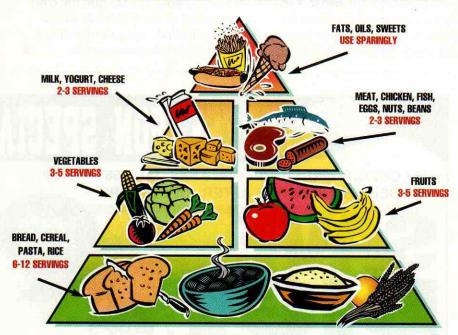


## **What Foods Should I Eat?**



#### **The Food Guide Pyramid**

ithin the Redskins conditioning protocol, we address eight specific components of each player's fitness profile: flexibility, conditioning, speed development, skill acquisition, specificity of conditioning, muscular fitness, rest, and nutrition.

Of these eight components, none has been as overlooked in the past or as oversold in the present as nutrition. The health food industry has become a multi-billion dollar a year business, over-run with wild claims and half-truths.

We are a gullible public, often looking for the quick fix or the easy way. But, buried in the sales pitch of thousands of new products with too-good-to-be-true promises, is a lot of sound nutritional information that can greatly enhance our athletes' ability to prepare and sustain.

Perhaps the most common question asked by our athletes is: "What foods should I eat?" The accompanying Food Guide Pyramid, designed by the U.S. Dept. of Agriculture, will help acquaint coach, athlete, and laymen with the basic foods and an approach to the area of programmed nutrition.

The pyramid differs from the traditional version, which identified the "four basic groups" and recommended choosing equally from each. The current pyramid limits the choices from the top half and focuses on the lower half—the fruits, vegetables, and bread-cereal-pasta groupings.

By Dan Riley & Jason Arapoff, Conditioning Coaches, Washington Redskins

#### WHAT ARE RDAS?

The RDA (Recommended Daily Allowances) are the best known nutritional standards developed to ensure adequate nutrient intake for all healthy individuals. Established in 1943 by the Food and Nutrition Board (FNB), it sets the allowances for all nutrients based on the most-up-to-date scientific information.

Remember, the RDAs are recommendations, not requirements. Since their standards exceed the needs of most healthy people, including athletes, the RDAs provide a built-in safety factor. The daily nutrient intake fluctuates in even the most disciplined individual, but balances out over the course of time.

#### WHAT IS A CALORIE?

Technically, a calorie is the amount of heat necessary to raise the temperature of 1 gram of water 1 degree centigrade. In nutrition, a calorie is the unit by which energy is measured. The energy given off by food is thus measured in calories. This energy is stored in the body as fuel and used for all of the functions that keep the body healthy and active. Almost all foods and most beverages contain calories.

#### WHERE CALORIES COME FROM

Calories are derived from nutrients within foods and are used to promote growth, maintenance, and repair.

The digestive process begins almost immediately. Five different body organs help to break down (metabolize) food into small units of nutrients. As the body continues to metabolize nutrients, energy is created, which is measured in calories.

#### **ESSENTIAL NUTRIENTS**

The foods we eat in a well-balanced diet in accordance to the Food Pyramid and the RDA will provide more than enough of the six essential nutrients: carbohydrates, fats, proteins, vitamins, minerals, and water.

While all of these nutrients are present in the foods we eat, only

## POWER INE

three of them actually provide calories. Carbohydrates, fats, and proteins are referred to as energy-yielding nutrients due to their calorie-providing qualities. Although vitamins, minerals, and water provide no calories and are referred to as non-energy yielding nutrients, they play a vital role in the body's ability to carry out hundreds of complex functions.

#### **CARBOHYDRATES**

Carbohydrates are the body's best energy-providing nutrient. Because they can be broken down by the body rapidly and used almost immediately for energy, they are viewed as the staple nutrient. Approximately 60% of your total caloric consumption should come in the form of carbohydrates.

There are two forms of dietary carbohydrates: complex and simple. Foods such as grains, breads, pasta, and vegetables are considered complex and are the best choice in providing longer-lasting energy. Such food items as fruits, candies, and sugars are simple carbohydrates and tend to provide short quick bursts of energy.

People erroneously believe that most high-carbohydrate foods are also high in calories. Most are actually relatively low in calories. One gram of carbohydrate contains 4 calories. A baked potato, for example, contains approximately 120 calories, with 108 of those calories coming in the form of carbohydrates.

Athletes in training should seek out these high-energy, low-calorie complex carbohydrates every day.

#### FATS

Fat is an important nutrient that has a bad reputation. Dietary fat is essential to a well-balanced diet and good health. It serves to protect vital organs, provide energy, furnish great taste, and offer the feeling of fullness. Unfortunately, many Americans consume far too many calories in the form of fat. A diet high in fat can lead

to many serious health problems, especially as we age.

There are two major types of fat: saturated and unsaturated. Saturated fat is usually of animal origin and can be found in such foods as butter, margarine, cheese, salad dressing, and desserts.

Unsaturated fats, are considered to be less harmful, and are found most commonly in oils and nuts.

