

cal and even mental and personality characteristics. They may be mistaken for each other even by their parents. The Dionne quintuplets are believed to be all identical.

But twinning may occur also by another sort of biological accident, the simultaneous development of two or more egg cells and their fertilization at the same time. Twins formed in this way may not be any more like each other than other brothers and sisters and may be of different sexes.

Quadruplets could thus be of four combinations—all identical, two pairs of identical twins, identical triplets and an odd one, or four brothers or sisters, no two of whom are identical. The chances of the last occurrence—four separate egg cells developing safely to maturity at the same time—are extremely small.

Yet the Alphabetical Perricones represent just such a fabulous occurrence. And to add to their rarity, they are all boys. The chances that non-identical quadruplets would be all boys is only one in 16.

Psychological studies by Dr. Gardner reveal that these four brothers are just as different in mind and temperament as they appear physically. Although they are all just about average in intelligence, Carl's IQ is 10 points higher than either Anthony's or Donald's and five points higher than Bernard's. The particular questions they do well on are different.

Carl and Bernard rush ahead and make quick decisions. Anthony and Donald deliberate longer. Donald misses questions that have to do with reading, but he is very good in detecting absurdities. Anthony and Donald are better than either Carl or Bernard on the non-reading performance tests.

These little boys were born of Italian parents on October 31, 1929, on a small truck farm near the outskirts of Beaumont, Texas.

In physical appearance, Bernard and Carl are more alike than any other pair among the four. But Bernard has medium chestnut hair and light brown eyes while Carl has dark brown hair and dark brown eyes. Carl is two inches taller than Bernard. And Bernard has freckles.

Anthony is also freckled, but is fair with bluish-gray eyes. He is the only left-handed one of the quads.

The boys have five older brothers and each of the quads has one older brother whom he resembles more than he does any one of the other quads.

*Science News Letter, September 28, 1940*

MEDICINE

# Anti-Bleeding Vitamin K May Prove Weapon Against Cancer

## Vitamin K Favors Production of Prothrombin; This In Turn May Protect Body Against Cancer Causers

**V**ITAMIN K, the vitamin that is saving new-born babies and sick adults from bleeding to death, appeared in the new role of a possible weapon for the fight against cancer in a report by Dr. Louis F. Fieser, of Harvard University, to the University of Pennsylvania Bicentennial Conference.

Prevention of cancer by means of this vitamin is the possibility, admittedly purely speculative as yet, which Dr. Fieser suggested to fellow scientists as a result of recent chemical studies of both the vitamin and cancer-causing chemical compounds.

Vitamin K prevents bleeding in certain cases because it favors production in the body of prothrombin, the blood constituent necessary for proper blood

clotting. A recent report from Duke University researchers on this point indicates, Dr. Fieser said, that the chemical relationship between the vitamin and prothrombin is similar in certain ways to a detoxifying of cancer-causing chemicals that has been observed in laboratory animals.

"On the hypothesis that a cancer-producing hydrocarbon can be detoxified by interaction with suitable disulfide compounds," Dr. Fieser said, "it is conceivable that one of the normal functions of prothrombin may consist in the protection of the body from incidental carcinogens (cancer-causers). This would suggest the possibility that maintenance of prothrombin at the top level of activity by administration of vitamin K



### SENSITIVE

*Even the hard of hearing can make use of the electrical microphone stethoscope now available for U. S. Navy physicians. A volume control and filter makes it possible to separate normal heart sounds from abnormal sounds.*

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