



Maine Cardiovascular Health Council

A Coordinated Approach to CVD Risk Reduction

The Governor's Sixth Cardiovascular Health Summit 2002

Social Determinants of Cardiovascular Health

Differences in heart disease have been shown to be due to elevated serum cholesterol resulting from diets rich in saturated fats, cigarette smoking, hypertension, and lack of physical activity. But studies carried out in the United Kingdom and United States have found that most of the differences in heart disease mortality among occupational and educational classes cannot be accounted for by these factors alone.

Social determinants of health are the social and economic conditions within a society that influence whether people are healthy or not. Dr. Dennis Raphael, in the keynote address, outlined the role that income and social exclusion play in the incidence of heart disease. The World Health Organization (WHO) report *Social Determinants of Health: The Solid Facts* (1998) states that societal factors that influence health are: income differences; stress; experiences during early years of life; social exclusion; work conditions; unemployment; social support; addiction; availability of food; and transportation. "Poor conditions lead to poorer health. An unhealthy material environment and unhealthy behaviors have direct harmful effects, but the worries and insecurities of daily life and the lack of supportive environments also have an influence."

Cardiovascular disease seems to be one of the diseases most sensitive to social determinants. In fact, a recent U.S. Department of Health and Human Services report (1998) documented the wide range of income-related health differences that exist between poor and not so poor children, adults

and seniors. In addition to mortality and morbidity differences, disparities are also seen for activity limitation among children and adults, as well as rates of cigarette smoking and being overweight. A study published in *JAMA* (1998, 279:1703) also revealed that lifestyle risk factors accounted for a small proportion of variance in total death rates from CVD as compared to income.

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*Keynote Speaker: Dennis Raphael, PhD,
Professor, School of Health & Policy, York
University, Toronto, Canada*

Summit

Continued from front page

With these facts in mind, Dr. Raphael proposed WHO's approach to address social determinants through recommendations to build healthy public policy to reduce health inequalities through reducing poverty and economic inequality, create supportive environments, strengthen community action, develop personal skills and re-orient health services.

Over 150 people interested in cardiovascular health attended the Summit that was held at Colby College on June 27th. In addition to examining the role of social determinants, participants learned about the Centers for Disease Control and Prevention's task force convened to consider working across health sectors to develop an approach to this issue. Marilyn Metzler from the Urban Research Center outlined the next steps of this new project. Laurie Anderson from the Division of Prevention Research (CDC) described Community Interventions to Promote Healthy Social Environments, an approach developed by the Task Force on Community Preventive Services. And, Gail Gentling from the Minnesota Department of Health talked about the state's multi-disciplinary, inter-sector Social Conditions and Health Action Team's report *A Call to Action: Advancing Health for All Through Social and Economic Change*. She also presented the state's 18 public health improvement goals that include "fostering the understanding and promotion of social conditions that support health." The breakout sessions in the afternoon gave participants the opportunity to explore the implications of social determinants in certain population sectors. For additional information on these topics, please contact Diane Campbell at 622-7566, ext. 230 or dianec@mcd.org.

In recognition of outstanding contributions to Maine cardiovascular health, two awards were presented. The 13th Annual *Larry Johnson Memorial Award*, which is given for outstanding efforts to prevent cardiovascular disease in Maine, was presented to **Patricia Jones**, Program Director, Community Health Program, Maine Bureau of Health. Pat has been a long time ally of MCHC and a dedicated public health professional who has worked tirelessly to promote cardiovascular health in Maine for over 20 years. Pat was instrumental in preparing the successful application to CDC for Maine to be funded for a Comprehensive Cardiovascular Health Program. This project was funded in 2000 and has just been renewed for another five years, bringing over \$5,000,000 to Maine to prevent CVD.

The Fourth Annual *Heart Healthy Recognition Award* was presented to the **Move & Improve Program, Eastern Maine Medical Center**, for its efforts to help promote healthy hearts not only in their community but throughout the state of Maine. Move & Improve is a 12-week community-based physical activity program serving over 15,000 Mainers.



Marilyn Metzler, RN, BA, Urban Research Center, Centers for Disease Control and Prevention.



Patricia Jones, Program Director, Community Health Program, Maine Bureau of Health, accepting the Larry Johnson Memorial Award.



Elanna Farnham (left), Move & Improve Coordinator, Eastern Maine Medical Center, accepting the Fourth Annual Heart Healthy Recognition Award.

