

Modern Eggs for the Modern Woman

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Nature's Original Functional Food

Meeting your nutritional needs has become big business. Everywhere you look, various nutrients are promoted to benefit your body in some way. Without a professional diagnosis of disease, we are expected to determine our specific nutrient needs according to our family medical history, lifestyle, environmental pollutants, gender, age, economic group and race. Given all these requirements, it's little wonder that most women despair and resort to a multivitamin supplement.

However, the benefits of eating foods that are naturally nutritious must not be overlooked. Foods that offer a variety of nutrients in ample quantities have benefited generations of humans before us. That is because each nutrient helps another to be absorbed and used by the body. This is called nutrient synergy.

Scientists are still discovering nutrients in foods that are essential to the health and well being of the human body. When a supplemented food or a synthetic compound is consumed, the nutritional benefits may be different than from food. Foods like eggs have been an important part of a healthy diet for generations and have a large variety of essential nutrients packed into them by nature. In fact, eggs contain varying amounts of all essential nutrients with the exception of vitamin C. That's why teaming up a cold glass of orange juice with your fresh eggs every morning can take the guesswork out of eating without all the hype.

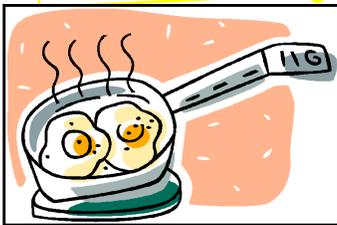
Iron: Not Just for Pressing the Clothes

Function: Iron plays an important role in many body functions including proper immune function, brain development, temperature regulation, energy metabolism and work performance.

Bioavailability: Iron in foods occurs in different forms and therefore differs in its ability to be absorbed and used by the body. The most readily absorbable form of iron is found in animal protein sources such as meat, fish, poultry and eggs. Heme iron is assisted in its absorption into the body by a protein factor in the animal sources that also facilitates the absorption of the non-heme form of iron found in vegetable and grain products.

Deficiency: Many people with mild iron deficiency experience no obvious problems other than vague symptoms of tiredness, headache, irritability, and depression. Iron is the carrier of oxygen in the blood and transports carbon dioxide wastes to the lungs for removal from the body.

Iron in Food: Because iron in meat, fish, poultry and eggs is mostly in the heme form, it is most easily absorbed and used by the body. Non-heme iron sources such as grains and vegetables often supply greater quantities of iron but only about 5% of this iron is absorbed. Vitamin C rich foods assist in the absorption of iron in food sources while calcium rich foods and supplements interfere with iron absorption. Polyphenols found in coffee and tea are also known to interfere with iron absorption.



Eggs; Delicious, Nutritious and Affordable



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High Quality Protein for Women's Health

Protein is the only essential nutrient that provides nitrogen, extremely important for building and repairing muscle and organ tissues as well as maintenance of blood, nerves, bones and heart.

After mother's milk, an egg contains the highest quality food protein known. The human intestine is able to absorb ninety seven percent of the egg's protein in the form of amino acids. In fact, egg protein contributes all the amino acids known to be essential for humans in the amounts needed for normal body function. Egg white has the highest biological value protein of any one food. This means all nitrogen from egg protein

can be absorbed and retained by our body.

Recent studies of protein metabolism have highlighted the vital importance of protein consumption for women. One study where elderly women were fed diets containing protein from either animal or vegetable sources found less breakdown of body protein in the elderly women consuming protein from animal rather than vegetable sources. In addition, animal protein was also found to increase bone density, while vegetable protein intake decreased it.

Another study found elderly women experienced significant loss of normal body function including immune response, muscle function and

muscle tissue stores when a low protein diet was consumed. In fact, research into what constitutes adequate protein in older people found that the RDA for protein (0.8 grams/kg body weight) may not be enough to meet the body's needs of older adults. Given the quality of the protein eggs supply, women would be well advised to consume an egg daily to maintain healthy protein storage at all ages.



Pregnancy and Infant Nutritional Needs

Adequate nutrition, even as early as 8 weeks before pregnancy begins, can help to ensure proper growth during critical stages of embryonic and fetal development and maintain optimal health of the mother as well.

Vitamin needs increase considerably during pregnancy. Certain vitamins such as folate and vitamin B6, and minerals such as iron and iodide, are needed in quantities nearly double that of non-pregnant females due to their involvement in cell metabolism and reproduction. Other nutrients newly found to be essential for health are not yet classified as either vitamin or mineral but have been shown to be necessary for promotion of normal development of the fetus into infancy and beyond.

