

Title: Folic Acid and Colon Polyps

Author: Wen-yu Vicky Haines

Date: September 12, 2008

Key words: folic acid, development of colorectal polyps

Abstract: Folic acid does not prevent further development of colorectal polyps after removal of recent polyps

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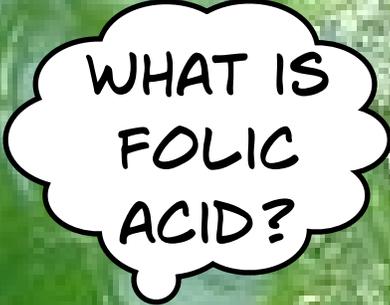
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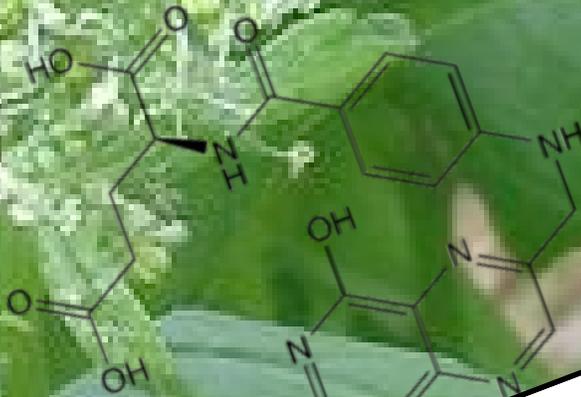
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WHAT IS
FOLIC
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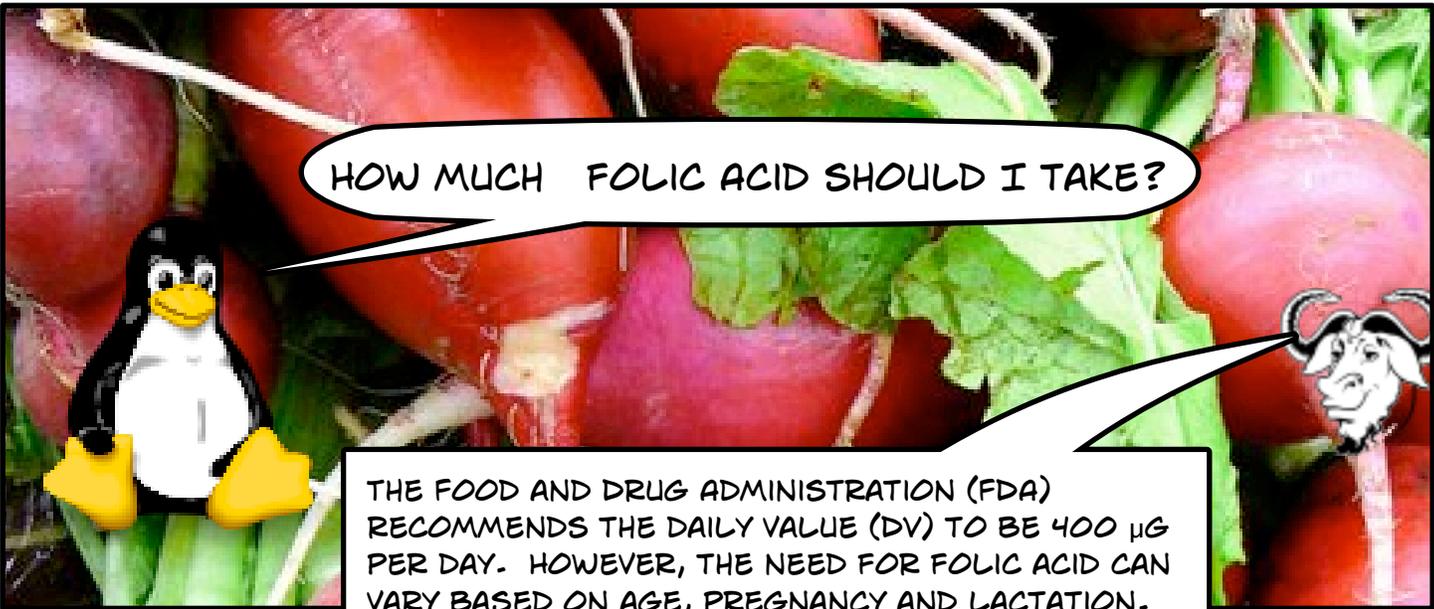
FOLIC ACID IS A WATER-SOLUBLE VITAMIN B ESSENTIAL FOR NUCLEOTIDE SYNTHESIS AND METHYLATION OF NEW CELLS IN OUR BODIES. IT CAN BE FOUND IN FOOD SUCH AS LEAFY-GREEN VEGETABLES, LEGUMES, CITRUS FRUIT AND LIVER. IN THE U.S., GRAIN PRODUCTS (E.G., CEREAL, BREAD, FLOUR, ETC.) ARE FORTIFIED WITH FOLIC ACID.



