

Groovy Pyramid

Obesity Prevention
Physical Activity Promotion
&
Nutrition Literacy

Program Primer

Draft Version

Introduction

For over two years, our company, Positive Records has been developing the concept of using music to deliver health and wellness information. The prototype project we have developed is entitled the Groovy Pyramid. Although one of the main components of the Groovy Pyramid Hip-Hop Wellness Project is a Soul Music Soundtrack CD, the program consists of much more than music! In addition to songs that feature nutritional lyric content that is based on the new Food Pyramid, and the U.S. Dietary Guidelines, the Groovy Pyramid also helps wellness and nutrition educators initiate peer-based dialogue about lifestyle subjects such as diet, nutrition, water consumption, exercise and rest.

Basically, within the Groovy Pyramid Nutrition Literacy system, music is designed to be an "icebreaker." The Groovy Pyramid tracks serve as Melodic Messengers that deliver nutritional information in a consumable format. Educators can also spice-up their wellness curriculum with the Groovy Pyramid Activity Guide, which includes over 100 cross-disciplinary activity exercises (Math, English, Arts) for grades K-12.

Moreover, since the student participants each receive a complimentary copy of the Groovy Pyramid Sampler CD, they are able to take the concepts home and share them with their family.

The learning objectives of the Groovy Pyramid Obesity Prevention and Nutrition Literacy Project are to increase student's knowledge of the USDA food pyramid, the U.S. dietary guidelines and the benefits of a balanced diet, increased physical activity and adequate rest.

The Food Pyramid and the U.S. Dietary Guidelines

Dietary Guidelines

The U.S. Dietary Guidelines are science-based diet and physical activity recommendations developed by the U.S. Departments of Health and Human Services and Agriculture to promote health and reduce risk for chronic diseases.

Our daily diets should provide all the nutrients we need for proper growth and good physical health. And, to assist us in understanding which nutrients we need, the government publishes the Recommended Dietary Allowances (RDA). The RDA can help in balanced diet planning by listing the total amount of calories we should consume and the specific quantity amounts of essential nutrients we need on a daily basis. In addition to the RDA, the government mandates that food products list information about nutrients a product contains and the respective percentages of RDA on the Nutrition Facts Panel and the Food Label.

Most of us do not have problems consuming the recommended daily amount of calories, however many of us are not getting enough of certain recommended nutrients. Both children and adults tend to intake an inadequate amount of calcium, potassium, fiber, magnesium iron, folic acid and vitamins A, B12, C D, and E. And, while we may need to increase our intake of certain nutrients, most of us need to decrease our consumption of fat, salt and sugar.

Another important principle set forth in the Dietary Guidelines is to consume a variety of nutrient-dense foods in order to achieve the recommended nutrient intake in the fewest calories possible.

Food Pyramid

In addition to the Dietary Guidelines, another tool provided by the federal government to help us make good food consumption choices is the USDA Food Guide. The USDA Food Guide is a tool designed to provide the recommended dietary allowances for calories, nutrients, and physical activity.

To visually represent physical activity, meal choice and variety, serving size proportionality, moderation, gradual improvement, and personalization, the USDA developed the Food Pyramid. The Food Pyramid includes a colored bar/band to represent the six food groups (grains, vegetables, fruits, milk, meat and beans, and oils). The Food Pyramid includes also a character climbing stairs to represent the importance of physical activity and the relationship between exercise and diet. The Food Pyramid illustrates that each of us must develop an individualized plan for healthy eating and physical activity. Healthy eating generally occurs when individuals consume the recommended servings from each food groups.

From The Ground Up- Fruits, Grains & Vegetables

"From the ground up to your mouth" is a slogan that promotes eating more fruits, grains and vegetables in our daily diet.

Grains

The ***Grains Food Group*** includes those food products that are made with rice, oats, wheat, barley or other cereal grain. The nutrients provided by grain-based foods like tortillas, noodles, crackers, rice, bread, oatmeal, spaghetti and popcorn help our bodies to digest the food we eat and they also help our bodies to build red blood cells and repair of body tissue.