Choline is an essential nutrient that is associated with memory storage and muscle control. Choline metabolism is closely inter-

related with the metabolism of folate and vitamin B12 to produce the amino acid methionine from homocysteine. Eggs are an excellent dietary source of choline, which in laboratory studies has been shown to enhance fetal brain development and memory function even into old age. The carotenoids lutein and zeaxanthin, also found in eggs, have been found to protect eyes from illness associated with vision loss in the elderly.

Eggs contribute many B vitamins including folate and vitamin B6 as well as a readily absorbable form of iron. It is well known that severe iron deficiency in pregnancy, especially during the first half of pregnancy, may lead to pre-term delivery, low birth weight, and increased risk for fetal death in the first weeks after birth.

Most recently, research has indicated that egg yolks are a good food source of absorbable iron for infants even after the first 4-6

months when their fetal stores of iron becomes depleted and dietary iron is essential for continued health. In a new study published in the American Journal of Clinical Nutrition (June 2002), both breastfed and formula fed infants age 6 to 12 months who consumed egg yolks had improved iron status when compared with infants that did not have egg yolks. In fact, this study also found that antibody levels specific to egg yolk or egg white were no higher for the group that received the egg yolks. Other recent findings have shown that infants who consumed adequate amounts of vitamin D had an 80% lower risk of developing diabetes. Again, eggs are one of the few foods that are a natural dietary source of vitamin D.



Yes but, what about the cholesterol?

For over 25 years eggs have unjustly been the icon for the fat, cholesterol and caloric excesses in the American diet, and the message to limit eggs to lower heart disease risk has been widely circulated. The “dietary cholesterol equals blood cholesterol” view is a standard of dietary recommendations, yet few consider whether the evidence justifies such restrictions.

Over 50 years of cholesterol feeding studies show that dietary cholesterol does have a small effect on plasma cholesterol concentrations. Cholesterol feeding studies demonstrate that dietary cholesterol increases both LDL and HDL cholesterol with little change in the important LDL:HDL ratio. In fact, the American Heart Association has re-

vised its dietary guidelines to allow an egg a day in your diet, if the rest of your daily cholesterol intake is limited.

Many misconceptions about the function of cholesterol in human nutrition may lead young mothers to be needlessly concerned about providing eggs to their children. Human milk contains more cholesterol than both cow’s milk or infant formula. For the infant who is weaning from breast milk or formula, no significant effect was found in plasma cholesterol levels when infants age 6-12 months when fed a diet including 4 egg yolks a week. As a matter of fact, current American Heart Association recommendations are not to restrict fat in the diets of children under two years old.

The benefits derived from cholesterol consumption during early childhood relate to cholesterol’s role in the development of the central nervous system as well as stimulation of enzymes needed for cholesterol degradation.

Additionally, when finances are tight, eggs are extremely inexpensive for the powerhouse of nutrition that they are. Eggs are portion sized so there is little wastage and can be refrigerated for up to a month saving many inconvenient trips to the grocery store. Since eggs are so versatile they can be prepared in an infinite number of ways and mixed with so many other healthy ingredients they are sure to keep boredom from interfering with a nutritious intake, and will make you seem like a gourmet chef time and again.



Senior Wisdom

Maturity should bring wisdom and when considering adequate nutrition, each of us has life experiences that have guided us toward making suitable food choices. Women are often the special keepers of that accumulated health knowledge which has proven itself to be tried and true over a lifetime.

Gradually over time however, changes occur within our bodies that require some new considerations and practices. After age 40, women begin to replace some muscle tissue with fat tissue leading to a reduction in the number of calories one needs as they age. Hormones that once protected women from the risk of heart disease now decline and after menopause women are more likely to put on weight in the dangerous abdominal area. Bone mineral density may also decline as a result of carefree consumption during earlier stages in a woman’s life and a declining ability to absorb valuable nutrients.

A lifetime of healthy eating and exercise should prevent some of the more devastating changes that accompany aging. A healthy intake for the adult woman should include adequate amounts of all nutrients known to be essential. Although nutrient needs are the same throughout adulthood, this must be offset by a diminished requirement for calories as one ages. Foods consumed should contain the most nutrients one can get for the number of calories the food supplies. This is what nutrition experts mean by nutrient density, which has growing importance as we age.