FOLIC ACID DEFICIENCY:

TOO LITTLE FOLIC ACID CAN CAUSE A TYPE OF ANEMIA. CHILDREN AND INFANTS WITHOUT SUFFICIENT FOLIC ACID CAN HAVE SLOWER OVERALL GROWTH RATE. PREGNANT WOMEN WITH FOLIC ACID DEFICIENCY CAN GIVE BIRTH TO NEONATES WITH VARIOUS BIRTH DEFECTS, IN PARTICULAR NEURAL TUBE DEFECTS. FURTHERMORE, EXCESSIVE ALCOHOL CONSUMPTION, MALABSORPTION AND LIVER DISEASES ALL INTERFERE WITH THE METABOLISM OF FOLIC ACID.

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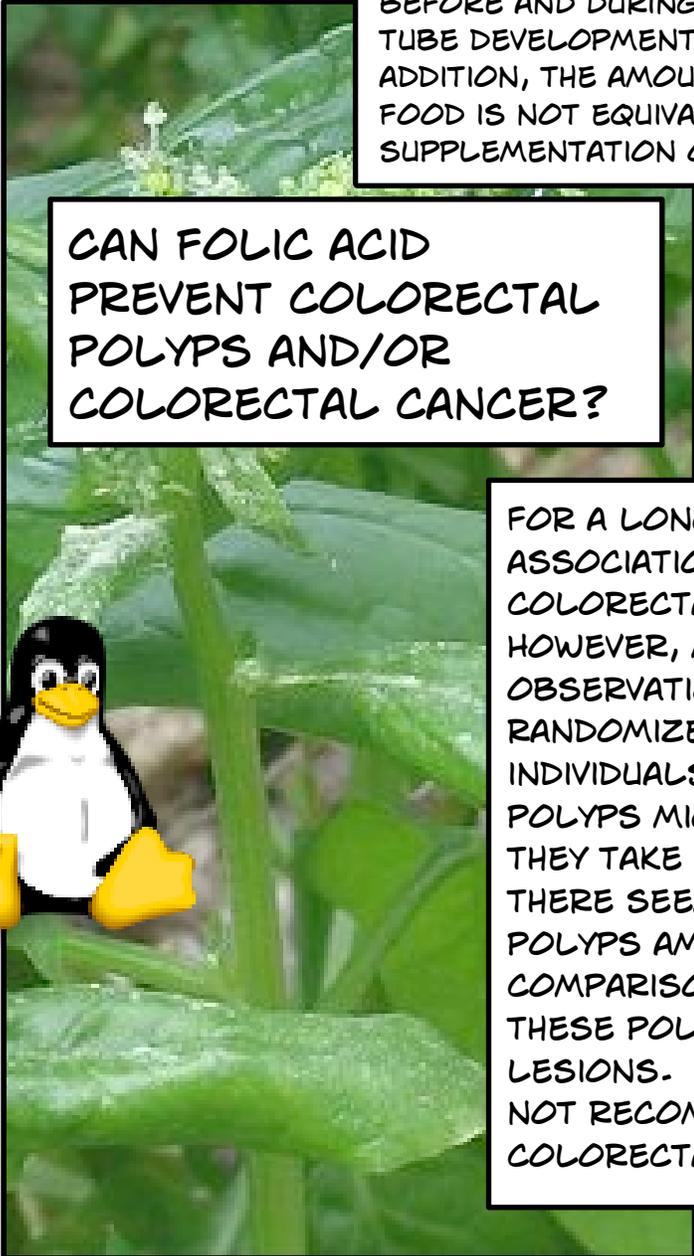
HOW MUCH FOLIC ACID SHOULD I TAKE?