Update

Worksite Pilot Project

The worksite component of the MCVHP focuses on increasing the use of policies and environmental supports for heart health at worksites across Maine. We work with businesses, community groups and other partners to develop work environments that support employee health. We believe that supportive work environments will improve employee health, increase productivity, raise job satisfaction, and project a positive image about the business to the community. In the second year of the pilot project we will include more small businesses (<30 employees) and business coalitions, as well as to partner with several Healthy Maine Partnerships in creating healthy work environments. A key objective in our work is to identify partners, such as the Healthy

Maine Partnerships, who can be empowered with the necessary tools to facilitate environmental and policy changes in their local worksite health promotion initiatives.

The Worksite Advisory Board, a collaboration between MCHC and the Bureau of Health, is made up of experienced professionals with expertise in benefits management, cardiac services, managed care, health education, and worksite health promotion. The advisory board provides guidance to the worksite health coordinator in the areas of strategic planning, implementation, and evaluation. For additional information, contact Andy Spaulding at 622-7566, ext. 262.

Following is an example of a worksite policy that was adopted at one of our pilot sites.

Flex Time for Exercise Policy

The City of Auburn recognizes the benefits of regular exercise to the employee and to the organization as a whole. A healthy workforce has more productivity, less absenteeism, and lower health insurance utilization rates. The City, as a way of encouraging overall health and physical fitness, will permit employees flexibility during the regular workday to pursue an exercise program.

Employees will be permitted to take flex time for the purposes of participating in a fitness program either through an individual regimen or through an established fitness program such as a fitness center. Specifically, employees who exercise during their lunch period may extend their lunch period if there is not sufficient time to complete their exercise regimen. Similarly, employees who exercise before work may report to work later than their normal start time if such a delay is a result of participating in an exercise program. Time for the exercise program will include travel to and from the exercise site, time for changing, actual exercise time, and showering.

The following are conditions on flex time for exercise:

- The staffing and work demands are very different among departments. Flex time for exercise may not be appropriate for all departments and employees. Therefore the employee and the supervisor and the department director must mutually agree to flex time before it is implemented. Factors such as union contract provisions, office coverage, minimum staffing levels, vacations, sick leave and other unplanned absences, special projects and peak workloads, and requirements for supervision will be considered before implementing individualized flex time.
- The employee must make up any time lost either at the end of the regular workday, during the lunch period or before normal start of the workday.
- Flex time for exercising will not disrupt the normal workflow of the department or impede customer service.
- Flex time away from regular job will not exceed 30 minutes per day.
- Flex time should occur on a regular schedule to the extent possible (example: lunch time every Monday, Wednesday and Friday, etc.)

Failure of the employee to adhere to these conditions, barring any extenuating circumstances which are approved by the department director or supervisor, will cause the employee to lose the opportunity to participate in flex time.

Approved by the City Manager on June 12, 2002.

Upcoming Events

Cardiovascular Health Screening Workshops Offered

The Maine Cardiovascular Health Council will be sponsoring a three-day Cardiovascular Health Screening Workshop at Medical Care Development in Augusta on October 8, 9, and 15, 2002. Topics covered will include:

October 8 – Risk Factors, Lipids, State & Federal Regulations, Hands-On Cholesterol Screening Training

October 9 – Blood Pressure Measurement and Equipment Calibration

October 15 – Clinician-Patient Communications, Dietary Risk Factors, Benefits of Physical Activity

Brochures containing further information and a registration form can be downloaded off the web at www.maineheartandblood.org (go to the Upcoming Events page) or call 622-7566, ext. 204.

MPHA's 18th Annual Meeting

The Maine Public Health Association's 18th annual meeting, *Public Health Lessons: State and Community Perspectives*, will be held on Monday, November 4, 2002 at the Marriott at Sable Oaks in South Portland. The meeting will focus on the future of public health and the ten essential public health services.

Hugh Tilson, MD, DrPH, will give the keynote address. Dr. Tilson is a Clinical Professor of Epidemiology and Health Policy at the University of North Carolina School of Public Health. Additionally, participants will choose from ten breakout sessions, each focusing on an essential public health service and highlighting programs from the state and community.

For a copy of the brochure, please call 622-7566, ext. 204 or email maryb@mcd.org.