Nutritional concerns for mature women include adequate protein, fluid, vitamin and mineral intake. Animal protein intake has been shown to be beneficial in preserving a women’s bone mineral density. Vitamin and mineral intakes play a large role in preserving a woman’s health and immunity since resistance to infection is often one of the first defenses to be lost when dietary intake is

inadequate. As we ages, some of our natural defenses to foodborne illness diminishes including sight, taste and smell as well as stomach acid output that kills bacteria after it reaches the stomach. This makes women more susceptible to foodborne illness as they age.

Consuming enough vitamins and minerals can also help avoid gum disease which makes chewing food a burdensome challenge. For those women who have difficulty chewing food due to medical problems or poor dentition, eggs are soft and easily chewed yet packed with easily digestible nutrients.



Control Appetite to Control Weight

If there's one concern that has been associated with women throughout history, it surely must be weight control. Unlike the hunter, women have been the gatherers of society, concerned with preparing the food for the family. Whereas men historically performed hard labor in securing food, women have had lives that required less physical exertion. Accompanying this role, a women's weight was controlled by hormones that were programmed to provide nourishment for suckling infants as well as stored energy to protect them from starvation when the hunter returned unsuccessful.

How does the modern woman meet this goal when food is plentiful and time is short? By using the same strategies that have brought us into this technological age, today's woman can be successful in controlling her weight. The goal is to follow a plan that includes a routine intake of nutrient dense foods consumed throughout the day which is balanced with activities to provide an outlet for her energy intake.

Starting the day with a nutrient dense breakfast has been shown to help children focus and perform better in school. Similarly, studies have found breakfast is important for adult cognition and memory as well. Other studies have shown that eating a nutrient dense breakfast helps to reduce snacking on less nutritious and more calorie laden foods throughout the day.

Eggs, when eaten at the start of the day, provide a satisfying meal that can keep the stomach from emptying too quickly thereby providing a long period of satiety.

At 75 calories per large egg, eggs actually contribute few calories for all the nutrients that they provide. When teamed up with whole grains and vegetables they are a complete meal that is easily prepared, widely available and inexpensive making them a useful tool when planning a "women's weight control" program.

Fast and Easy Recipes for Anytime of Day

Time is short, and you're out of ideas for the next meal. Luckily you have some eggs in the refrigerator. Now it's a meal waiting to happen!

Here are some fast recipes for those days.



Baked Monte Cristo (2 servings)

- 4 slices whole grain bread
- 4 slices ready to eat smoked turkey
- 2 slices provolone cheese
- 2 eggs
- 1/4 cup prepared low calorie Italian salad dressing

Preheat oven to 400°F. Evenly coat baking sheet with cooking spray. Top each of 2 slices of bread with 2 slices of turkey and a slice of cheese. Cover with remaining bread slices to make 2 sandwiches. In a shallow pan, beat together eggs and salad dressing until well blended. Dip each sandwich into egg mixture, turning to coat both sides. Place on baking sheet. Bake for 8 minutes. Turn and bake until lightly browned, about an additional 4 to 5 minutes. Serve immediately.

Go Grecian Deviled Eggs (6 appetizer servings)

- 6 hard cooked eggs*
- 1/4 cup feta cheese (crumbled)
- 6 large pitted, chopped olives (kalamata or ripe olives)
- 1/4 cup reduced fat mayonnaise

Lively Latin Devils (6 appetizer servings)

- 6 hard cooked eggs*
- 2 Tablespoons un-drained canned chopped green chilies
- 2 Tablespoons drained canned whole kernel corn
- 2 Tablespoons minced green onions
- 2 Tablespoons shredded Monterey Jack cheese
- 2 Tablespoons taco sauce

For each version, cut eggs in half lengthwise. Remove yolks and set whites aside. In small bowl, mash yolks with a fork. Stir in remaining ingredients for each variation and mix well. Spoon about 1 Tablespoon yolk mixture into each reserved white half. Chill to blend flavors.

*Hard-Cooked Eggs

Place eggs in a single layer saucepan. Add water to cover by one inch. Cover and quickly bring just to a boil. Turn off heat. Let eggs stand, covered in the hot water about 15 minutes for large eggs (about 18 minutes for extra large eggs) Immediately run cold water over eggs, or place them in ice water until completely cooled.

Crunchy Egg Salad

- 1/4 cup reduced fat mayonnaise
- Dash of ground nutmeg
- 3 hard cooked eggs, chopped
- 1/3 cup shredded carrots
- 2 Tablespoons sunflower seeds
- seeds

In medium bowl, stir together mayonnaise and nutmeg until well blended. Add eggs, carrots, and seeds. Gently stir until evenly coated with dressing. Cover, chill. Serve on multigrain bread or spinach.