

# AU InforMed

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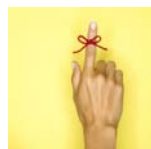


## Key Inforbits

- Cardiovascular Disease... Did you know?
- Attention Women Aged 40 and Up!
- Controlling Blood Pressure Around the Clock
- In the news... Zetia® & Vytorin®
- Guideline Update
- Gender Disparities



## February is... American Heart Month



**Friday, February 1, 2008 is National Wear Red Day** – Show your support for the Go Red For Women campaign and women's heart disease awareness by wearing something red or your Red Dress Pin from the American Heart Association (AHA). Visit <http://www.americanheart.org/presenter.jhtml?identifier=3051416> for details.

### Cardiovascular Disease... Did you know?

- ✓ Cardiovascular Disease (CVD) is the #1 cause of death for men and women in the U.S.
  - ✓ Each day 2,400 Americans die of CVD, an average of 1 death every 37 seconds
  - ✓ CVD refers to the following diseases related to the heart and blood vessels:
    - Hypertension: defined as having a blood pressure of >140/90mmHg, taking medication for high blood pressure, or being told at least twice by health care professional that one has high blood pressure
    - Coronary Heart Disease (CHD): includes myocardial infarction (MI) or heart attack and angina or chest pain
    - Heart Failure
    - Stroke
  - ✓ Over 80,000,000 American adults (1 in 3) have one or more types of CVD
  - ✓ In 2008, an estimated 770,000 Americans will have a new coronary attack, and about 430,000 will have a recurrent attack.
  - ✓ In 2007, the estimated direct and indirect costs of CVD were \$431.8 billion
  - ✓ In 2004, 410,000 American men and 450,000 American women died from CVD
  - ✓ The average age for a first heart attack in men is 66 years.
  - ✓ Almost half of men who have a heart attack under age 65 die within 8 years
1. American Heart Association. Heart disease and stroke statistics-2008 Update. Dallas: American Heart Association;2008. Located [http://www.americanheart.org/downloadable/heart/1200078608862HS\\_Stats%202008.final.pdf](http://www.americanheart.org/downloadable/heart/1200078608862HS_Stats%202008.final.pdf).
  2. Centers for Disease Control. [http://www.cdc.gov/DHDSP/announcements/american\\_heart\\_month.htm](http://www.cdc.gov/DHDSP/announcements/american_heart_month.htm). Updated 07 Jan 2008, Cited 21 Jan 2008



## FROM THE MEDICAL LITERATURE...

### **Attention Women Aged 40 and Up!**

Recent surveys on women's health and cardiovascular disease (CVD) are daunting. Almost 40% of women do not participate in any type of leisure-time activities<sup>1</sup> and almost 70% of women aged 40 and older are either overweight or obese!<sup>2</sup> Incorporating physical activity, weight control and a healthy diet are important factors to reduce the risk of CVD in women. A new study by Folta and colleagues focused on assessing women's CVD literacy as well as identifying effective interventions for this population. Several misconceptions were identified in this group, including the fact that **CVD is the leading cause of death in women**. Interestingly, participants were **more concerned about breast cancer**. Barriers to healthy eating and physical activity were also identified and discussed. Several interventions were identified, including social opportunities to promote lifestyle modifications. One recommendation suggested community activities such as cooking classes to allow taste testing and demonstrations of food preparation techniques. Increasing one's CVD awareness and risk reduction is definitely a New Year's Resolution to stick to!

1. National Center for Health Statistics. Health, United States, 2006 With Chartbook on trends in the health of Americans. Hyattsville (MD): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2006. Located at <http://www.cdc.gov/nchs/data/hus/hus06.pdf#073>. Accessed 22 Jan 2008.
2. Ogden C, Carroll M, Curtin L, McDowell M, Tabak C, Flegal K. Prevalence of overweight and obesity in the United States, 1999-2004. JAMA 2006;295(13):1549-1555.
3. Folta S, Goldberg J, Lichtenstein A, Seguin R, Reed P, Nelson M. Factors related to cardiovascular disease risk reduction in midlife and older women: A qualitative study. Prev Chronic Dis. 2008;5(1). [http://www.cdc.gov/pcd/issues/2008/jan/06\\_0156.htm](http://www.cdc.gov/pcd/issues/2008/jan/06_0156.htm). Accessed 22 Jan 2008.