Women



NHLBI Stops Trial

The National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH) has stopped early a major clinical trial of the risks and benefits of combined estrogen and progestin in healthy menopausal women due to an increased risk of invasive breast cancer. The large multi-center trial, a component of the Women's Health Initiative (WHI), also found increases in coronary heart disease, stroke, and pulmonary embolism in study participants on estrogen plus progestin compared to women taking placebo pills.

The report from the WHI investigators on the study was published in the July 17, 2002 issue of *The Journal of the American Medical Association (JAMA)*.

"We have long sought the answer to the question: Does postmenopausal hormone therapy prevent heart disease and, if it does, what are the risks?" The bottom-line answer from WHI is that this

combined form of hormone therapy is unlikely to benefit the heart. The cardiovascular and cancer risks of estrogen plus progestin outweigh any benefits--and a 26% increase in breast cancer risk is too high a price to pay, even if there were a heart benefit," said NHLBI Director Claude Lenfant, MD.

"Menopausal women who might have been candidates for estrogen plus progestin should now focus on well-proven treatments to reduce the risk of cardiovascular disease, including measures to prevent and control high blood pressure, high blood cholesterol, and obesity. This effort could not be more important: heart disease remains the number one killer of American women," added Lenfant.

Two Drugs Help Heart Patients

A three-month course of an antibiotic, clarithromycin, appears to reduce the danger that heart patients will suffer a future cardiac crisis, according to a study published in the March 12, 2002 *Circulation*.

Clarithromycin is usually prescribed to fight respiratory infections. Growing evidence indicates that respiratory tract, dental, and other infections are associated with heart disease. The drug also reduces inflammation, a threat to blood vessels. The role of infection is unknown but inflammation plays a key role in CV problems.

A New Drug Raises “Good” Cholesterol

Good news on the cholesterol-control front may be in the not-too-distant future. An investigational drug, called a CETP inhibitor, boosted “good” (HDL, or high-density lipid) cholesterol levels by 34% in a recent early-phase study in Holland reported in the April 15, 2002 *Circulation*, a journal of the American Heart Association.

What’s Your Reaction ...?

Not Just Cholesterol Anymore?

Half of all heart attacks happen to people with *normal* blood cholesterol levels. We thought cholesterol = heart attack, but it turns out to be only part of the story. While a lipid profile is important information, it doesn’t accurately predict heart disease risk for everyone. Healthcare providers focus primarily on lowering LDL levels but additional diagnostic blood markers are getting a lot of attention. Experts remain divided on whether or not to check these markers in healthy people but they may be helpful in some people at risk for heart disease.

The blood markers are:

Homocysteine. High levels of the amino acid homocysteine have long been linked to heart disease, but there are no studies yet that show lowering it can make a difference. Although most experts recommend keeping homocysteine levels low by taking the three B vitamins needed to dismantle homocysteine: B6, B12, and folate.

C-Reactive Protein. High levels of this marker --as determined only by a high-sensitivity CRP test (hs-CRP)--signal inflammation in the arteries, indicating plaque is vulnerable to rupture, causing a heart attack. Like homocysteine, however, there is no direct evidence that lowering CRP reduces risk of heart disease. Omega-3 fatty acids, abundant in oily fish, also lower CRP levels by inhibiting proteins that cause inflammation.

Lipoprotein(a). This LDL-related substance may foster blood clotting and promote plaque. But Lp(a) is influenced mostly by heredity; diet and exercise do not seem to affect it. Lp(a) can be lowered with medication, namely estrogen or the B vitamin niacin, but at prescription dose levels, not amounts found in foods or multis.

Small, Dense LDL's. Small LDL's are thought to be more damaging to artery walls because they are more easily oxidized. But particle sizing has its skeptics.

Remnant Lipoproteins. These are breakdown particles usually rich in triglycerides. Some researchers believe they provide a more accurate picture of heart disease risk. Diet and exercise may keep them at desirable levels.

What Markers Mean for Diet. High levels of certain markers may indicate an increased risk for heart disease. But that's not a certainty. What these measures *can* provide is an early warning for a change in lifestyle -- a diet low in saturated and trans fat; abundant in whole grains, fruits, vegetables, and especially fish.

What's your reaction to these new ways to predict heart disease? We gladly welcome your reactions by email at mchc@mcd.org or write us at MCHC, 11 Parkwood Drive, Augusta, ME 04330.

Stroke

The American Stroke Association (ASA), a division of the American Heart Association (AHA), each year seeks to raise awareness about the risk factors and warning signs of stroke (with May being designated as American Stroke Month). In a call to action this year, ASA asks each of us to teach two people the warning signs of stroke.

