



Texas Agricultural Extension Service
The Texas A&M University System

Designing Eggs for Better Nutrition



Microwave Mediterranean Eggs

- 2 PUFA-rich eggs
- 2 Tablespoons feta cheese
- 1 small plum tomato sliced
- 1 Tablespoon fresh basil, chopped,
or 2 teaspoons dried
- 1 Tablespoon low-fat milk
- ground black pepper to taste

Blend eggs with milk. Add cheese, tomato slices, and basil, mixing to blend. Pour mixture into a lightly greased, microwave safe, custard cup. Microwave on medium setting for about 3 minutes (time will vary between microwaves) until eggs are dry and fluffy. Add pepper to taste and enjoy!

For additional information on PUFA-rich eggs, please contact the authors at Department of Poultry Science, Texas A&M University, College Station, Texas 77843.

Educational programs of the Texas Agricultural Extension Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Zerle L. Carpenter, Director, Texas Agricultural Extension Service, The Texas A&M University System.

5M-7-97, New

PS 3



Sarah G. Birkhold
Assistant Professor and
Extension Poultry Specialist
The Texas A&M University System

Mary Van Elswyk
Assistant Professor
Department of Poultry Science
Texas A&M University

Texas Agricultural Extension Service
Zerle L. Carpenter, Director
The Texas A&M University System
College Station, Texas

Eggs are one of nature's most nutritious and economical foods. Unfortunately, concerns about dietary cholesterol and the risk of heart disease have decreased the consumption of eggs.

Now, medical opinion has shifted, and doctors are more concerned about saturated fat as a risk factor in heart disease. The USDA Dietary Guidelines, designed to promote good health, recommend that of the total calories we consume, no more than 30 percent should come from fat. Of this 30 percent, less than 10 percent should be from saturated fat. The remaining fat calories should come from mono- and polyunsaturated fats. These health guidelines target eggs as a good food for obtaining protein without a lot of undesirable fats.

The story gets better. Eggs are recommended as part of a heart-healthy diet; and now, through improved diets of laying hens, eggs are even more nutritious.

Essential Polyunsaturated Fats

Some polyunsaturated fats (PUFA) are an essential part of our everyday diet because our body can not make them. Unfortunately, foods that are good sources of PUFA are often high in total fat.

The essential PUFA include two main families and their derivatives. The omega-6 essential PUFA include linoleic acid and its derivative arachidonic acid. Small amounts of omega-6 PUFA are found in whole grains and meat from grain-fed animals. Some vegetable oils have a lot of omega-6 PUFA. The omega-3 essential PUFA include linolenic acid and its derivatives EPA and DHA. Linolenic acid and its derivatives can be found in flaxseed and some fish. Neither of these foods is commonly eaten in the U.S.

Cost Comparison

Like people, hens are what they eat. Hens fed diets rich in essential PUFA lay eggs rich in essential PUFA. Thus, eggs can become an important source of these healthful fatty acids. In fact,

the amount of essential omega-3 PUFA found in two PUFA-rich eggs is equivalent to that found in a 3.5-ounce serving of lean fish, and at a fraction of the cost. The approximate cost of a dozen PUFA-rich eggs, on a per pound basis, is \$2.00, while most fish averages \$3.00 to 6.00 per pound. The American Heart Association promotes the consumption of up to four eggs per week as part of a heart-healthy diet. PUFA-rich eggs can fit easily and economically into a healthy diet plan.

Taste, Color, Cooking

PUFA-rich shell eggs taste and cook like any other eggs in the grocery store. However, they may look a little different. Naturally occurring antioxidants, as well as pigments added to the hen's diet, can make the yolk a bright yellow-orange color. These designer eggs can contain as much as six times the Vitamin E of a typical egg.

Because these PUFA-rich eggs taste and cook like other eggs, they can be used in any egg recipe.