Basically, there are two types of grains, whole grain and refined grain. Whole grain products are made with the entire grain kernel and refined grain kernels are milled. While refined grain products are generally enriched with vitamins and minerals such as riboflavin, niacin, iron and folic acid and iron, the milling process of refined grains generally result in the loss of dietary fiber which is important for digestion. The Dietary Guidelines recommend that we consume more whole grains so that we can get the necessary daily allowance of fiber along with the added nutritional benefits of the whole grain kernel.

Our daily diet should include between three to eight ounces of grains depending on your age, gender and how physically active you are. One ounce of grain is equivalent to a half cup of rice, one cup of cereal, or one slice of bread. Usually most of us have no problems consuming enough grain in our daily diets. The challenge is to make at least half of our grain consumption, whole grain.

Fruits and Vegetables

The ***Fruits and Vegetables Food Groups*** may be the most important because of the many health benefits they provide. The bottom line is that more fruits and vegetables you eat, the less likely you are to get diseases such as high blood pressure, cancer, heart disease and diabetes. Fruits and vegetables contain many key nutrients your body needs and as a bonus, they are naturally low in fat and calories.

The nutrients provided through the consumption of fruits and vegetables help our bodies in so many ways. First, they provide an essential source of vitamin A, C, and E which helps our vision, our hair, our skin, teeth, bones, and glands. They also are an excellent source of folic acid, potassium and iron which are crucial for blood cells and body fluid maintenance. Fruits and vegetables also provide phytochemicals which are believed to be prevent certain types of cancer, and they are a source of fiber as well.

Each day, we should consume between one and three cups of vegetables and between one and three cups of fruits, depending on your age, gender and how physically active you are. It is also important to eat a variety of fruits and vegetables (of different colors) in order to get the many vitamins, minerals and phytochemicals our body needs.

Three Times A Day – Low Fat Dairy

The ***Milk Food Group*** includes fluid milk products and many foods made from milk. The nutrient calcium in milk products helps our bodies build and maintain bone mass throughout our lives. Calcium may also help prevent colon and breast cancer, but more importantly, this mineral helps provides for the proper growth and maintenance of our bones and teeth. Another aspect of calcium consumption is that it is we especially need it when we are young. People who don't get enough calcium when they are young are at increased risk from the painful and debilitating disease osteoporosis they are older. Osteoporosis causes bones to become brittle and to break more easily.

Although it's possible to obtain calcium from food such as sardines, shellfish, and green leafy vegetables, the ***Milk Food Group*** represents the best source for calcium. Milk is also a source of other nutrients our bodies need such as potassium, vitamin D, and protein. That is why the Dietary Guidelines recommend that we consume at least three cups of milk or milk products per day.

However, when consuming dairy products, we need to be careful to monitor the fat content. Certain dairy products, such as cheese, ice cream and whole milk, are known to be high in fat. So when possible try to consume low-fat or non-fat dairy products (Skim and Low-Fat milks have more calcium than regular milk).

Mean Protein – Meats, Nuts & Beans

The ***Meats Nuts and Beans Food Group*** which also includes poultry, fish, eggs, and seed provides many essential nutrients like protein, niacin, thiamin, riboflavin, vitamin E, iron, zinc, and magnesium. These nutrients are important because they help our skin, bones, blood, muscles, nervous system and immune system. The Dietary Guidelines recommend that we eat 5.5 ounces of meats, nuts and beans each day.

Unfortunately however, eating food from this group also carries a certain health risk because meats are high in calories and they often can contain high levels of saturated fat ("*bad fat*") and cholesterol which can raise the LDL (low-density lipoprotein, "*bad cholesterol*") levels in our blood. The health consequence of eating too many calories is weight gain, and higher levels of saturated fat and LDL cholesterol is believed to increase coronary heart disease.