- ✦ Sudden numbness or weakness of the face, arm or leg, especially on one side of the body.
- ✦ Sudden confusion, trouble speaking or understanding.
- ✦ Sudden trouble seeing in one or both eyes.
- ✦ Sudden trouble walking, dizziness, loss of balance or coordination.
- ✦ Sudden severe headache with no known cause.

FACTS

Did You Know?

- ✦ Stroke is more common in men than in women.
- ✦ 28 percent of stroke survivors are under 65.
- ✦ In 1999, 1.1 million people had functional limitations resulting from stroke.

For more information, visit www.StrokeAssociation.org. For a one year free subscription to Stroke Connection Magazine, call 1-888-4-STROKE.

RESOURCES

American Speech-Language-Hearing Association (ASHA) is a nonprofit organization that provides education about speech, language, and hearing disorders to professionals and the public. Their web site is easy to navigate to find information about aphasia and apraxia, disorders that about a quarter of stroke survivors experience. Employment rights for people with communication disorders are also discussed. You can look for self-help groups on the site or by calling the organization.

10801 Rockville Pike
Rockville, Maryland 20852

www.asha.org

Call toll-free, voice or TTY 1-800-638-8255 from 8:30 am to 5:00 pm (eastern) weekdays.

American Stroke Association

1-888-4-STROKE (478-7653)

Fax 214-706-5231

www.StrokeAssociation.org

National Family Caregivers Association

Voice 1-800-896-3650

Fax 301-942-2302

www.nfcacares.org

Aphasia Hope Foundation is a nonprofit organization that promotes research in the causes and cure of aphasia as well as education about it. Their web site offers forums and chat rooms for people with aphasia and their caregivers. The site also provides tips for living with aphasia and a listing of aphasia resources such as language software.

2436 West 137th Street
Leawood, Kansas 66224

www.aphasiahope.org

Toll-free 1-866-449-5804

Voice 913-402-8306

Fax 913-402-8315

Americans with Disabilities Act (ADA)

Voice 1-800-514-0301

TTY 1-800-514-0383

www.usdoj.gov/crt/ada/adahom1/htm

National Aphasia Association

Voice 1-800-922-4622

Fax 410-729-5724

www.aphasia.org

Diabetes

The American Heart Association offers a program called "The Heart of Diabetes: Understanding Insulin Resistance" to help motivate and support people with type 2 diabetes as they attempt to control their diabetes and reduce their risk for cardiovascular disease. Patients enrolling in the program receive a copy of "Getting to The Heart of Diabetes." This booklet explains the relationship between cardiovascular disease, diabetes, and insulin resistance.

Patients who fill out the health risk assessment in this booklet and mail it to the American Heart Association National Center will receive a free educational journal to track glucose, cholesterol, blood pressure, and weight. In addition, the journal serves as an exercise and nutrition log. They also receive a free 12-month subscription to *Diabetes Positive*. This inspirational publication includes informational articles and personal stories to help them manage diabetes.

Along the way they also receive regular communications from the AHA on recent scientific developments as well as incentive items like the American Heart Association's "Fitting in Fitness" booklet.

The Heart of Diabetes: Understanding Insulin Resistance program is designed to educate on diabetes and the risk of stroke and cardiovascular disease. Joining is easy and free -- call 1-800-AHA-USA1 (242-8721) or visit www.americanheart.org/diabetes.

FYI ...

Study Links Western Dietary Pattern with a Greater Risk for Type 2 Diabetes in Men

Researchers from the Harvard School of Public Health have linked a diet high in consumption of red meat, processed meat, high-fat dairy products, and refined grains, combined with obesity and inactivity with a high risk for type 2 diabetes in men. Approximately 16 million Americans have type 2 diabetes, which can cause blindness, kidney failure and heart disease. The study results appear in the February 5 issue of the *Annals of Internal Medicine* (www.annals.org).

FACTS



Diabetes is an independent risk factor for stroke. While diabetes is treatable, having it increases a person's risk of stroke.



Diabetes affects 15.7 million Americans: there are 10.3 million diagnosed cases, and an estimated 5.4 million people who do not know that they have the disease. Mexican Americans and African Americans have almost twice the risk of whites. The majority of people with diabetes have type 2 diabetes.



