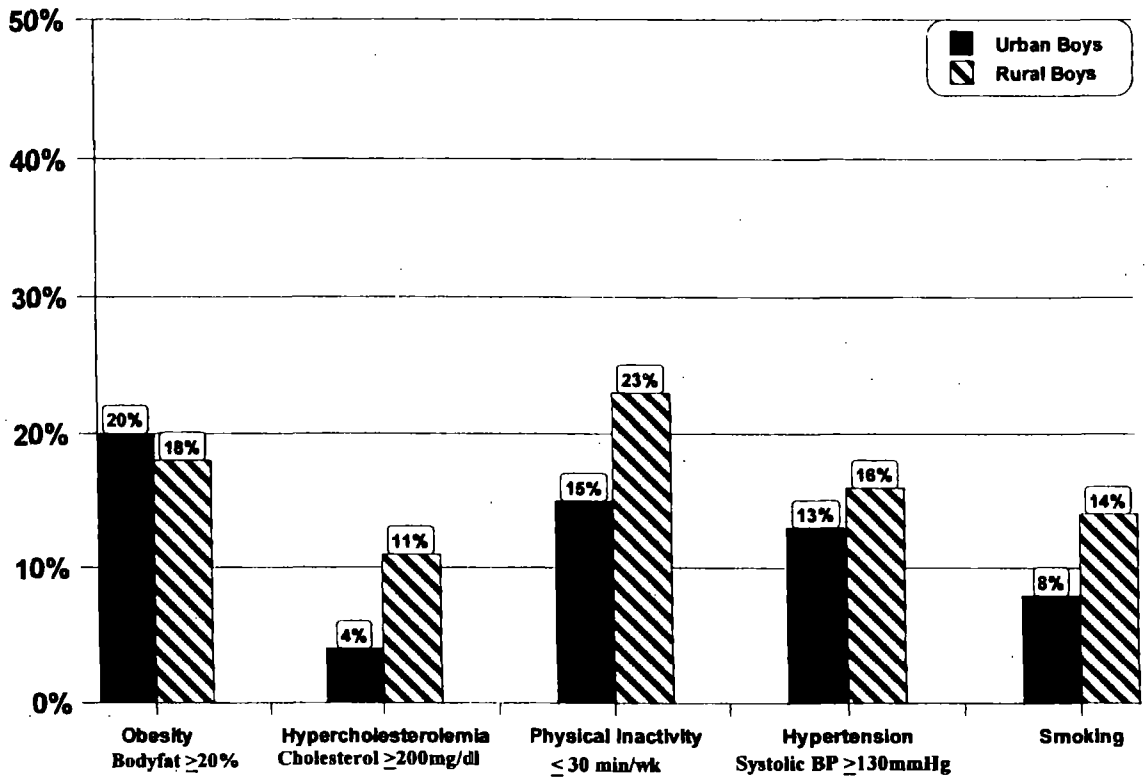

Figure 2. **Comparison of Elevated Risk Factors - Boys**

ORIGINAL CONTRIBUTION

Ethnic Variation in Cardiovascular Disease Risk Factors Among Children and Young Adults

Findings From the Third National Health and Nutrition Examination Survey, 1988-1994

Marilyn A. Winkleby, PhD, MPH
Thomas N. Robinson, MD, MPH
Jan Sundquist, MD, PhD
Helena C. Kraemer, PhD

Context Knowledge about ethnic differences in cardiovascular disease (CVD) risk factors among children and young adults from national samples is limited.

Objective To evaluate ethnic differences in CVD risk factors, the age at which differences were first apparent, and whether differences remained after accounting for socioeconomic status (SES).

Design Third National Health and Nutrition Examination Survey, 1988-1994.

Setting Eighty-nine mobile examination centers.

Participants A total of 2769 black, 2854 Mexican American, and 2063 white (non-Hispanic) children and young adults aged 6 to 24 years.

Main Outcome Measures Ethnicity and household level of education (SES) in relation to body mass index (BMI), percentage of energy from dietary fat, cigarette smoking, systolic blood pressure, glycosylated hemoglobin (HbA_{1c}), and non–high-density lipoprotein cholesterol (non–HDL-C [the difference between total cholesterol and HDL-C]).

Results The BMI levels were significantly higher for black and Mexican American girls than for white girls, with ethnic differences evident by the age of 6 to 9 years (a difference of approximately 0.5 BMI units) and widening thereafter (a difference of >2 BMI units among 18- to 24-year-olds). Percentages of energy from dietary fat paralleled these findings and were also significantly higher for black than for white boys. Blood pressure levels were higher for black girls than for white girls in every age group, and glycosylated hemoglobin levels were highest for black and Mexican American girls and boys in every age group. In contrast, smoking prevalence was highest for white girls and boys, especially for those from low-SES homes (77% of young men and 61% of young women, aged 18-24 years, from low-SES homes were current smokers). All ethnic differences remained significant after accounting for SES and age.

Conclusion These findings show strong ethnic differences in CVD risk factors among youths of comparable age and SES from a large national sample. The differences highlight the need for heart disease prevention programs to begin early in childhood and continue throughout young adulthood to reduce the risk of atherosclerosis.

JAMA. 1999;281:1006-1013 www.jama.com

ALTHOUGH CARDIOVASCULAR DISEASE (CVD) does not manifest until adulthood, CVD risk factors, such as elevated blood pressure, excess weight, and abnormalities in plasma lipoprotein levels, are present in childhood[1] and persist into adulthood.[2] Furthermore, CVD risk factors are associated with the presence of atherosclerosis in children and young adults.[3-5]

Ethnic differences in CVD risk factors in children are of special importance because of the premature mortality from CVD and high levels of CVD risk factors experienced by adult ethnic minority populations, most notably African American and Mexican American populations, which constitute the 2 largest minority groups in the United States. For example, CVD mortality rates for African American and white women 45 to 64 years old were 274 and 107 per 100 000, respectively, in 1992. For African American and white men, rates were 511 and 299 per 100 000, respectively.[6] In addition to higher CVD mortality rates, African American adults have higher prevalences of excess weight, physical inactivity, diabetes, and hypertension than do white adults.[7-9] Studies of CVD mortality among Mexican Americans are much less conclusive[10]; however, Mexican American adults are more likely to be overweight and physically inactive, to have diabetes, and to have higher levels of untreated and uncontrolled hypertension than are white adults.[9,11-13]

Past studies of ethnic differences in CVD risk factors among children have most commonly focused on school-

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Physical Activity & Teenage Health

PATH is a unique school-based health promotion program that integrates vigorous physical activity, health education and behavior modification. From testing approximately 2000 teenagers in **PATH** we have learned that heart disease risk factors and poor heart health behaviors are prevalent at an early age and, if left uncontrolled may be precursors to the onset of atherosclerosis as adults. **PATH** is designed to meet the need for early intervention.

GOALS

The goals of **PATH** specifically address recommendations of the U.S. Surgeon General, President's Council on Physical Fitness and Sports, Healthy People 2000 and the New York State Learning Standards and include:

- ♥ improved health and fitness that persists into adult life
- ♥ enhanced basic skills acquisition including reading, writing, mathematics, listening, and verbalizing
- ♥ understanding the concepts of personal wellness
- ♥ knowing how to design a personalized program of health and fitness
- ♥ improving awareness of career opportunities in health and fitness

CURRENT STATUS

Since 1993 **PATH** has been introduced to approximately 10,000 high school students in metropolitan New York and rural Schoharie County. A **PATH** curriculum has recently been developed for middle schools. **PATH** has been commended by the President's Council on Physical Fitness and Sports, New York State Department of Health, Greater New York Chapter of the American College of Sports Medicine, and in 1995 was recognized by the American College of Sports Medicine as the outstanding program in the country at meeting objectives of Healthy People 2000.

BENEFITS

The following benefits have been observed from **PATH** intervention: 1) increased heart health knowledge, 2) better dietary and physical activity habits, 3) decreased cholesterol and body fat, 4) increased cardiovascular fitness, 5) decreased blood pressure, 6) greater time in activity and better attendance compared to traditional physical education. This information has been published in scientific journals and presented at numerous scientific and clinical meetings in the United States and Europe.

Children's Health Issues Not Named High Priority for Public

A recent major survey shows that Americans are out of touch with health problems that their children face today. The public's perception of a problem is important because it can influence the attention of policymakers and make changes possible. Americans in the survey readily named drugs and drug abuse as the main general problem facing children today but were stumped by health issues. Almost a quarter of the population couldn't name even one child health issue. The health problems that were mentioned — AIDS, infectious/communicable diseases, drugs, smoking, dietary concerns, and cancer — hardly represented a majority consensus: each got only about 10% (cancer) to 23% (AIDS) of the responses.