### **New Guideline Update...**

In 2007, an update for the Evidence-Based Guidelines for **Cardiovascular Disease Prevention in Women** was released. The new guideline recommends a new method for risk stratification in women that addresses limitations with the Framingham global risk score. For example, the new model places greater emphasis on lifetime risk rather than short term, absolute risk. The guideline addresses three specific types of clinical recommendations, including lifestyle interventions, risk factor interventions, and preventative drug interventions. Lifestyle interventions include the standard smoking, exercise, and dietary intake, but they also include some more novel interventions, such as dealing with depression. Risk factor interventions address lipids, blood pressure, and diabetes management. Preventive drug interventions include the appropriate addition of medications such as daily aspirin. CVD causes one-third of all deaths in women, so these updated guidelines may offer some important new perspective for practitioners.



Mosca L, Banka CL, Benjamin EJ, Berra K, Bushnell C, Dolor RJ, et al. Evidence-based guidelines for cardiovascular disease prevention in women: 2007 Update. Circulation. 2007;115:1481-1501.

## Controlling Blood Pressure Around the Clock



A new meta-analysis compared the significance of ambulatory daytime and nighttime blood pressure on mortality and cardiovascular events in patients with hypertension. The study concluded that both daytime and nighttime systolic ambulatory blood pressure (ABP) were significant predictors of all-cause and cardiovascular mortality, coronary heart disease, and stroke. Nighttime ABP alone was a predictor of non-cardiovascular mortality. The ratio of daytime to nighttime ABP was also a predictor of mortality. All measurements were better indicators of outcome than the blood pressures measured in the office. Therefore, controlling ABP, especially during the night, will reduce cardiovascular morbidity and mortality in patients with hypertension. Though the article made no specific recommendations on how to control ABP during the night, managing variables such as cholesterol, diabetes, and making lifestyle changes to include smoking cessation are beneficial initial actions.

Fagard R, Celis H, Thijs L, Staessen, Clement D, Buyzere M, et al. Daytime and nighttime blood pressure as predictors of death and cause-specific cardiovascular events in hypertension. *Hypertension*. 2008;51:55-61.

## In the news... Vytorin & Zetia



Recently, the media made an announcement regarding Vytorin®, a combination product that contains ezetimibe (Zetia®) and simvastatin (Zocor®). The information was obtained from an abstract of the ENHANCE trial, which was sponsored by Merck and Schering-Plough. This information has not been published, but is being considered for presentation at the American College of Cardiology (ACC) annual meeting in March 2008.<sup>1</sup>

The objective of the ENHANCE trial was to determine which was more beneficial, simvastatin 80mg monotherapy or the combination product containing simvastatin 80mg plus ezetimibe 10mg, in 720 patients with heterozygous familial hypercholesterolemia (HeFH). There was no difference in the primary end point, which was the mean change from baseline to two years in carotid artery intima-media thickness (CA IMT). There was also no difference in the secondary endpoints, which included: the proportion of participants who had reductions in CA IMT, the change in maximum far wall IMT, the proportion of participants who developed new carotid artery plaques, and the changes in carotid and common femoral artery IMT.<sup>2</sup>

This information should be interpreted carefully since it has not been subjected to peer review, published, and it is not intended to study clinical outcomes. Larger studies are required to determine if monotherapy or combination therapy is superior for clinical endpoints. One trial for this purpose is the IMPROVE-IT trial, which is in progress and designed to evaluate the effect of Vytorin® versus Zocor® on heart disease and stroke.<sup>3</sup> For now, Merck and Schering-Plough plan to compile final study results from ENHANCE. The FDA will thoroughly evaluate this study data and determine if regulatory action is warranted.<sup>4</sup>