In type 2 diabetes, the body does not use insulin properly. Insulin is the hormone needed to break down sugars in the blood. People with diabetes have blood sugar levels that are too high -- over 126 milligrams/deciliter (mg/dl). Over time, high levels can lead to blindness, liver disease, the amputation of limbs and cardiovascular disease.



People with diabetes are two to four times more likely to have a stroke or heart attack. But there is good news -- the condition can be managed and the risk of stroke and heart disease reduced.

Upcoming N.E. Conferences

October 1-4, 2002
Diabetes Core Curriculum Workshop
Uniondale, Long Island, New York
Call 631-754-3663 for information

October 27-29, 2002
Maine DCP Annual Meeting
Rockport, Maine
Call 207-287-5180 for information

November 4, 2002
Diabetes Update 2002
Dartmouth-Hitchcock Medical Center
Lebanon, New Hampshire
Call 603-653-1234 for information

FYI

Statin Reduces Inflammation Too

Popular cholesterol-lowering statin drugs may do much more to protect the heart than just keeping cholesterol in check. Researchers say the quick-acting drugs also attack inflammation linked to heart disease risk within just two weeks.

A study, which appeared in the August 26, 2002 issue of *Circulation*, shows the statin drug Zocor was effective at not only lowering cholesterol, but it also significantly reduced the level of an inflammation marker known as highly sensitive C-reactive protein (hsCRP).

High hsCRP levels are common after a heart attack. In addition, high hsCRP levels after a heart attack, or surgeries to open blocked arteries, may be a sign of bad things to come.

Recent studies have suggested that inflammation plays an important role in increasing heart disease risk. Although the exact relationship between inflammation and heart disease is not clear, research

has shown that reducing markers of inflammation can help reduce the risk of heart-related problems.

The speed with which Zocor lowers hsCRP levels raises the question of whether they may prove useful for the acute treatment of coronary events, much the way nitroglycerin is used in emergency rooms.

In the study, 40 men and women with high LDL (bad) cholesterol received Zocor for 14 days followed by a placebo or vice-versa.

The average LDL level in both groups was 162 mg/dL at the start of the study and dropped by 56 points after seven days of treatment with Zocor. Meanwhile, their average hsCRP levels fell from 2.55 mg/L to 1.6 mg/L after two weeks of treatment.

Researchers say the drug's effect on hsCRP was not related to its effect on cholesterol which suggests that the drug may work in more than one way to reduce heart risk.



Viagra Reduces Heart Attack Damage

Rabbits given Viagra don't suffer as much damage from induced heart attacks as animals that do not get the drug. The difference is huge: as much as 68% less damage to heart muscle, according to the report in the September 2002 issue of the *American Journal of Physiology -- Heart and Circulatory Physiology*.

The study leader, Rakesh C. Kukreja, PhD, Professor of Cardiology at Virginia Commonwealth, looked at Viagra because the drug lowers blood flow to the heart. Normally, this is not such a good thing. In fact, heart patients taking blood pressure-lowering drugs are told to avoid the impotence pills. But there's a paradox known to cardiologists -- a puzzle called ischemic preconditioning.

Robert Alan Kloner, MD, PhD, director of research

at the Heart Institute of Good Samaritan Hospital and professor of cardiology at the University of Southern California, studied this phenomenon -- "When blood flow to the heart gets cut off, heart muscle dies. But if the the heart sees brief periods of low blood flow for a few minutes before it sees a longer blockage, the size of the heart attack is markedly reduced. The heart is more resilient when it has seen a brief period of low blood flow. It is a natural way for the heart to protect itself.

"This is one of the few drugs which I have seen that work as effectively as preconditioning or even better," Kukreja says. "Chances are it will become the therapy of choice for treating heart diseases or minimizing damage from bypass surgery and angioplasty."

(Excerpt from WebMD, Inc., Aug. 23, 2002.)

Editorial Policy: The MCHC welcomes articles concerning cardiovascular disease for submission to the newsletter. ALL submissions should be submitted on a computer disk (in Microsoft WORD, if possible) or typed and double-spaced, with the author's name and address. The editorial staff reserves the right to determine acceptance for publication. The information contained herein has been obtained from sources believed to be reliable and the editors have exercised care to assure its accuracy. However, the MCHC does not guarantee that the contents of this publication are correct or necessarily reflect on the views or policies of the Council, nor does the mention of trade names, commercial products, or organizations imply endorsements by the Council.

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