Drugs ranked first on the list of various problems facing children mentioned by 56% of the public, but were chosen the third most important health problem facing children (15%). The difference in ranking is attributable to the fact that Americans believe that drugs also have important non-health effects on children. These include negative effects on their education, a lowering of morals, and crime. Experts, on the other hand, consider child poverty and children's lack of access to health care to be among the most important problems, and they name childhood injuries, unwanted teen pregnancies, and mental health problems as the important health issues for children. Only 1 to 3% of the public mentioned these.

The survey results were from a 1997 survey by the Harvard School of Public Health, the University of Maryland Survey Research Center, and The Robert Wood Johnson Foundation, along with the findings of several other national surveys including Gallup. The 1997 survey was the first in almost a decade to ask the US public about problems facing children today.

The authors of the report believe that lack of knowledge of children's issues has important implications for policymakers. "Health policy in the United States is not only influenced by public opinion," they write, "but it is also affected by the number and intensity of individuals and groups actively trying to change the nation's public policies." They observe that "today, children with health problems have many fewer citizen advocates than do beneficiaries of other government programs, such as the elderly."

Consider the issue of children's lack of health insurance. Survey respondents did not specifically mention lack of children's health insurance as a problem, but when questioned about it, 83% said it was a major problem, and 91% said that children have a right to health insurance. Legislative acts have been passed in recent years expanding insurance coverage for children, including the State Children's Health Insurance Program enacted in 1997. Yet, according to the survey, 68% of Americans had never heard of it, even if they had an uninsured child in their household.

Lack of public awareness of the importance of child health insurance coverage is unfortunate because there is now evidence from a separate study that expansion of Medicaid has improved access to health care and use of health care services for poor children. That study reported on data from nearly 30,000 children to determine the impact of boosting the number of children enrolled in Medicaid by about 70% from 1986 to 1995. Compared to uninsured poor children, Medicaid-covered children more often had a routine source of medical and preventive care, fewer unmet health needs, and at least one visit to a physician in the preceding year. Compared to nonpoor children with private insurance, however, the Medicaid-covered children had more unmet health needs and were less likely to have a usual source of care, although the volume of physician services was similar for both groups.

Overall, the expanded Medicaid coverage has apparently narrowed the gap between poor children and nonpoor children with private insurance. The authors conclude that "Medicaid has played an important, if not always consistent, role in improving access to health care for children living in families with incomes below the poverty level." They anticipate that "the salutary effects of the program may be heightened if states choose to implement several new Medicaid options legislated under the Balanced Budget Act of 1997."

The operative word is choose. For example, states can open Medicaid eligibility to families with incomes up to 200% of the federal poverty level. They can also guarantee eligibility for one year. But the extent of state changes depends on how states choose to exercise their options and how willing they are to provide new state funding. But just as states may be ready to embark on further Medicaid expansions, the public appears to have mixed feelings about who should pay for children's health insurance. For example, 50% in the 1997 survey said that they believe that parents bear the primary responsibility for paying for children's insurance, although 61% of these chose government as second most responsible, suggesting that government should intervene when parents are unable to pay. Only 51% of Americans would pay higher taxes in order for the government to spend much more for certain programs for children. Similarly, most Americans feel that federal programs with direct medical consequences for children, such as immunization programs, community health clinics, Medicaid, and prenatal care, are very important. However, some of the programs they felt weren't very

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important actually do affect children's health, such as low-income housing and food stamps. Even people who could benefit from these programs gave food stamps and welfare a low priority. And again, less than a quarter of the public said they would be willing to accept a tax increase in order to pay more for certain programs to benefit children.

The authors of the survey report single out health professionals and organizations as those most likely to mobilize citizens in the interest of children's health. The survey showed that Americans trust nurses' and physicians' groups the most to recommend policies for children (they trust health insurance companies and labor unions the least). However, physicians and nurses will need to be mindful of the public's reliance on the media for information. Since Americans reported that they received most of their information about children's health issues from television, newspapers, magazines, and radio, medical professionals will need to work with health groups and the news and entertainment media on these issues to "raise the importance that the public attaches to them."

Blendon RJ et al. Americans' Views on Children's Health. *The Journal of the American Medical Association* 280 (December 23/30): 2122–2127, 1998.

Newacheck PW et al. The Role of Medicaid in Ensuring Children's Access to Care. *The Journal of the American Medical Association* 280 (November 25): 1789–1793, 1998.

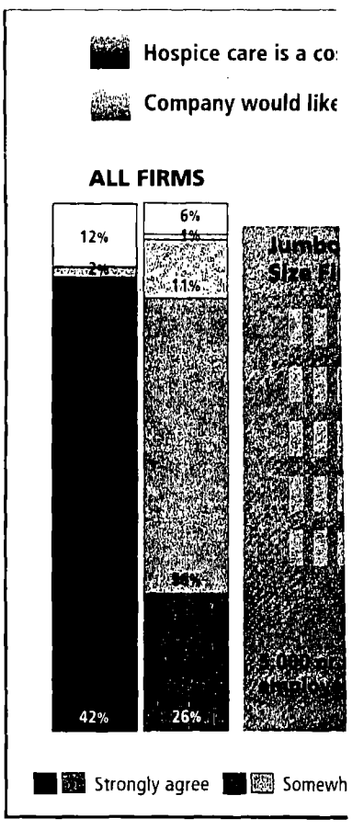
Hospice Coverage for Terminally Ill: The Role of Employers

Hospice care is an accepted alternative to aggressive, life-prolonging treatment for the terminally ill. While data are available on the use of hospice care by individuals over age 65, very little is known about insurance coverage for the terminally ill that is provided as an employee benefit to younger, working-age Americans.

Since 1991, the KPMG Peat Marwick survey of employer-sponsored health benefits has provided detailed information on the insurance coverage that large US employers offer to their employees. To better understand how hospice care is featured in the overall benefit package, KPMG Peat Marwick introduced questions on hospice coverage for the first time in 1997. This study examines the findings from those questions — which were posed to more than 1,500 human resource directors at companies with 200 or more employees — as well as the findings from a series of focus groups convened with employee benefits managers and insurance brokers and consultants.

Hospice care appears to be a standard benefit among the nation's largest employers: the surveyed firms offered hospice benefits to 83% of employees covered by their health plans. The larger the firm, the more likely it

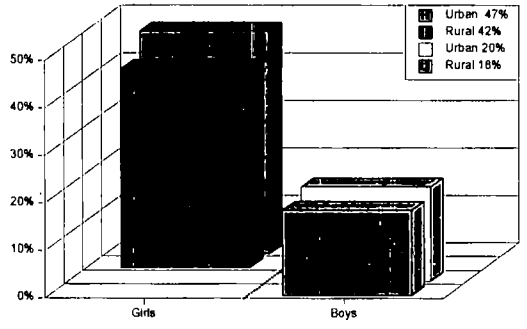
Employers' Perspectives on



Comparison of Elevated Risk Factors
Girls vs. Boys
Urban vs. Rural

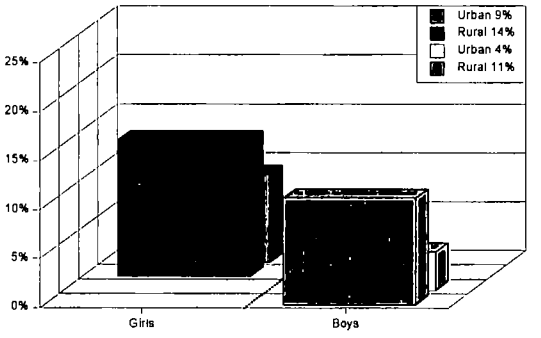
OBESITY

Greater than 30% (Girls), 20% (Boys)



