

CDC's Second Nutrition Report At-A-Glance

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Demetrius Parker] CDC's *Second Nutrition Report* provides ongoing assessment of the US population's nutrition status by measuring blood or urine concentrations of biochemical indicators in samples from the National Health and Nutrition Examination Survey, also known as NHANES, from 2003 to 2006.

Dr. Christine Pfeiffer is a research chemist with the Division of Laboratory Sciences at CDC's National Center for Environmental Health. She is joining us today to discuss the *Second Nutrition Report*. Welcome, Dr. Pfeiffer.

[Dr. Christine Pfeiffer] Thank you, glad to be here.

[Demetrius Parker] Dr. Pfeiffer, please give us an overview of CDC's *Second Nutrition Report*.

[Dr. Christine Pfeiffer] CDC's *Second Nutrition Report* covers 58 biochemical indicators of diet and nutrition and it is the most comprehensive and only biochemical assessment of the nutrition status of the US population. It shows us what the levels of biochemical indicators actually are in people – in the general population, as well as in selected groups, such as children, women of childbearing age, and minorities. Biochemical indicators include nutrients, such as vitamins, or dietary indicators with potential health relevance, such as phytoestrogens.

CDC's goal is to make new biochemical nutrition information available as soon as possible to the scientific community and to the public. To meet this goal, we periodically release a new issue of the Nutrition Report, but we also publish biochemical nutrition information in peer-reviewed publications. Our first report was released in 2008 and it presented information on 27 biochemical indicators that were surveyed in the US population between 1999 and 2003. So with this new report, we have now more than doubled our evaluation.

[Demetrius Parker] So, what does the report tell us about the nutrition status of the US population?

[Dr. Christine Pfeiffer] This report offers a snapshot regarding the state of our nation's nutrition status that is generally favorable. For example, the prevalence of nutrient deficiencies in the general US population ranges from less than one percent for folate and vitamins A and E, to about 10 percent for iron and vitamins B6 and D. However, for most nutrition indicators, rates vary by age, gender, or race/ethnicity and they can be as high as 31 percent for vitamin D deficiency in non-Hispanic blacks.

[Demetrius Parker] What are some of the key findings in the report?

[Dr. Christine Pfeiffer] The report found a sustained increase of blood folate levels since food fortification with folic acid began in 1998. This increase in blood folate lowered the prevalence of folate deficiency in the United States to less than 1 percent. Folate is particularly important to

women and their developing fetuses during pregnancy because it reduces the risk of spina bifida and related birth defects.

Another nutrient that is important for women of childbearing age is iodine. It is an essential component of thyroid hormones which regulate human growth and development and it helps to ensure the best possible brain development of the fetus during pregnancy. The report shows that young women age 20 to 39 had iodine levels that were lower compared to other age groups and in fact, were bordering on insufficiency.

Vitamin D, a nutrient essential for good bone health, receives a lot of attention due to its purported benefits regarding muscle strength, cancer, and type 2 diabetes. The report found the highest rates of vitamin D deficiency in non-Hispanic blacks, despite clinical data showing greater bone density and fewer fractures in this group compared to other race/ethnic groups.

[Demetrius Parker] What are some of the features in the report?

[Dr. Christine Pfeiffer] There are many, but let me name a few. Two new features in this report are that it provides rates of nutrient deficiencies and it looks at nutrient levels over time to detect trends in health significance. The report also provides for the first time, data on plasma levels of both healthy and unhealthy fatty acids in the US population, which over time, will help researchers assess progress towards heart-healthy diets.

[Demetrius Parker] So, how can health professionals use the report?

[Dr. Christine Pfeiffer] The Second Nutrition Report can be used by public health scientists and policy makers to detect low and high nutrient levels and thereby assess inadequate or excess intake. Agencies and organizations involved in developing nutrition policy can use the data to develop further recommendations and guidelines and to evaluate the effectiveness of interventions to improve nutrition status; our blood folate finding that I mentioned earlier is a very good example of that.

[Demetrius Parker] Dr. Pfeiffer, tell our listeners where they can get more information about CDC's *Second Nutrition Report*?

[Dr. Christine Pfeiffer] The complete report and additional resources are available at www.cdc.gov/nutritionreport. Thank you.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.