Meats

In general, we should keep our meat portions small and keep our meats lean. This can be accomplished by limiting consumption of meats that are known to be high in saturated fat, such as bacon, sausages, ground beef and hot dogs. In addition, when we are consuming meats, we should limit our portions. And, we should also learn to "trim the fat" on the meat we consume. "*Trim the fat,*" basically means that if you see fat present on the meat, you should remove it before cooking it or eating it. You can also limit your saturated fat intake from meat by remove the skin before eating and by utilizing cooking methods that do not add fat (Grill, Broil or roast instead of frying).

Moreover, selecting fish as the meat choice can also enhance a healthy balanced diet because certain fish such as herring, trout and salmon, provide a type of unsaturated fat ("*healthy fat*") called omega-3 fatty acids. It is believed that omega-3 fatty acids may reduce the risk of cardiovascular disease.

Beans & Peas

Dry beans and peas such pinto beans, black-eyed peas, lentils and lima beans, are considered an alternative to meat. These food products can be a good substitute for meat because while they also provide protein and a number of other essential nutrients they are naturally low-fat foods that also provide dietary fiber.

Nuts & Seeds

Like fish, nuts and seeds such as cashews, pecans, sunflower seeds, almonds and walnuts can be considered as an alternative to meat. Nuts and seeds also provide protein, and they are good sources of vitamin E. Consuming nuts and seeds as a substitute for meat can also help us to get the healthy fats called monounsaturated and polyunsaturated fatty acids that we need in our diets. These unsaturated fats are essential because our bodies cannot create them from other fats we consume.

Stay Low – Fats and Oils

Contrary to popular opinion, we could all use a little fat. A healthy diet should include essential fatty acids, and a major source of vitamin E is fat. Fats also help our bodies absorb vitamins A, D, E and K and carotenoids and they help our bodies develop membranes and certain hormones.

But, the problem with fat is not that we are consuming too little. Instead, we generally consume too much saturated fat ("*bad fat*" from meats), and too much trans fatty acids ("*bad fat*" from processed foods and oils). On the other hand, many people are also not consuming enough of the unsaturated fat ("*healthy fat*" from fish, nuts and seeds).

Consuming an excessive amount of saturated and trans fat is a health risk because it may lead to obesity, diabetes, high blood pressure, heart disease and certain kinds of cancer. It is therefore recommended that we limit our fat intake to 20 percent to 35 percent of our caloric intake. Saturated fats should account for less than 10 percent of our calories. In terms of overall fat quantities that amounts to approximately 65 grams of fat per day. Our saturated fat intake should be limited to 20 - 33 grams per day.

The first step to controlling our fat intake is to learn which foods and ingredients are high in fat. And, while some fat is easy to see, sometime fat can only be discovered through a review of the *Per Serving* fat content listed on a products' Food Label.

Secret Agent H2O - Water

Although it is not part of the major food groups, water is an essential element of a daily balanced diet. Our body is composed of 50%-75% water, and our blood is approximately 85% water. Water helps our bodies to perform several important functions including, digestion, absorption, lubrication and transportation of nutrients. Water also helps us to regulate our temperature through sweat (perspiration) that cools the body. And since most of our waste is water-soluble, so they can be removed in our urine.

Water is available through our food consumption, soda, coffee, milk, juices and other beverages. However, the best option to get water is plain water. As a general rule, we need around eight cups of water per day. And, when we exercise our body will require more water than normal to replace the fluids you lose to perspiration.

If you do not drink enough water, you body may become dehydrated and you may feel thirsty and fatigue. A lack of water in the body may also result in a loss of appetite, and you may experience headaches and other symptoms of dehydration, including dizziness, a shortness of breath or heavy breathing, an accelerated heart rate, faster pulse rate, dry mouth.