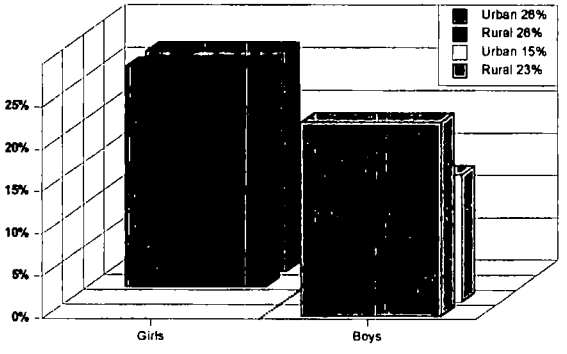
HYPERCHOLESTEROLEMIA

Greater than 200 mg/dl



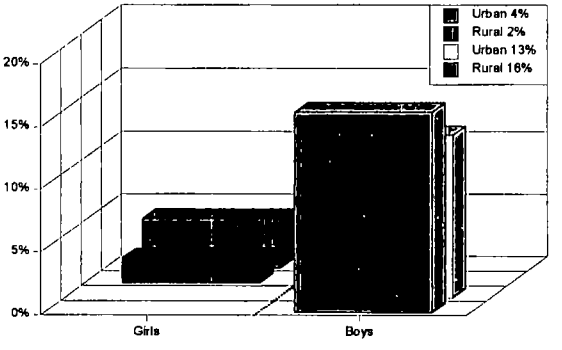
PHYSICAL INACTIVITY

30 min/week or less



HYPERTENSION

Greater than 130 mmHg



SMOKING HABITS

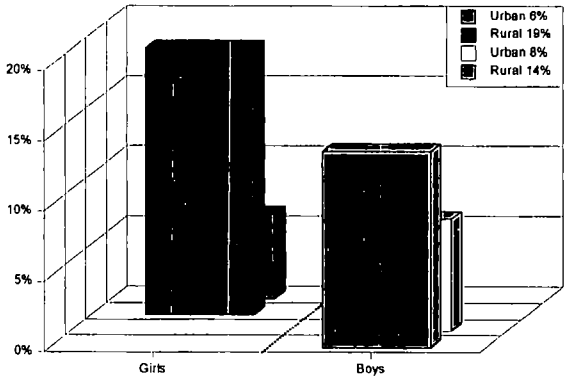


Figure 1

Cardiovascular Disease Risk Factors and Heart Health Behaviors
Urban Girls vs. Urban Boys
(N = ~ 1400)

VARIABLE	GIRLS	BOYS
% Body Fat	30	17
Physical Activity (x/wk)	4.6	5.7
Cholesterol (mg/dl)	159	145
Maximal Oxygen Uptake (ml.kg.min)	34	46
Resting Systolic Blood Pressure (mmHg)	111	117
Resting Diastolic Blood Pressure (mmHg)	71	72

Cardiovascular Disease Risk Factors and Heart Health Behaviors
Rural Girls vs.Rural Boys
(N = 447)

VARIABLE	GIRLS	BOYS
% Body Fat	29	15
Physical Activity (x/wk)	4.2	4.6
Cholesterol (mg/dl)	167	154
Maximal Oxygen Uptake (ml.kg.min)	34.5	47.5
Resting Systolic Blood Pressure (mmHg)	109	116
Resting Diastolic Blood Pressure (mmHg)	67	69

Table 1

Cardiovascular Disease Risk Factors and Heart Health Behaviors
Urban Girls vs. Rural Girls

VARIABLE	URBAN GIRLS	RURAL GIRLS
% Body Fat	30	29
Physical Activity (x/wk)	4.6	4.2
Cholesterol (mg/dl)	159	167
Maximal Oxygen Uptake (ml.kg.min)	34	34.5
Resting Systolic Blood Pressure (mmHg)	111	109
Resting Diastolic Blood Pressure (mmHg)	71	67

Cardiovascular Disease Risk Factors and Heart Health Behaviors
Urban Boys vs. Rural Boys

VARIABLE	URBAN BOYS	RURAL BOYS
% Body Fat	17	15
Physical Activity (x/wk)	5.7	4.6
Cholesterol (mg/dl)	145	154
Maximal Oxygen Uptake (ml.kg.min)	46	47.5
Resting Systolic Blood Pressure (mmHg)	117	116
Resting Diastolic Blood Pressure (mmHg)	72	69

Table 2

Significant Changes within Variables Pre-to-Post
Urban Females (N = ~ 550)

VARIABLE	PRE	POST	% CHANGE
Cholesterol (mm/dl)	161	153	5
% Fat	30	28.5	5
Max. Oxygen uptake (ml.kg.min)	34.5	36.6	6
Systolic Bp (mmHg)	111	105	5
Diastolic Bp (mmHg)	71	68	4
Physical Activity (x/week)	4.4	5.2	19
Total Food (x/week)	44.6	41.3	7
CV Knowledge (%)	51.7	56.1	9

Urban Males (N = ~ 350)

VARIABLE	PRE	POST	% CHANGE
Cholesterol (mg/dl)	147	142	3
% Fat	17	16	6
Max. Oxygen uptake (ml.kg.min)	46	49	8
Systolic Bp (mm/Hg)	116	112	3
Diastolic Bp (mm/Hg)	72	70	3
Physical Activity (x/week)	5	5.8	16
Total Food (x/week)	47.7	46.1	3
CV Knowledge (%)	46.7	52.3	12

Table 3

Significant differences among ethnic groups in urban adolescent girls

(N = ~ 1300)

VARIABLE	ETHNIC GROUP
Greatest % NOT eating breakfast	African-Americans Hispanics
Highest % eating fast food	African-Americans Hispanics
Poorest eating habits	African-Americans Hispanics
Poorest scores in heart health knowledge	African-Americans Hispanics
Highest blood pressure	African-Americans
Highest % considering themselves overweight Lowest %	White African -American
Largest % on a diet Smallest %	White African-American

Table 4

PATH

Research and Publications

Fardy PS, Magel J, Hurster M, Quiett A, Clark L, Brink L, Savino S, Amodio G. Prevalence of coronary artery disease risk factors in multi-ethnic adolescents: a feasibility study. Cardiopulmonary Rehabil 9:404, 1989.

Fardy PS, White R, Hurster M, Magel J, Quiett A, Clark L, Stein R, Vrabas I, Konstantinidis. Coronary artery disease risk factors in multi-ethnic adolescents. Cardiopulmonary Rehabil 10:365, 1990.

Fardy PS, White R, Hurster M, Amodio G, Clark L. Gender comparisons of coronary risk factors in multi-ethnic adolescents. J Cardiopulmonary Rehabil 11:298, 1991.

Fardy PS, White R, Clark L, Amodio G. Coronary risk reduction and health promotion in multi-ethnic adolescents. J Cardiopulmonary Rehabil 9:341, 1992.

Fardy PS, White REC, Clark LT, Hurster M, Magel J, Amodio G, McDermott K. Coronary risk factors and health behaviors in a diverse ethnic and cultural population of adolescents: a gender comparison. J Cardiopulmonary Rehabil 1994;14:52-60.

Fardy PS, Haltiwanger MK, White R, McDermott K, Magel J. Effects of a school based program of exercise and health education on female minority students. Med Sci Sports and Ex 26:5 (supplement), 1994.

Agin D, Fardy PS, Haltiwanger MK, White R. Gender comparisons of physical activity, dietary habits and coronary risk factors in multi-ethnic adolescents. Med Sci Sports and Ex 26:5 (supplement), 1994.

Fardy P, White R, Haltiwanger K., McDermott K. Physical Fitness and Coronary Risk Reduction in Inner-City Multi-Ethnic Adolescents. In: Proceedings from XXVth FIMS World Congress of Sports Medicine, Athens, Greece, 1994.

Fardy PS, White REC, McDermott KJ, Magel JR. Changes in Cardiovascular Disease Risk Factors Following an Inner-City School-Based Exercise and Health Education Curriculum. In: Current Trends of the Prevention of Atherosclerosis in Childhood, Szamosi T.,ed., Budapest, NRK Studio Bt., 78-81, 1994.

Haltiwanger MK, Fardy PS, White R, McDermott K. Coronary risk factors, health behaviors, health knowledge, and physical fitness in multi-ethnic adolescents. Med Sci Sports and Ex 26:5 (supplement), 1994.

Fardy PS, White REC, Clark LT, Amodio G, Hurster M, McDermott K, Magel J. Health promotion in minority adolescents: a Healthy People 2000 pilot study. Cardiopulmonary Rehabil 1995;15, 65-72.

Fardy P. Exercise and the Prevention of Atherosclerosis in Youth, Training Course Lectures, Care of Children with High Atherosclerotic Risk, Budapest, Hungary, 1995.

Fardy PS, White REC, Haltiwanger-Schmitz K, Magel J, McDermott K, Clark L, Hurster M. Coronary disease risk factor reduction and behavior modification in minority adolescents: The PATH Program. Journal of Adolescent Health 1996;18:247-253.

Fardy PS, Azzolini A, McDermott KJ. Health Promotion in Minority Adolescents: The PATH Program. In: Proceedings of American Association of Cardiac and Pulmonary Rehabilitation, Baltimore, MD, 1996.

Azzollini A, Fardy PS, Tekverk L, Agin D. Gender Comparisons in a School-Based Health Promotion Program for Multi-Ethnic Adolescents: PATH. Poster Presentation, American College of Sports Medicine Mid-Atlantic Chapter Meeting, November, 1996.

Fardy PS, White REC, Azzollini A, Tekverk L, Hirschman J, McDermott KJ, Magel JR. Coronary Disease Risk Factor Reduction and Behavior Modification in Minority Adolescents: The PATH Program. In: Current Trends of the Prevention of Atherosclerosis in Childhood 2, Budapest, Hungary, Convention Budapest Ltd, 99103, 1997.

