



## Doctor in the Kitchen®

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### VITAMIN INTERRELATIONSHIPS — IV (Fourth of a four-part series of articles)

In the past three weeks we've talked about vitamins generally, and specifically vitamins A and D. What I didn't mention in the earlier columns is that vitamins A and D, along with vitamins E and K, are known as the fat-soluble vitamins. This is because they always appear in the fat portion of foods. All the fat-soluble vitamins are stored in our bodies to some degree, hence we can build up reserves.

All other vitamins are water-soluble vitamins. These are not stored in the body. They constantly are leaving by way of excretion and must be replenished from our food. Later in this column, they will be discussed.

#### Vitamin E

But first a word about vitamin E. It is essential. Deficiencies in various animals have caused degeneration of skeletal muscles, paralysis of the legs, and reproductive failure. But none of these failures have been demonstrated in man. Vitamin E in the body acts as an antioxidant, uniting with oxygen to help prevent blood cell ruptures caused by oxidizing agents such as the peroxides in unsaturated fatty acids. The daily need for vitamin E is closely related to how much polyunsaturated fats you consume.

The other fat soluble vitamin — vitamin K — is essential for normal blood coagulation, though we don't really know how it assists in blood clotting. We get vitamin K in our food and it is also synthesized in our intestinal tract.

#### The Water-Soluble Vitamins

The water-soluble vitamins include all those referred to as the vitamin B complex, plus vitamin C, or ascorbic acid. At least 11 vitamins compose the complex. The major ones are thiamin, riboflavin, niacin, folic acid, vitamin B12, Vitamin B6, pantothenic acid, and biotin. There isn't space to adequately discuss them, but here, briefly, are some facts.

Thiamin promotes appetite and digestion, keeps the nervous system healthy, and helps the body

release energy from food. Riboflavin helps cells use oxygen, helps keep skin, tongue and lips smooth and normal. Niacin helps keep the nervous system healthy, and prevents pellagra, a disease once prevalent in our southern states. Folic acid and vitamin B12 and ascorbic acid share a function related to the health of red blood cells. B12, on its own, is essential for body cell function, especially those in bone marrow, the nervous system and the gastrointestinal tract.

A deficiency of vitamin B6 creates symptoms similar to those resulting from a lack of the other B vitamins — skin problems, tongue and lip inflammation, muscular weakness, nervous disorders, depression and irritability. Pantothenic acid helps release energy from proteins, fats, and carbohydrates in our food. Biotin helps us in metabolizing carbohydrates and in the synthesis and oxidation of fatty acids.

#### Vitamin C

As for vitamin C, it apparently is involved in many of the reactions within cells but this function is little understood. We do know that vitamin C is vital in helping us make the cementing materials that hold body cells together. Vitamin C also helps make the walls of our blood vessels firm, and it helps us in healing wounds and broken bones. Scurvy, once a disease suffered by sailors from lack of citrus fruits in their diets, would result if you did not get enough vitamin C.

Next week we will present a chart showing each of the vitamins, and the best food sources for each.

# Home on the Range

(Continued From Page 29)

1 teaspoon salt  
Drop by teaspoonful on cookie sheets. Bake at 350 degrees for 10 to 15 minutes. Put icing on.

Mrs. Abram Fisher  
R.D. 1  
Ronks

xxx

#### Tempting Pecan Rolls

Dough:

1 cake compressed or 1 package dry yeast  
¼ cup lukewarm water  
1 cup milk, scalded  
½ cup sugar  
1 teaspoon salt  
1-3 cup butter or margarine  
2 eggs  
4 to 4½ cups sifted all-purpose flour

1 cup oatmeal (quick or old fashioned, uncooked)

Soften yeast in lukewarm water (use warm water for dry yeast). Pour scalded milk over sugar, salt and butter; stir occasionally until butter melts. Cool to lukewarm. Beat in eggs and one cup flour. Add softened yeast and oats. Stir in enough flour to make a soft dough.

Turn out on lightly floured board or canvas, knead until smooth and satiny, about 10 minutes. Round dough into ball; place in greased bowl, brush lightly with melted shortening. Cover and let rise in warm place until double in size, about one hour.

Punch dough down; cover, let rest 10 minutes. Divide dough in half. Roll one-half to form a 12-inch square. Brush with melted butter; sprinkle with half of filling made by combining these ingredients:

Filling:

½ cup sugar  
½ cup firmly packed brown

sugar  
2 teaspoons cinnamon  
Roll up as a jelly roll. Cut into 12 one-inch slices. Repeat for other half of dough.

Topping:

6 tablespoons butter or margarine  
6 tablespoons dark corn syrup  
¾ cup firmly packed brown sugar

1-3 cup chopped pecans

Whole pecans

For topping, melt two tablespoons butter in each of three eight-inch cake pans. Stir two tablespoons dark corn syrup and ¼ cup brown sugar into butter in each pan. Sprinkle with chopped pecans.

Place eight rolls in each pan,

cut sides down. Cover; let rise in warm place until nearly double in size, about 45 minutes.

Bake in preheated moderate oven (375) about 25 minutes. Invert on wire rack immediately. Makes two dozen.

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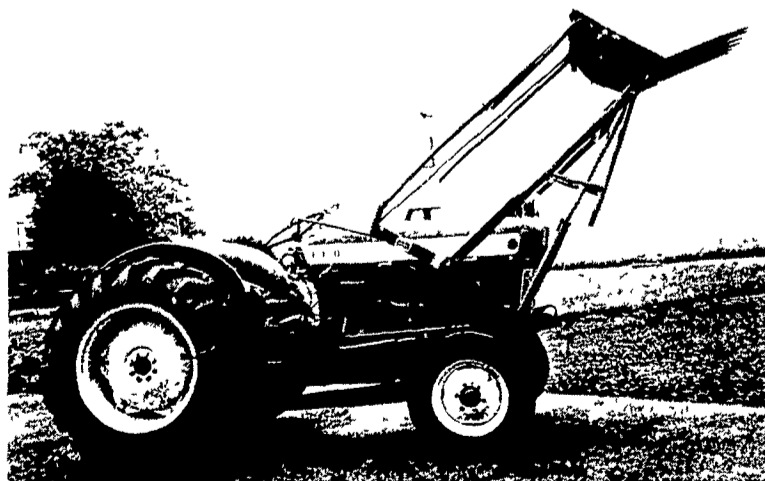
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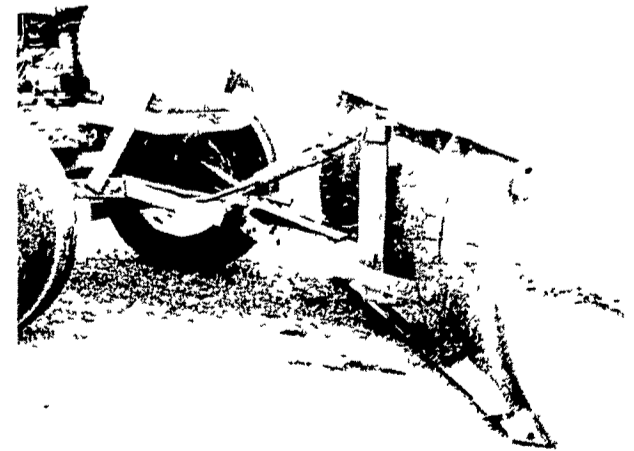
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