1. Bhatt, DL. Effect of combination ezetimibe and high-dose simvastatin alone on the atherosclerotic process in patients with heterozygous familial hypercholesterolemia (ENHANCE) [clinical trial summary]. 2008. Located at <http://www.cardiosource.com/clinicaltrials/trial.asp?TrialID=1640>.
2. Kastelein JJ, Sager PT, Groot E, Veltri E. Comparison of ezetimibe plus simvastatin versus simvastatin monotherapy on atherosclerosis progression in familial hypercholesterolemia: Design and rationale of the Ezetimibe and Simvastatin in Hypercholesterolemia Enhances Atherosclerosis Regression (ENHANCE) trial. *Am J Heart* 2005;149:234-239.

3. Merck.com [homepage on the Internet]. Merck and Schering-Plough Respond to Issues Raised About ENHANCE Clinical Trial. [updated 2008 Jan 25, cited 2008 Jan 28]. Available from: [http://www.merck.com/newsroom/press\\_releases/product/2008\\_0125\\_print.html](http://www.merck.com/newsroom/press_releases/product/2008_0125_print.html).
4. FDA.gov [homepage on the Internet]. Rockville: Food and Drug Administration [updated 2008 Jan 25, cited 2008 Jan 28]. Early Communication about an Ongoing Data Review for Ezetimibe/Simvastatin (marketed as Vytorin), Ezetimibe (marketed as Zetia), and Simvastatin (marketed as Zocor). Available from: [http://www.fda.gov/cder/drug/early\\_comm/ezetimibe\\_simvastatin.htm](http://www.fda.gov/cder/drug/early_comm/ezetimibe_simvastatin.htm).

### **Cholesterol is more poorly controlled in women versus men...**

A recent study aimed at revealing gender disparities in cardiovascular treatment discovered that the percentage of diabetic men who reached LDL goals of < 100mg/dl was 5.6% higher than in diabetic women. In patients who had recent acute cardiac events, the difference jumped to 9.3% in favor of men. These differences were present in both commercial and Medicare managed health care plans. One commercial plan even revealed a 32% difference in cholesterol control favoring men. Previous studies have shown that women experience increased morbidity and mortality because of CVD, but that women are less likely to receive preventative and treatment interventions. Health care plans were challenged to start monitoring for these disparities in care and to examine the need for quality improvement to ensure that women are provided with the same standard of care as men.

Chou A, Wong L, Weisman C, Chan S, Bierman A, Correa-de-Araujo R, et al. Gender Disparities in Cardiovascular Disease Care Among Commercial and Medicare Managed Care Plans. *Women's Health Issues*. 2007;17:139-149.

### **Try these recommendations to make your favorite recipes "heart" healthy:**

- Replace low-fat, fat free, nonfat dry, or evaporated fat free milk for whole milk.
- Replace 1 whole egg with ¼ cup of egg substitute.
- Make muffins, quick breads, and biscuits with 3 ripe, well-mashed bananas instead of ½ cup of butter or oil.
- Substitute a cup of applesauce for a cup of butter, margarine, oil, or shortening in baked goods.
- For chocolate desserts, use 3 Tbsp of cocoa for every ounce of baking chocolate. If you need to replace the fat in chocolate, add up to 1 Tbsp of vegetable oil.



National Heart, Lung, and Blood Institute (NHLBI). The heart truth for women. U.S. Department of Health and Human Services. 2005. Located at [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov).

### **Fun Facts... February is:**

- |   |                                      |
|---|--------------------------------------|
| • Black History Month                   | • Ground Hog Day (2 <sup>nd</sup> )  |
| • International Boost Self Esteem Month | • Valentines Day (14 <sup>th</sup> ) |
| • National Pet Dental Health Month      | • Library Lovers Month               |
| • National Time Management Month        |                                      |



*Smile, it is the key that fits the lock to everybody's heart.*

-Anthony J. D'Angelo, contributing author and editor of *Chicken Soup for the College Soul*

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