Fardy P, Azzollini A, Tekverk L, Agin D, White R, Copperman N, Haas T, Arden M, and Jacobson M. Health Issues and Trends in Physical Education. Symposium: Eastern District Association of American Alliance of Health, Physical Education, Recreation and Dance Convention, Burlington, VT, March, 1997.

Fardy PS, Azzollini A, Tekverk L, Agin D. PATH: A program to improve cardiovascular fitness, health behavior and coronary disease risk factors in multi-ethnic teenagers. Annals of the New York Academy of Sciences, 817:356-358, May, 1997.

Azzollini A, Fardy PS, Tekverk L, Agin D. Gender Comparisons in a school-based health promotion program for multi-ethnic adolescents: PATH. Poster presentation, American College of Sports Medicine National Meeting, May 1997.

Azzollini A, Fardy PS, Tekverk L, Agin D. Gender comparisons in a school-based health promotion program for multi-ethnic adolescents: PATH. Med Sci Sports and Ex 29:S15 (supplement), 1997.

Fardy PS, Azzollini A. Gender and ethnic comparisons of cardiovascular risk factors and health behaviors in urban adolescents: The PATH Program. J Cardiopulmonary Rehabil 17:332, 1997.

Azzollini A, Fardy PS. Comparisons of cardiovascular disease risk factors and health behaviors in adolescents: The PATH Program. Poster presentation. American College of Sports Medicine Mid-Atlantic Chapter Meeting, November 15, 1997.

Azzollini A, Fardy PS. Ethnic comparisons of cardiovascular disease risk factors and health behaviors in adolescents: The PATH Program. Med Sci Sports and Ex 30; S202, 1998.

Fardy P, Azzollini A, Magel J, Kohn S, Tekverk L. Coronary risk factors and healthy heart behaviors in urban v. rural teenagers: The PATH Program. Med Sci Sports and Ex 30;S91, 1998.

Bayne-Smith M, Fardy PS, Catelli L, Azzollini A. Improved heart health behaviors and reduced risk factors in adolescent girls: The PATH Program. J Cardiopulmonary Rehabil 18;352, 1998.

Fardy PS, Azzollini A, Bayne-Smith M. Effects of schoolbased health promotion on male minority adolescents: The PATH Program. J Cardiopulmonary Rehabil 18;353, 1998.

Fardy PS, Azzollini A. The PATH Program. In: Active Youth: Ideas for Implementing CDC Physical Activity Promotion Guidelines. Champaign, IL, Human Kinetics Publishers, 1998.

Fardy PS, Azzollini A, Magel J, Tekverk L. Coronary risk factors and healthy heart behaviors in urban v. rural teenagers: The PATH Program. 2nd Conference of the International Group for Prevention of Atherosclerosis in Childhood, Budapest, Hungary, Oct. 30, 1998.

Fardy PS, Azzollini A, Magel JR. Gender and ethnic differences in risk factors for coronary heart disease among urban teenagers: The PATH Program. In: Proceedings of the Second Conference of the International Group for the Prevention of Atherosclerosis in Childhood. Szamsoi T., editor. Convention Budapest, Ltd, Budapest, Hungary, 1999 (in press).

Azzollini A, Fardy PS, Salerno VM, Magel JR. A comparison of health knowledge and behaiors between urban and rural teens: The PATH Program. Med Sci Sports Ex 31;S55, 1999.

Fardy PS, Azzollini A, Magel JR, Kohn S, Tekverk L. Health knowledge and behaviors, risk factors and aerobic capacity in rural adolescents: PATH. Med Sci Sports Ex 31;S404, 1999.

THE PRESIDENT'S COUNCIL
ON PHYSICAL FITNESS
AND SPORTS

March 2, 1995

Dr. Paul Fardy
Director
Physical Activity and Teen Health (PATH)
The City University of New York
65-30 Kissena Boulevard
Flushing, NY 11367-1597

Dear Dr. Fardy:

On behalf of the President's Council on Physical Fitness and Sports, it is a pleasure to congratulate you on your accomplishments with the Physical Activity for Teenage Health (PATH) program.

Your success in enhancing teenage awareness and knowledge of physical activity and fitness, as well as helping them form lifetime habits, deserves wide recognition. Our young adults need innovative programs like PATH to educate them and to generate greater interest in physical activity habits for life. The inevitable result will be healthier young adults becoming healthier adults, with healthy habits.

We are delighted that the PATH program is being expanded to include three more schools, and we look forward to the time when all schools in New York City will "take the PATH" to healthier lifestyles. This is the type of program that would greatly benefit children in schools across America.

Great strides are being made for fitness in the Big Apple. Keep up the good work!

Sincerely,

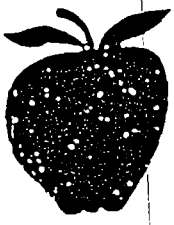
Florence Griffith Joyner
Co-Chair

Tom McMillen
Co-Chair

Health Education Award 1996

PRESENTED TO

Queens College, City University of New York



FOR

EXCELLENCE

IN

HEALTH EDUCATION

PROGRAMMING

Barbara A. DeBuono, MD

COMMISSIONER OF HEALTH

March 4, 1996

DATE

NEW YORK STATE DEPARTMENT OF HEALTH

ACSM

HEALTHY PEOPLE 2000
PHYSICAL ACTIVITY PROMOTION AWARD

Non-Consortium
Group Or Organization Category

presented to

THE PHYSICAL ACTIVITY AND TEENAGE HEALTH PROGRAM

For Its Promotion Of The
Healthy People 2000 Objectives

1995

AMERICAN COLLEGE
of SPORTS MEDICINE SM

May 5, 1995

Paul Fardy
Health and Physical Education Department
Queens College
65-30 Kissena Blvd.
Flushing, NY 11367-0904

Dear Paul:

On behalf of the American College of Sports Medicine, I am pleased to announce that your application, submitted for consideration in the ACSM Healthy People 2000 Physical Activity Promotion Awards, has been selected as a winner in the non-consortium group category. The application was reviewed by both a regional chapter review committee and the ACSM Project Review Committee.

Your Award will be presented in the afternoon of Friday, June 2, during the Healthy People 2000 Current Issue session at the Annual Meeting in Minneapolis. Gary Abosch, the Committee's staff liaison, will work with you on your airline and hotel arrangements which are part of the Award package.

Congratulations on your receipt of this Award. Through your hard work and initiative, we move closer to achieving the Healthy People 2000 objectives for Physical Activity and Fitness.

Sincerely,

Steven Ketevian

Steven Ketevian, Ph.D., FACSM
Chair
Ad Hoc Committee on Healthy People 2000

Street Address: 401 W. Michigan St. • Indianapolis, IN 46202-3233 USA
Mailing Address: P.O. Box 1440 • Indianapolis, IN 46206-1440 USA
Telephone: (317) 637-9200 • FAX: (317) 634-7817

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New Y

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

Karen Schimke
Executive Deputy Com

March 8, 1995

Paul S. Fardy, Ph.D.
Director, P.A.T.H.
Queens College
Department of Health and Physical Education
The City University of New York
65-30 Kissena Boulevard
Flushing, New York 11367-1597

Dear Dr. Fardy:

The Mary Lasker Heart and Hypertension Institute is pleased to commend the work that Queens College is doing to reduce the cardiovascular risk of minority adolescents. The Physical Activities and Teenage Health Program is an excellent example of a program that serves a population that is often overlooked in health promotions, yet is open to new ideas and change.

Cardiovascular disease causes more deaths in New York State than any other disease and it cripples the lives of many citizens. It is a disease that begins years before symptoms appear, usually due to unhealthy lifestyles. The PATH Program successfully fosters healthy lifestyles to change the lives of the students involved.

The New York State Department of Health is committed to improving the health of all citizens of this State. We are proud to support the Queens College PATH Program in this effort.

Sincerely,

Sonja A. Hedlund

Sonja A. Hedlund, M.S.
Director
Mary Lasker Heart and
Hypertension Institute

New Roche e schoo s boost phys ca -ed opt ons

By Marlon Vaughn
Staff Writer

The physical-education curriculum in New Rochelle schools is dancing into the 21st century.

Hoping to increase program options for students and to meet new state requirements, the physical-education department is broadening its reach and emphasizing its place in the district's "core" curriculum. This year, for the first time, the merengue and hip-hop tap lessons take place in the New Rochelle High School gym alongside traditional volleyball and basketball.

"We've added a dance specialist this year," said John Magnotta, director of physical education and athletics for the district. "Next year, students will have a specialty dance track."

Among the options available to students are lessons in jazz dance, ethnic dances and ballet. Next year, students will be able to study a particular form of dance for the entire year.