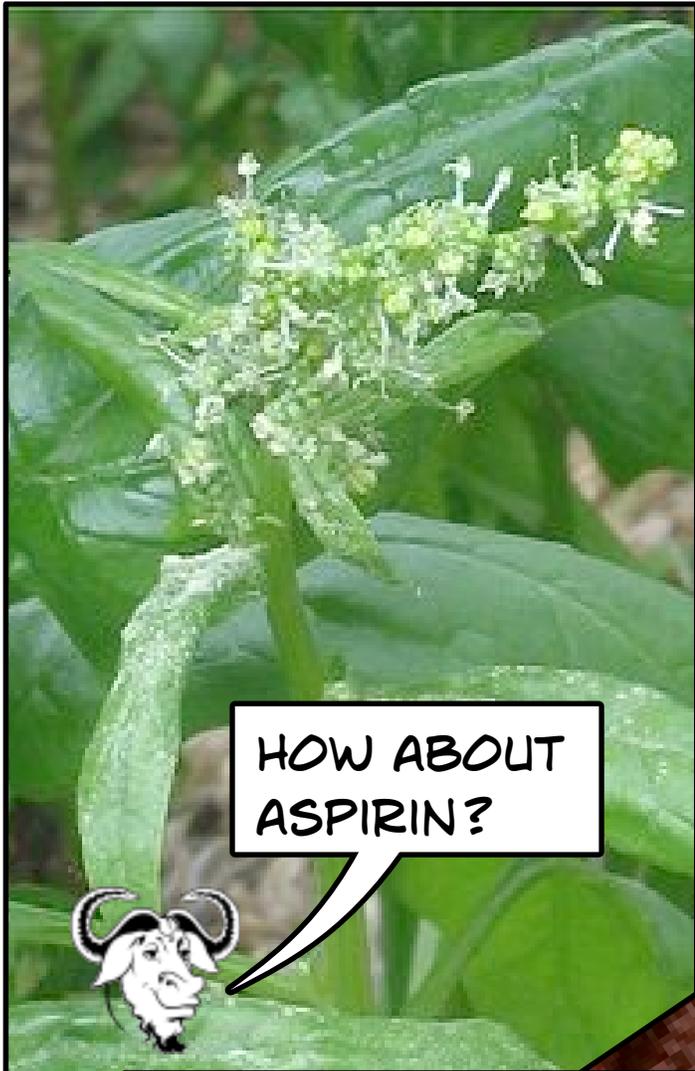
THE FOOD AND DRUG ADMINISTRATION (FDA) RECOMMENDS THE DAILY VALUE (DV) TO BE 400 µG PER DAY. HOWEVER, THE NEED FOR FOLIC ACID CAN VARY BASED ON AGE, PREGNANCY AND LACTATION. FOR EXAMPLE, IT IS RECOMMENDED THAT WOMEN OF CHILD BEARING AGE CONSUME 400 µG PER DAY BEFORE AND DURING PREGNANCY SINCE NEURAL TUBE DEVELOPMENT STARTS VERY EARLY. IN ADDITION, THE AMOUNT OF FOLIC ACID IN NATURAL FOOD IS NOT EQUIVALENT TO FOLIC ACID SUPPLEMENTATION OR FORTIFICATION.

CAN FOLIC ACID PREVENT COLORECTAL POLYPS AND/OR COLORECTAL CANCER?



FOR A LONG TIME, THERE SEEMED TO BE AN ASSOCIATION BETWEEN THE REDUCTION OF COLORECTAL CANCER AND FOLIC ACID INTAKE. HOWEVER, MOST OF THE DATA ARE BASED ON OBSERVATION STUDIES. RECENTLY, MULTI-CENTERED RANDOMIZED CLINICAL TRIALS REVEAL THAT INDIVIDUALS WHO HAVE A HISTORY OF COLORECTAL POLYPS MIGHT FURTHER DEVELOP MORE POLYPS WHEN THEY TAKE 1 MG FOLIC ACID PER DAY. IN PARTICULAR, THERE SEEMS TO BE AN INCREASE IN THE NUMBER OF POLYPS AMONG PARTICIPANTS WHO TAKE FOLIC ACID IN COMPARISON TO THE PLACEBO GROUP. MANY OF THESE POLYPS ARE THE SO-CALLED PRE-CANCER LESIONS. FOLIC ACID SUPPLEMENTS, THEREFORE, ARE NOT RECOMMENDED TO REDUCE THE RISK OF COLORECTAL CANCER.





HOW ABOUT ASPIRIN?



MANY RANDOMIZED CLINICAL TRIALS SHOW THAT ASPIRIN HAS SOME PROMISING POTENTIAL TO REDUCE COLORECTAL POLYP DEVELOPMENT IN ADDITION TO ITS CARDIOVASCULAR PROTECTIVE EFFECT. HOWEVER, THERE IS NO CONSISTENT DOSAGE OF ASPIRIN FOR THIS EFFECT AT THIS TIME.