Most of the foods we eat contain both types of fat. One gram of fat contains 9 calories, more than twice that of a gram of carbohydrate. About 25% of your total daily caloric intake should come in the form of fat.

#### PROTEIN

One gram of protein provides 4 calories. The two primary sources of dietary protein are animal and vegetable. Animal sources tend to be high in fat, and include such foods as red meat, dairy products, eggs, and fish. Vegetable sources include beans and nuts.

A well-balanced diet will provide more than enough protein. Larger amounts of protein will not build bigger muscles. Proteins should supply only 15% of the total daily caloric intake.

#### **VITAMINS**

Vitamins are natural constituents of foods that are vital to life. Their interaction with the energy-yielding nutrients helps maintain and

regulate all of the chemical reactions in the body. But they do not provide energy, nor has scientific study been able to prove that vitamin supplementation will improve performance.

Because vitamins are stored in the body, it is unnecessary and potentially dangerous to ingest large doses. A well-balanced diet will contain more than the RDA for all vitamins.

#### **MINERALS**

Minerals are often confused with vitamins. Although required in even smaller amounts than vitamins, they serve an equally important role in the regulatory processes of the body. Of the 16 essential minerals needed by the body, iron, zinc, and calcium are the three most commonly recognized among athletes.

Iron in red-blood cells helps transport oxygen. Zinc significantly assists all of the functions of protein. Calcium, the most abundant mineral in the body, is known for its relationship to strong teeth and bones. A balanced diet provides all of the minerals needed by the body.

#### WATER

Water is the most important nutrient. It accounts for approximately 60% of the body weight, most of which is stored in the working muscles.

Although water provides no calories and yields no energy, it is

#### WATER TIPS

- ▲ Avoid consuming beverages that contribute to dehydration, such as alcohol, coffee, tea, and soda.
- ▲ Since 50% of heat is lost through the head, remove helmets, hats, bandanas, whenever possible.
- ▲ Pull socks down and expose the skin as much as possible.
- ▲ Remove pads at half-time.
- ▲ Change out of sweat-drenched clothing if possible.
- ▲ Drink approximately 16 to 20 oz. of

#### **FOR ATHLETES**

water two hours prior to competition.

- ▲ Drink approximately 8 oz. every 15 minutes during a workout or game.
- ▲ Maintain hydration rules during both warm and cold weather.
- ▲ Do not allow yourself to become thirsty.
- ▲ Try to maintain the same body weight before and after workouts and games.
- ▲ If body weight is lost during a workout, consume fluids until it is restored.

## **POWERLINE**

required for almost every metabolic process, from nutrient transportation to the lubrication of our joints.

Because water plays a key role in so many bodily functions, remaining properly hydrated is critical to good health. Most of the body's water is obtained through the fluids we drink and the foods we eat. It is normally lost through urination, evaporation from the skin, and breathing. (It is also lost during exercise.)

The average person should drink 6 to 8 eight-once glasses of water daily to maintain proper hydration.

Athletes are particularly at risk of dehydration. When the body begins to heat up, it draws water to the surface of the skin in an attempt to cool down.

This protective mechanism works out very well, but not without a price. The sweat is drawn predominantly from the working muscles, and it isn't uncommon for a 300-lb lineman to lose 20 lbs. during a two-hour practice.

Rule-of-thumb: On hot days, particularly in summer workouts, the athletes should be permitted to drink all the water they desire. Heat stroke used to be a killer until coaches and trainers unplugged their water supply.

#### **CALORIES PER DAY?**

Every athlete is different. Calorie intake per day will depend on his or her activity level and metabolism. A simple formula can help determine the approximate amount of calories he will need each day.

When trying to lose weight, multiply Body Weight by 15.

When trying to maintain current weight, multiply Body Weight by 19.

When trying to gain weight, multiply body weight by 22.

For example: If a 225-lb. linebacker wants to maintain current body weight, he should

ingest 4,275 calories (19 x 225) per day, with 60% (2,565) of those calories coming in the form of carbohydrates, 25% (1,069) from fat, and 15% (641) from protein.

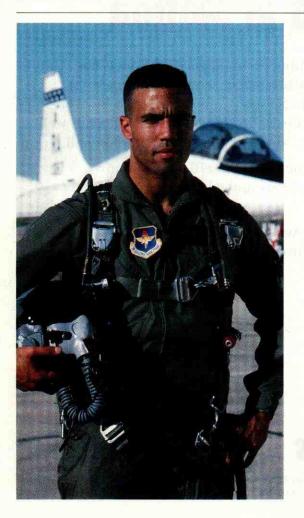
Because we have also learned there are 4 calories in a gram of carbohydrate, 4 calories in a gram of protein, and 9 calories in a gram of fat, the 225-lb. athlete should consume 641 grams of carbohydrates (2,565 divided by 4), 160 grams of protein (641 divided by 4), and 119 grams of fat (1,069 divided by 9).

Athletes should approach weight gain and weight loss cautiously. Quality weight gain should be a slow and gradual process, accomplished by hard training and increased muscle mass.

May the "Power" be with you. ■

#### SEND YOUR QUESTIONS TO:

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