"We're trying to do a variety of things to enhance physical education in the district, to make it very relevant to students," Magnotta said.

Also new this year is PATH, or Physical Activity for Teenage Health. The program, designed by Queens College, encourages students to think about the impact of health and physical fitness on their lives.

In PATH, students get reading and writing assignments about nutrition, exercise and other physical-education topics. PATH serves as good preparation for state requirements mandating that students have certain "exit" skills in physical education, administrators said.

"They want students to have a certain knowledge of health and physical fitness that can be evaluated," Magnotta said.

Physical education is mandated by the state for students in grades kindergarten through 12. The "exit" skills requirement is part of the overall state Regents push to boost student achievement.

Next year, New Rochelle schools likely will require seniors to design lifetime fitness programs for graduation. Also under discussion is establishing a fitness resource center at the high school and adding heart rate monitors so that students can see the results of exercise.

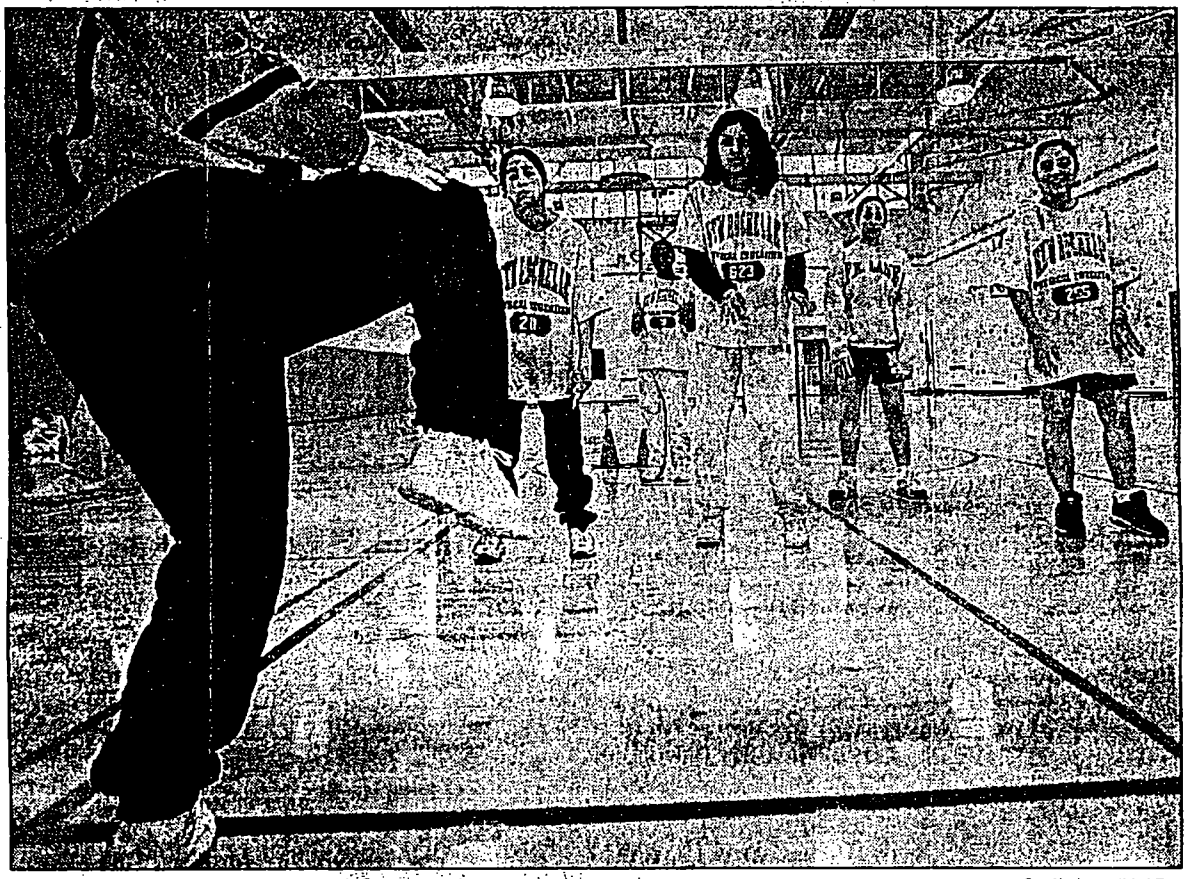
The enhancements to the physical-education offerings underline the traditionally undervalued program's importance to the overall curriculum, New Rochelle Schools Superintendent Linda Kelly said.

Other Sound shore school districts also are expanding their physical-education offerings. Rye offers a variety of courses, ranging from dance to martial arts. Mamaroneck schools offer a full fitness center and a computer analysis of students' health habits.

Administrators at Pelham schools last year reorganized their course offerings and decided to focus on lifetime physical fitness activities. Students are now able to participate in a lot more than football, basketball, softball and other sports traditionally offered in high school, said Dennis Lauro, director of instruction and personnel for Pelham schools.

"It's definitely more about maintaining lifetime health and fitness," Lauro said.

Among the programs introduced in Pelham were a professional cardiopulmonary resuscitation rescue course, lessons in sportsmanship for middle schoolers and step aerobics.



Staff photo/Hai Do

Students in the physical education class at New Rochelle High School observe the hip-hop steps of dance teacher Liz Lynn on Thursday. The school has added jazz dance, ethnic dances and ballet to diversify the options for physical education classes.

> "We're trying to do a variety of things to enhance physical education in the district, to make it very relevant to students."
>
> — John Magnotta, Director of physical education and athletics

HEALTHMATTERS

Your Questions, Your Concerns

PERSONAL HEALTH

Schooling Teens on the Right Path to a Healthier Life

"WHAT'S RISKY behavior?" shouted out physical education teacher Lorraine Bier.

The girls in her 9:45 gym class at Flushing High School in Queens were quick to answer.

"Lack of exercise," shouted one.

"Smoking," said another.

"Stress," shouted a third.

"Bad diet," answered another girl.

"If you want to change to good behavior, what do you do?" Bier shouted.

The responses were as quick and to the point, and soon music was blasting out of a boom box. For 40 minutes Latin sounds mingled with the thunder of about 50 pairs of feet as the girls went through a vigorous step-aerobics routine.

At the end, Bier had them stretch and feel their pulses. Tomorrow they would be back for floor exercises, explained freshman Diana Morel, 15. The next day it would be jumping rope, and then Friday was "free day," to work on what you like.

Did she like the program? she was asked.

"Oh yeah. We want to exercise to look better, but this is better because it's also teaching us about health," she said.

Morel and her classmates are part of an innovative program that is trying to stanch the barrage of statistics showing a decrease in physical activity and a rise in obesity and other health problems among America's kids. According to the latest surveys, 11 percent of children and adolescents are classified as overweight, and another 14 percent are considered at risk for becoming overweight. Obesity in children has been associated with a host of health problems, including high blood pressure, which puts the person at risk for heart disease, diabetes and hypertension — as well as an earlier death.

One reason for the obesity is clear: Kids are exercising less. A recent study of 4,063 kids ages 8-16 published in the Journal of the American Medical Association looked at the relationship between the hours children watched television and their weight. Those who watched four or more hours a day of TV were heavier than those who watched two hours a day. Girls — especially minority girls — were more likely to do the least amount of physical activity; 26 percent of all girls exercised less than twice a week.

Ridgely Ochs

That's why Paul Fardy, professor of family, nutrition and exercise sciences at Queens College, and colleagues developed the PATH program, which stands for Physical Activity and Teenage Health. After working for 15 years in cardiac rehabilitation with adults, he said he became convinced that "if you wanted to do anything [about adult health], you had to do it at a young age." But he found that although there were programs developed for grade-school children, "the least amount of information was available for high-school-age kids."

The program began in 1993 in Hillcrest High School in Jamaica, Queens, and now has expanded to six other high schools in the borough as well as to two high schools in Westchester. Hempstead High School is expected to begin a PATH program shortly, Fardy said.

What makes the PATH program special is that kids tools to live a healthy life. The fitness program includes aerobics, toning exercises and/or weight-lifting. The nonprofit Operation FitKids of Laguna Beach, Calif., has donated fitness and weight-lifting machines to all six Queens schools. The kids are given a workbook on everything from the heart to the food pyramid to ways to reduce stress.

Fardy's studies of kids in some of the first PATH classes has mimicked findings from other studies: According to a study he published in 1996 in the Journal of Adolescent Health, at the beginning of the program, girls were less likely than boys to do any regular physical activity, were less fit, were fatter and had "a poorer health self-perception."

But after 11 weeks the 91 girls in the PATH program showed a 10 percent reduction in foods high in saturated fat, cholesterol, salt and sugar — although the eating habits of the 90 boys stayed the same, despite the same PATH instruction. The blood cholesterol levels decreased by 10 percent in the girls and 4 percent in the boys, and both girls and boys showed an increase in maximal oxygen uptake — a measure of cardiovascular fitness.

