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Issued from the Council for Responsible Nutrition

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Traditionally, eating a nutritious diet and exercising regularly are perceived as the two pillars of heart health. However, a new study shows that nearly three-quarters of US cardiologists would add another recommendation: taking dietary supplements.

In fact, 73 percent of cardiologists believe this regimen—healthy diet + vitamins and other supplements + exercise—is essential for a healthy heart, according to new research from the “Life...supplemented” Healthcare Professionals (HCP) Impact Study. The study also showed that 72 percent of US cardiologists recommend dietary supplements to their patients, and more than half (57 percent) take supplements themselves, with the most popular being multivitamins, omega-3/fish oils and vitamin C.

“Dietary supplements play an important role in a well-balanced health regimen, filling nutritional gaps and helping to promote overall health,” says William Cooper, M.D., medical director of cardiovascular surgery at WellStar Kennestone Hospital, assistant professor of cardiothoracic surgery at Emory University and advisor to the “Life...supplemented” campaign. “For those at high risk for heart disease, there's evidence that consistent use of certain supplements may help as part of a preventative program.”

For example, Dr. Cooper points to the benefits of omega-3 fatty acid/fish oil supplements to help reduce inflammation, lower triglyceride levels and contribute to a healthy heart. He also recommends multivitamins, noting that the first step to heart health is maintaining overall health, and is a strong advocate of the benefits of fiber and phytosterol supplements for cholesterol-lowering effects.

Diet, Supplements & Exercise

Other supplements to consider for heart health include antioxidants, like vitamins C and E, B vitamins, coenzyme Q10, calcium, potassium and magnesium.

A healthy diet complemented by appropriate vitamins, minerals and other supplements is part of a long-term effective solution. In fact, 54 percent of cardiologists believe dietary supplements can play an important role in improving or maintaining the health of their patients.

If all this information sounds confusing, don't be afraid to ask a doctor for guidance. Sixty-two percent of cardiologists agree that one of their roles as a healthcare professional is to provide information to patients on dietary supplements. The ones they are most often asked about include omega-3/fish oil (80 percent), coenzyme Q10 (58 percent), vitamin E (39 percent), multivitamins (36 percent), and glucosamine and/or chondroitin (35 percent).

While a well-balanced wellness regimen that includes a healthy diet, vitamins and regular exercise is the

foundation for long-term health, there are other steps you can add to help protect your heart:

- ➔ *Talk to your doctor; don't be afraid to ask questions. Form a partnership with your physician to set realistic goals for your blood pressure and cholesterol levels.*
- ➔ *Engage in stress-reducing behaviors, such as yoga, meditation and massages, and be sure to get a good night's sleep on a regular basis.*
- ➔ *Don't smoke. Research concludes that smoking is not good for your health or your heart.*

Methodology: Results from the 2008 "Life...supplemented" HCP Impact Study went public in November 2008 and comprise three separate surveys – 300 cardiologists, 300 dermatologists and 300 orthopedic specialists. Margins of sampling error at a 95 percent confidence level are +/- 5.7 percentage points for each of the specialty groups of healthcare professionals surveyed (dermatologists, cardiologists and orthopedic specialists). A nominal honorarium was given to each healthcare professional completing the survey.

Children's Supplement Use

Healthiest kids most likely to be supplement users

A large number of U.S. children and teens age 2 to 17 use vitamin and mineral supplements according to a report in the February 2009 issue of Archives of Pediatrics & Adolescent Medicine, and the healthiest are the most frequent supplement users.

The study is based on analysis of data from 10,828 children age 2 to 17 who participated in the 1999 to 2004 National Health and Nutrition Examination Survey. As part of the study, parents filled out questionnaires and participated in household interviews, and children and teens underwent medical examinations.

The researchers found that approximately 34 percent of the children and adolescents had used vitamin and mineral supplements in the past month, with underweight children having greater intakes. "Our results supported our hypothesis that underweight children would have the highest use of vitamin and mineral supplements," the authors write. "However, in contrast to what we expected to find, children and adolescents with healthier nutrition, more active lifestyles, greater food security and greater health care access were more likely to use vitamin and mineral supplements."

"It comes as no surprise that those individuals who use vitamin and mineral supplements also engage in other healthy behaviors, such as trying to eat a well-balanced diet and being physically active" stated Douglas MacKay, N.D., vice president, scientific and regulatory

affairs, US Council for Responsible Nutrition. “Studies show that healthy individuals tend to engage in many healthy habits—not just one healthy habit—but an overall approach to wellness. Vitamin supplements are one component of a total health package and cannot be teased out of the overall wellness equation.”

Though this study reaffirms the fact that our healthiest populations include dietary supplementation as part of their wellness strategy it also underscores a situation that is well known and understood within health care communities; that too often those children that have the greatest need for the healthful, abundant nutrition

provided by a supplemented diet (including those poor eating and exercise habits, greater obesity, lower income and food security, poorer health and less access to health care) are those least likely to get them.

“Such supplements contribute significantly to total dietary intakes of vitamins and minerals, and studies of nutrition should include their assessment,” the authors conclude. “Since vitamin and mineral supplement users report greater health care access, health care providers may be in a position to provide screening and counseling regarding dietary adequacy and indications for supplement use.”

STUDY ABSTRACT: Vitamin and Mineral Supplement Use by Children and Adolescents in the 1999-2004 National Health and Nutrition Examination Survey: Relationship with Nutrition, Food Security, Physical Activity, and Health Care Access

Ulfat Shaikh, Robert S. Byrd, and Peggy Auinger. Arch Pediatr Adolesc Med, Feb 2009; 163: 150 - 157

Objective: To determine if vitamin and mineral supplement use among children and adolescents in the United States is associated with nutrition, food security, physical activity, and health care access.