And the kids in the study showed an increased understanding of a healthy lifestyle — as did the students in Flushing.

"I was an overweight child, and I've lost five pounds [since taking the course]," said sophomore Nellyette Pagan, 16. "The difference is that I'm learning how to eat better, and I can help my brothers and sister. In my house, we use the book. We're all on a diet; everything is low-fat — skim milk, everything."

"The course shows you how to eat right . . . I like Ms. Bier, and I don't feel ashamed about doing step aerobics," said sophomore Monique Johnson, 15. "I used to eat junk food, and now I eat fish and low-fat foods. I feel in better shape."

If knowledge is power, these kids have a powerful edge on their futures.

Ridgely Ochs can be e-mailed at ochs@newsday

Teens following prof's PATH to better health

By ALISON GENDAR
Daily News Staff Writer

Overweight.... Out of shape.... Exercises too little.... Smokes too much.

For a majority of New York City teenagers, this description fits all too well, said Paul Fardy, a Queens College professor who has gathered health and nutrition profiles on more than 1,500 Queens public high school students.

By recording teens' weight, blood pressure, body fat and cholesterol levels as well as physical activity, eating habits and whether they smoke or not, Fardy discovered a disturbing picture of teen health in New York City.

By high school, 53% of the teens already had one or more of the "big 5" risk factors that can lead to heart disease as an adult: obesity, inactivity, high blood pressure, high cholesterol and smoking.

For New York City girls, the picture was even worse: 60% had one or more risk factors, with obesity and inactivity leading the list. Forty per cent of the boys had one or more risk factors.

To a cardiac researcher whose passion is prevention, the mission was to change students' health habits before they left school.

"Traditional physical education classes taught different kinds of sports, with an emphasis on basic skills and the rules of the game," said Fardy, a professor of family, nutrition and exercise sciences.

"Teenagers need information on fitness and nutrition so they can chose to live a healthier life," he said.

So Fardy developed PATH — Physical Activity and Teenage Health. The PATH course combines cardiovascular exercise and weight training with information about physiology, nutrition and heart disease prevention. The initial work was paid for by grants, and time volunteered by CUNY faculty.

Results showed that students who took PATH reported greater physical activity, more knowledge about healthy eating habits and a better understanding of how to prevent heart disease.

Weight, cholesterol and body-fat levels also decreased.

Since the first pilot program in 1991, more than 7,000 New York City students have taken PATH. This year, 1,500 are taking it at the eight city high schools involved.

Next year, with local and state grants and private funding, Fardy hopes to bring the program to 11 high schools citywide and reach about 9,000 students.

At John Bowne High School in Flushing, PATH is so popular that the classes are hard to get into, said 16-year-old sophomore Diane Lyking.

Since Lyking runs track, lack of exercise was never an issue for her.

"But what is so good about this class is that it's not just about working out. It teaches you about nutrition and how to be healthier. So now, when I'm out shopping with my mom for groceries, I'm more aware about what I'm picking up," Lyking said.

When 17-year-old Kwame Larbi started the PATH workouts, "I could only go 10 minutes and then be out of breath from my asthma. Now, I've built my endurance, so I can do the whole class without stopping."

This kind of program is the future for physical education classes, said Neal Aronin, assistant principal for health and physical education at Bowne.

"Years ago, the push in physical education was the big, major sports, baseball, football and basketball," he said. "But we came to realize that kids need to learn activities they can do all their life. PATH does that, but it also adds real information, so kids leave here with the ability to make decisions for themselves."

And at 40 minutes a day, every day for 14 to 16 weeks, students see a change they can appreciate, Aronin said.

"They see the results," he said. "That's the motivation."

LIFTING WEIGHTS: Kwame Larbi takes part in workout regimen.

"Teens following prof's
PATH to better health"

DAILY NEWS • Thursday, May 28, 1998

BILL TURNBULL DAILY NEWS

SHIPSHAPE: Neal Aronin, assistant principal for health and physical education at John Bowne High School in Flushing, puts students through their paces.

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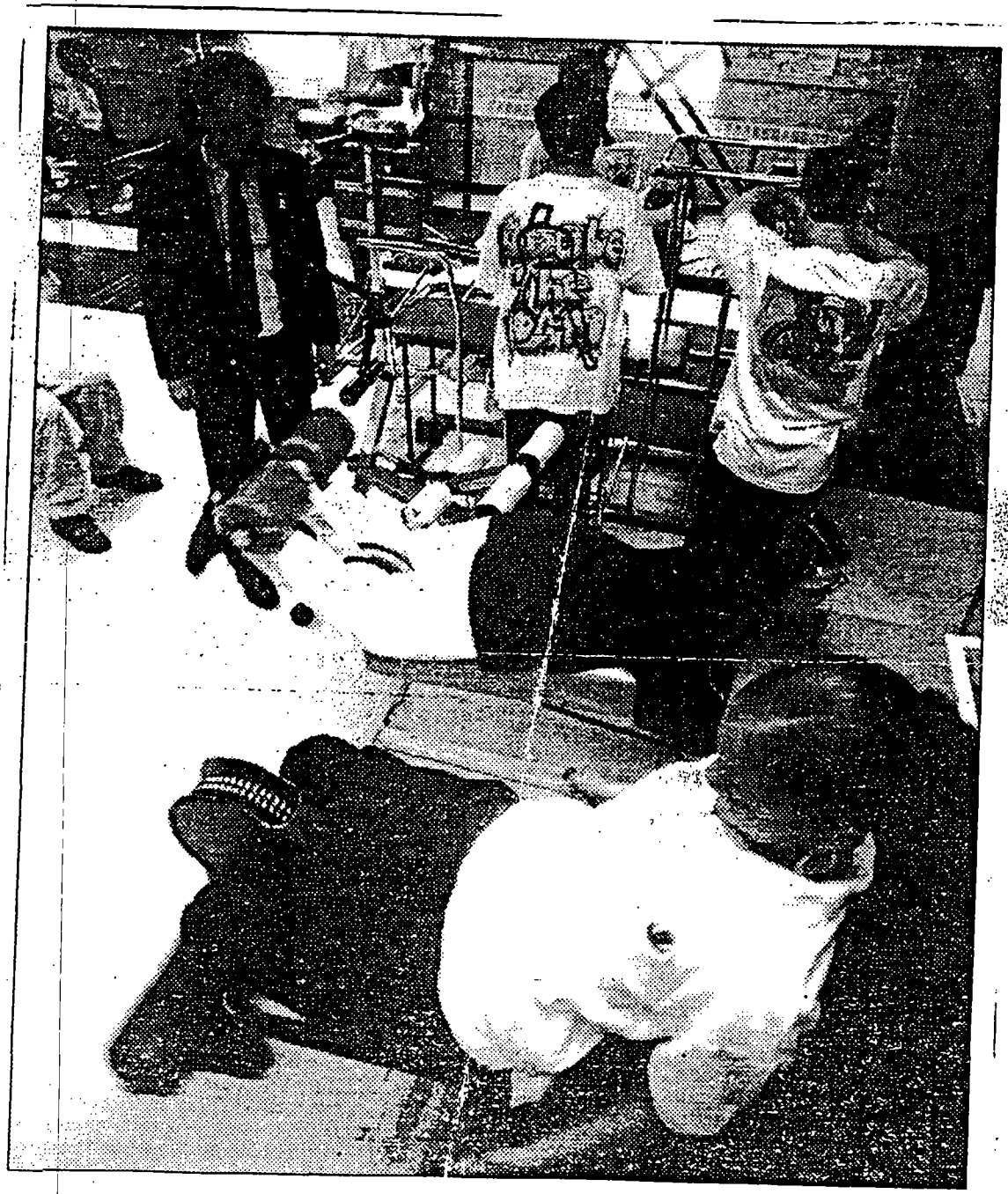
Queens
DAILY NEWS
Friday, March 10, 1995

Teens take heart

Fitness program works out

By SHARLINE CHIANG
Special to The News



JOE DeMARIA

A WORTHY EXERCISE: Queens College professor Paul Fardy watches students work out at Cardozo High School. His diet and exercise program has helped teens reduce risk of heart disease.

"Teens Take Heart

Fitness program works out"

Friday, March 10, 1995

When it comes to good health in later life, early education is the heart of the matter.

Paul Fardy, a professor of physical education at Queens College, said this week that his six-year-old diet and exercise program for high school students has reduced their risk factors associated with heart disease. If the students stick with the program, they will be far less likely to develop heart disease or other ailments, he said.