Design: Secondary analysis of nationally representative data from the 1999-2004 National Health and Nutrition Examination Survey.

Setting: Questionnaires, household interviews, and medical examinations.

Participants: Children and adolescents 2 to 17 years of age (N = 10 828).
Main Exposure: Vitamin and mineral supplement use in the past month.

Main Outcome Measures: Demographics, nutrition, food security, physical activity, and health care access. Results: Approximately 34% (SE 1.2) used vitamin and mineral supplements in the past month, with underweight subjects reporting greater intake. Younger age, non-Hispanic white race/ethnicity, being born in the United States, higher milk intake, lower total fat and cholesterol intake, higher dietary fiber intake, higher income, greater food security, lower media/computer use, greater physical activity, lower body mass index, health insurance coverage, better health care access, and better self-reported health were associated with greater use of vitamin and mineral supplements. Such supplements contributed significantly to total daily dietary intakes of vitamins and minerals.

Conclusions: A large number of US children and adolescents use vitamin and mineral supplements, which for most may not be medically indicated. Such supplements contribute significantly to total dietary intakes of vitamins and minerals, and studies of nutrition should include their assessment. Since vitamin and mineral supplement users report greater health care access, health care providers may be in a position to provide screening and counseling regarding dietary adequacy and indications for supplement use.

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Vitamin C may improve blood pressure: Study

Vitamin C may be an important regulator in blood pressure. A recent study found that among a group of young women with normal blood pressure, those with the highest levels of vitamin C had lower systolic and diastolic blood pressure than those with the lowest vitamin C levels.

The cohort of 242 healthy young women age 18-21 years had plasma ascorbic acid levels ranging from 0.22 to 3.13 mg/dL. Researchers determined that a 1 mg/dL increase in plasma ascorbic acid levels was associated with 4.1 mmHg lower systolic blood pressure and 4.0 mmHg lower diastolic blood pressure.

“The findings suggest the possibility that vitamin C may influence blood pressure in healthy young adults. Since lower BP in young adulthood may lead to lower BP and decreased incidence of age-associated vascular events in older adults, further investigation of treatment effects of vitamin C on BP regulation in young adults is warranted.”

Source: Block, Gladys, et. al. Vitamin C in plasma is inversely related to blood pressure and change in blood pressure during the previous year in young Black and White women. Nutrition Journal. Dec 2008: 7-35

Low selenium levels may increase anemia risk

Selenium has been found to be involved in antioxidant activity to protect hemoglobin against oxidation. According to a new study published in the European Journal of Clinical Nutrition, low levels of the mineral selenium may increase the risk of anemia in older people.

Researchers found that adults with the lowest selenium levels were 11.4 per cent more likely to have anemia, compared to subjects with the highest levels.

Lead author Richard Semba comments: “This study raises a potentially important public health question: Has selenium deficiency been overlooked as a cause of anemia among older adults? This study may represent a first important step toward determining whether selenium deficiency is a potential cause of anemia among older adults.”

Source: R.D. Semba, M.O. Ricks, L. Ferrucci, Q.-L. Xue, J.M. Guralnik, L.P. Fried. Low serum selenium is associated with anemia among older adults in the United States. European Journal of Clinical Nutrition. 2009, vol 63: 93-99

Vitamin-D protects cognitive capacity:

Publishing in the December 2008 issue of the Journal of Geriatric Psychology and Neurology, researchers at the Peninsula Medical School, the University of Cambridge and the University of Michigan revealed that vitamin-D status was associated with cognitive function in the elderly.

Data from 1766 subjects (708 males and 1058 females) over 65 years of age showed that those with the lowest levels of vitamin-D (as serum 25(OH) D) were twice as likely to suffer cognitive impairment compared to those with “optimum” levels. Though they could not claim that low vitamin-D caused the cognitive impairment, they noted that their findings add to the accumulating data supporting “previously unsuspected roles for vitamin D in brain development and neuroprotection”.

Source: Llewellyn DJ, Langa K, Lang I. Serum 25-Hydroxyvitamin D Concentration and Cognitive Impairment. J Geriatr Psychiatry Neurol. 2008 Dec 10.

Chronic Disease: Putting it all in Perspective

The grave reality of the global health crisis

was brought to our attention by the 2005 World Health Organization (WHO) report, "Preventing Chronic Diseases: A Vital Investment". WHO's alarming data projects deaths from chronic diseases to increase from 35 million to 41 million by 2015, a 17% increase in just 10 years! In addition, the world's populations will experience 50% more new cases of cancer in 15 years and a 114% increase in diabetes in just 25 years!

Though these growth rates are astounding on their own, when compared against global population growth projects, their true impact on the looming health disaster becomes even more apparent.

The chart below demonstrates that cancer prevalence, cancer incidence and diabetes occurrence rates will far exceed population growth rate by factors of 3 or 4 to 1.

The alarming growth rate of chronic disease and deaths as a result of chronic disease projected by this data further substantiates the reality of the global health crisis and the urgent need for action to do something about it.

- Between 2005 and 2015: chronic disease is expected to **increase by 17%**
- Between 2005 and 2020, there will be **50% more new cases of cancer**
- Between 2005 and 2025, cancer prevalence will **increase by 50%**
- Between 2005 and 2030, diabetes will **increase by 114%**

Projected Chronic Disease Growth Trends

**From data reported in the WHO 2005 report, "Preventing Chronic Disease"*