After just one year of the Physical Activity and Teenage Health program, which includes weight training, aerobics and short lectures on smoking, stress management and proper eating, Fardy found that the students had improved their diets and had reduced their cholesterol levels and body fat.

"As you lower the risk factors, the risk of [heart disease] is also decreased," said Fardy. "The program, if continued, will show a continued benefit."

Fardy said he first looked into early intervention because he was troubled by high levels of heart disease in minority adults. Urban minorities, he said, are at greater risk than whites of developing and dying from cardiovascular disease.

"Partly, it's a socioeconomic difference," he said. "Whether it's more than that is uncertain."

In 1989, Fardy studied the health and eating habits of 55 Hillcrest High School students — 80% of them minorities. He found many were at risk of developing heart disease. Three years later, he launched PATH, with 500 youngsters there.

Students say the program has changed them for the better.

"After this class, you have more energy for other classes," said Hillcrest senior Sheldon James, 19, a two-year PATH veteran.

And now, PATH has been extended to Cardozo and Flushing high schools.

"I used to eat a lot of junk food," admitted 14-year-old William Ortiz of Cardozo. "Now, I'm used to eating healthy."

Research and materials for PATH were funded by $150,000 in grants from the City University of New York, the Board of Education and the state Health Department. Several corporations donated equipment.

About 1,500 young men and women are enrolled in PATH fitness classes. Fardy hopes to extend the program to other city schools.

# # #

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'96

The Right PATH To a Healthy Life

Staying the course paid off for students at Flushing High School as they went the equivalent of a West Coast trip and back, 6,500 miles, to win a visit from local boxer Kevin (The Flushing Flash) Kelly.

The race, between Flushing, Cardozo and Hillcrest high schools, was part of the PATH program, which helps teach high schoolers about cardiovascular health.

Kelly, the WBC featherweight champion, spoke to the teens at Queens College about the importance of keeping fit as a way of life.

According to Queens College public information office Ron Cannava, "The PATH program is for heart health for teenage kids, who have a very high rate of obesity. Specifically for minority kids. The program helps minority kids have a better diet, more exercise and makes them aware of good cardiovascular habits."

PATH, started as a pilot program in 1988 by Dr. Paul Fardy of Queens College, is a series of classroom and gym activities and includes a strong motivational component.

NOTEBOOK

"The objective of the program is to improve health behaviors and reduce risk factors of cardiovascular disease in teenagers," Fardy said. "The primary focus has been on minority teenagers. Instead of having a traditional physical education program, these students have the PATH program. The program consists of 20 minutes of vigorous activity each day, complemented by approximately five minutes of lecture material on various cardiovascular health topics."

Nearly 2,000 students participated in the program this year. The race started April 15 and students from each school participated in aerobic or circuit training, including steps, jumprope, jogging and running. Each school needed to complete about 438 miles a day. For finishing first, in addition to the motivational visit from Kelly, the winners were given T-shirts and sunglasses courtesy of HBO Sports, which also arranged for Kelly's appearance.

"The program runs the entire school year," Fardy said. "We've noticed that, by and large, teenagers have poor health behavior and a high percentage of risk factors. Girls are worse than boys. Primarily, girls are significantly less active than boys. The number of inactive girls in the program is double the number of inactive boys. The number of obese girls is triple that of boys. Those two things run hand in hand. Girls [in the group] also have higher cholesterol than boys."

Fardy said the results have been good, particularly for the girls. "They've had improved cardiovascular fitness, lowered their cholesterol, lowered body fat and improved heart health knowledge."

He said the marked improvement of girls over boys is a combination of things, but added that the girls had more room for improvement. "The girls also were more receptive," he said. "They made more changes than did the boys."

Fardy said that while the program's goal was to provide information and help participants make changes and see health in a different way, most of the kids were motivated by the thought of looking better. "Kids look at health problems differently than we do," Fardy said. "Kids are not motivated by the long-term threat of health disease. Kids are motivated by 'How do I look?' "

Nearly 3,000 teens have taken part in the program since 1993-94. PATH receives funding from the state and federal governments and Fardy said the number of participating schools will be increased to seven for the next school year.

Acquista signs with Storm

Holy Cross soccer forward Carlo Acquista, who led the Knghts to a 17-3-3 record and the CHSAA boys soccer crown this year, signed a letter of intent with St. John's. Acquista finished the year as the Knight's second-leading scorer with 13 goals and 27 assists.

"St. John's is a great program. Their record speaks for itself. They're a national power," said Holy Cross coach Paul Gilvary. "Carlo is a good player with a lot of skills and can play a lot of positions which will help St. John's."

Prop 48 help

In an effort to help area athletes, coaches and counselors understand the recently tightened restrictions placed on college admissions by the revised Proposition 48, the Princeton Review Foundation will host a Prop 48 Day from 8:30 a.m. to 2 p.m. Saturday at the Hunter College Brookdale campus.

The clinic will provide an opportunity for 200 sophomore, junior and senior student-athletes to take a free practice SAT administered under testing conditions. During the afternoon, the Princeton Review will grade the tests and provide a computer analysis of each student's strengths and weaknesses. Tips on taking the SAT also will be provided.

Men's basketball coaches Armond Hill of Columbia and Nick Macarchuk of Fordham, and assistant coach Tom Pecora of Hofstra will talk about the inside view of college athletics during a free pizza lunch. All students who attend the clinic will receive free copies of a short, "student-friendly" guide to Prop 48 requirements and the Princeton Review's book, "Cracking the SAT."

For more information on the free clinic, telephone the Princeton Review at (212) 685-1500.

Empire State tryouts

Tryouts for New York City Scholastic Girls Basketball Team for the Empire State Games will be Saturday May 18 at Bishop Ford High School starting at noon. Telephone 718-965-6425 and ask for Ray Nash. The games will be July 24-28 in Buffalo.

REPORTED BY SYLVIA E. KING, GERALD C. MAGPILY AND CALVIN WATKINS

NEWSDAY 3/19/95

Queens SCHOOLS

A Heartier Student Body

Project aims to lower risk of coronary disease

By Josh Bernstein
STAFF WRITER

Paul Fardy could be a grade-school gym teacher.

The Queens College professor of physical education somehow even looks the part. And in recent years, he's even taken on some of the responsibilties.

Since 1989 Fardy has worked to improve the health and fitness of minority kids from the borough's public high schools. The goal, he said, is to promote better health and thus reduce their longterm risk of coronary disease.

"We know that inner city adults have a high risk of cardiovascular disease, and we wanted to do something about it," Fardy said. "We choose high-school-age kids because it is at this point where they make individual choices of lifestyle that will affect the rest of their lives."

Fardy's efforts have come in the form of a research project called the Physical Activity and Teenage Health Program, which he began with Kevin McDermott, an assistant principal at Hillcrest High School.

PATH, as the program is known, started out with only 50 Hillcrest students, but now includes more than 500 students at Cardozo and Flushing High Schools, as well. By next year, Fardy hopes to have 2,500 to 3,000 kids in PATH.

In a recent report on the program, Fardy said that students involved in PATH had a 10- to 15-percent reduction in their cholesterol level after just one year, and a 15- to 20-percent improvement in their cardiovascular health.

"There has been a significant increase in health knowledge and a significant improvement in dietary habits," he said.

Participants in the PATH program take 14 weeks of aerobic and resistance circuit training, three to five times a week. As part of the sessions, the students are given lessons on exercise, nutrition, stress management and the dangers of smoking.

"The program is great for the kids," said Arnold Goldstein, the prinicpal at Cardozo, where the program began last month. "They become conscious of health factors they weren't [conscious of] before."

Student participants said they understand the benefits of PATH.

"I'm able to run more than before, and I'm aware of what I'm eating," said Flushing High senior Michelle DeSena. "I now know what to do, and it really makes an improvement."

Cardozo sophomore Kristen Reinhart said the program carries over to her other activities.

"The program helps us all get in shape," she said. "It helps me with my gymnastics, especially jumping and tumbling, and I'm trimming down a little bit."

Seeing the benefits of the program through regular testing, Fardy said, should encourage the teens to continue the regimen outside of school.

"Fun is definitely a big factor. It's something you look forward to at the end of the day. Normally you would dread it, but not with this program," said Hillcrest senior Michelle Yeboah, one of the original PATH participants.

"I think PATH is a lot better than just playing basketball and volleyball in gym," said Cardozo senior Arek Papelian. "There's more physical activity throughout the entire period and not so much wasted time. The exercises get that heart pumping."

With budget cuts hitting city schools, the PATH program remains relatively safe with $150,000 in grant money from the Board of Education, the state Health Department and the City University of New York. Operation Fitkids, a private foundation sponsored by the President's Council on Physical Fitness and Sports, provides the exercise equipment to the schools.

"This is exactly the kind of program that tends to be overlooked, but look what education can do at its best," Goldstein said. "In the long run, this program will do more for society than less-positive endeavors."

Newsday / Viorel Florescu

Paul Fardy looks on as Cardozo HS student Yung Soo Kim gets fit.

'We know that inner city adults have a high risk of cardiovascular disease, and we wanted to do something about it.'

— Paul Fardy

On the PATH to Good Health

Students taught to be more aware of cardiovascular, dietary habits

When Cardozo senior Monica Jefferson began the school year, she wasn't worrying about everything she ate. But since finding out last month she had high cholesterol, Jefferson has virtually cut out red meat other foods that aren't healthy.

I try to stay away from some things, like fried ls," said Jefferson, who runs to keep in shape. it it's very difficult."

efferson is one of 400 students at Cardozo h School in Bayside participating in the Physical ivity and Teenage Health project, a program gned to improve the cardiovascular health and ary habits of inner city youth.

The program has made me more aware," she , adding that the regular testing allows her to track of — and hopefully lower — her choles- l level. "And once education has invoked your rer the benefits come quicker."

eldon James, a Hillcrest High School senior who was one of the original 50 kids in the program, said PATH has turned him into a sports and fitness nut.

"I try to eat healthier, and I exercise regularly," James said. "And I'm really into sports now."

For James, who plans to attend LaGuardia Community College in the fall, the fitness mentality does not end when he gets home. James said he recently purchased a $500 Nautilus machine to work out on at home.

"PATH is a fantastic program. I've bettered my knowledge of physical fitness. I've improved the health of my body, and I've become more muscular," explained James.

For some students already active in sports, however, PATH has been the way to improve their performances.

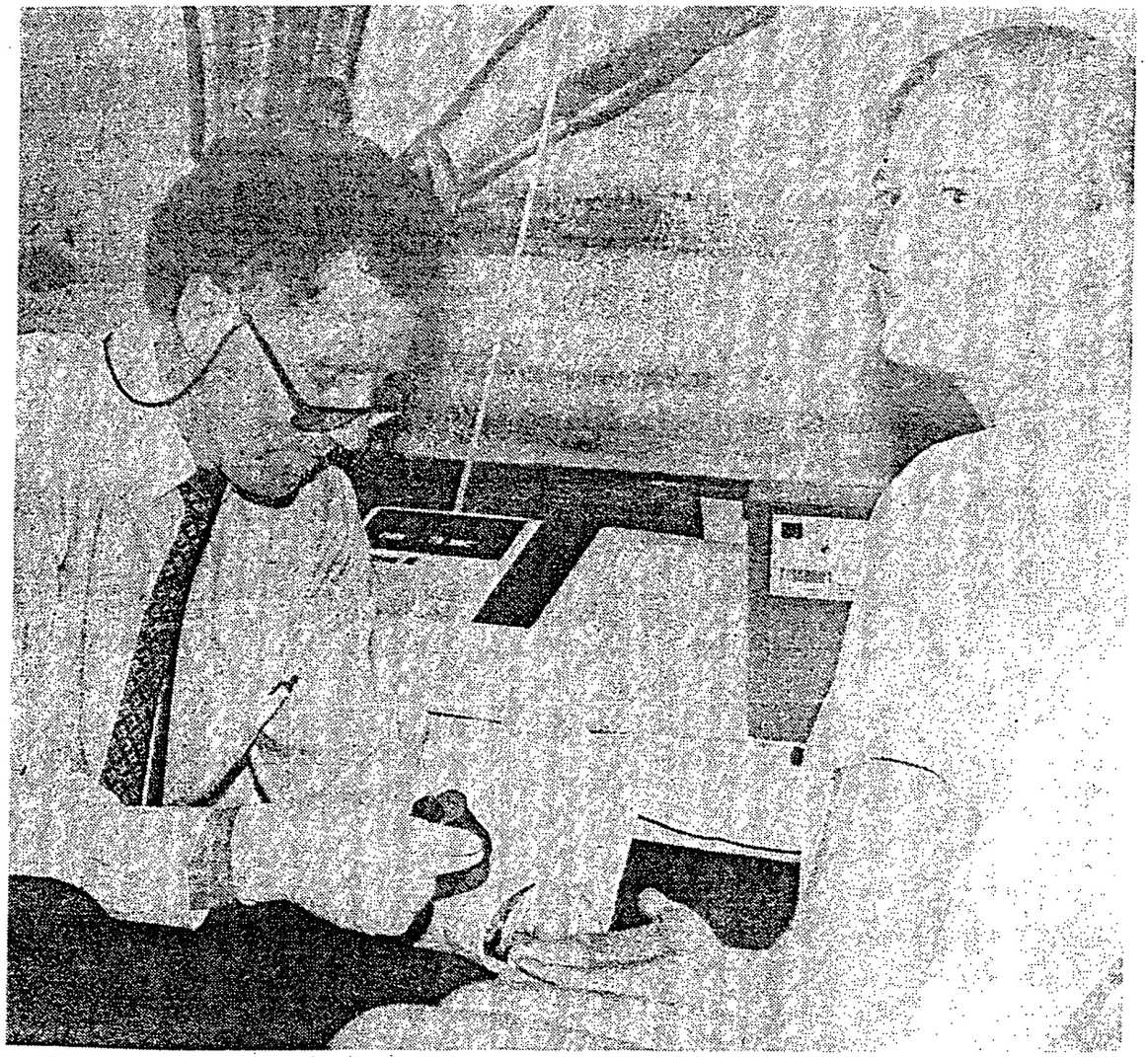
One such student is Hillcrest senior Michelle Yeboah. Yeboah, who hopes to attend college on a track scholarship, believes that she is a stronger runner thanks to the PATH program.

"I've become stronger in the weight room, and my endurance has increased as well," Yeboah said.

Thanks to PATH, Yeboah, whose mother is a dietician, now knows more about her body than ever before. She knows, for example, that health is more than muscles.

"I've learned the difference between my working heart rate and my resting heart rate. I can now measure it to see if I'm working harder," said Yeboah. "I've also changed my diet. I eat less fats, and my cholesterol has gone down. I was kind of high at the start, but it's gone down."

— Josh Bernstein



This won't hurt a bit—Cobleskill-Richmondville student Melissa Rosscoe looks away as Dr. Paul Fardy takes a blood sample for a cholesterol test as part of a study comparing the health of urban and rural teenagers. Dr. Fardy tested C-R students on Thursday and expects the results of his study to be available in several weeks.—Photo by Jim Poole.

C-R kids part of study on cardio-vascular health

Research compares city, rural students

By Jim Poole

It makes sense that students at a rural high school, growing up in the fresh air of the country, would be healthier than their inner-city counterparts.

But that's not necessarily so.

Whether rural students are healthier than urban kids and the cardio-vascular risks both groups face are the twin goals of a Queens College research team that visited Cobleskill-Richmondville last week.

Paul Fardy, heading the research, tested C-R high school students for cholesterol, blood pressure, obesity, cardio-vascular fitness and other characteristics on Thursday.

The overall thrust of Dr. Fardy's work is to improve health behavior among teenagers and reduce cardio-vascular risks.

He's already completed the inner-city portion of his study.

"We found that 50 percent of the urban kids had at least one of the primary risk factors for cardio-vascular disease, and that's without considering family history," Dr. Fardy said.

"We don't know yet up here. There's less obesity here, but the cholesterol seems to be the same or higher. Kids here aren't eating any better, that's clear."

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>
> —Dale Wotherspoon

Dr. Fardy is working with C-R Physical Education Teachers Dale Wotherspoon and Gayle Westervelt, along with the Schoharie County Health Department. Together, they're working with the Physical Activity for Teenage Health (PATH), which was developed by Queens College.

Forty-three C-R juniors and seniors agreed last semester to take part in PATH, which combines aerobic exercise, stress management, nutrition, smoking awareness and other tools.

The county Health Department provided a grant and funding for equipment for the program.

Mr. Wotherspoon and Mrs. Westervelt tested the kids at the beginning of the program and will test them at the end.

If it's successful, C-R may add PATH—or some part of the program—to its Physical Education curriculum.

"What we'll do with the program, we're not sure," Mr. Wotherspoon said. "We're trying to get kids to use the tools to be fit. You can't legislate fitness, but you can make kids aware."

Taken over six years, Dr. Fardy's tests included about 2,000 New York City kids. Cobleskill-Richmondville is one of several rural schools he and his team will study.

"We're just starting to move out of the city," he said. "We don't know if kids are better or worse here."

The study targets teenagers, he said, because that's the age people begin making their own choices.

"Before that, parents make choices for them, most of the time," Dr. Fardy said. "Now, teenagers are deciding for themselves whether to smoke, what to eat, things like that. We want to start them on the right path...or PATH."