Let's Get It Started – Physical Activity

The new Food Pyramid also includes a *stick* figure climbing stairs to symbolize the importance of physical activity and its connection to a balanced healthy diet. There are many health benefits gained from regular exercise, including enhanced heart function, improved blood flow, and better muscle tone. Physical activity also helps our bodies digest food and to burn the excess calories we consume in our diet. The new Dietary Guidelines recommend that we are physically active at least 30 minutes four to five days a week. To generate the maximum health benefits exercise should be moderate to vigorous. Moderate exercise activity includes walking, dancing, golfing or bicycling, while vigorous exercising includes more robust activity such as tennis, basketball, aerobics, weight lifting, swimming, or jogging.

Usually the hardest aspect to implementing an exercise program is getting started. That's why we should learn to take it slow. We are so spoiled for convenience these days that we spend minutes looking for the closest parking spot instead of simply walking "a little more" from the available spot. In order to get started with physical activity, we should try exercises that are very easy such as walking around the block, or dancing to the beat of your favorite song, or stretching for five minutes. In fact, stretching is also a very good idea for "*warming up*" your muscles before and the "*cool-down*" after more vigorous exercise. Once you've started with the ***Let's Get It Started Five Minute EASY Workout***, gradually add one minute per week until you're in the twenty to thirty minute range.

Everyone can make excuses for not being physically active. "*I don't have time.*" "*If only I was close to a gym.*" "*I don't have the right shoes or clothes.*" "*I workout by chasing the kids.*" "*I'm too big.*" "*It's too late for me*". These are just a few of the reasons and fake obstacles we can drum up to justify concession and complacency. However, we must not let these obstacles prevent us from having a long healthy life.

For the most part, we need to learn to challenge ourselves to not be lackadaisical about physical activity. Most of us will begin to feel pride even with the smallest amount of exercise, and as we continually notice improvements in the way we look and feel our self-esteem will grow. Being physically active also helps us to relieve stress and to maintain a healthy weight for our bodies. Exercising is the key to life longevity because it allows us to lower our risk of getting chronic diseases such as high blood pressure, heart disease, colon cancer, and diabetes.

Close Your Eyes and Fall – Adequate Rest

A recent study by researchers at Columbia University's Mailman School of Public Health and the Obesity Research Center show that a lack of sleep can increase the risk of obesity. Basically, when we sleep, our bodies release certain hormones that help regulate our appetite and help our bodies to digest the food we consume. A lack of sleep can also increase our risk of diabetes and heart problems and may also lead to depression and substance abuse.

Sleep is an important element of overall health and is a basic necessity of life. It is as important to our physical and mental health as air, food and water, and exercise. When we're asleep, our body recoups and revitalizes itself.

Generally we need between 7-9 hours per night, but enough sleep is often defined as the amount of sleep you need to not feel sleepy the next day.

Seesaw Balance – Discretionary Calories

Diet, exercise, fluid management and rest must all be in balance in order for us to maintain a healthy body. In terms of diet, it's very important that in addition to making sure we get the nutrients we need for our bodies; we also need to monitor the amount of calories we consume. Each of us require a specific caloric intake, and if we consume over the recommended amount of calories, we are increasing our chance of gaining weight. And weight gain is known to lead to an increase risk of chronic disease.

That is why you should learn to read the Food Label so that you can know the calorie count for the foods you consume on a per-serving basis. If you are careful in selecting the foods you eat, you may be able to withstand the increased caloric intake from inevitable binge trip into the "Danger Zone" of Fats, Salts and Sugars. The Food Pyramid describes these calories as "discretionary calories."

In order to avoid weight gain, it very important that we limit our discretionary calories to 200 to 500 per day depending on our age, gender and how physically active we are.

Summary

One of the main goals of the Groovy Pyramid is to get individuals to focus on the food they consume and to recognize that we eat in order to maintain health. Accordingly, our food choices should not only be based on taste, but on knowledge of nutrient and caloric content. The new Food Pyramid emphasizes the point that each person has their own specific nutrient and caloric requirements and it's important that we know what those requirements are so that we can consume a balance healthy diet on a daily basis.

For more information on the new Food Pyramid and the Dietary Guidelines, visit, www.mypyramid.gov, healthierus.gov, nutrition.gov, and fitness.gov.

And for more information on the Groovy Pyramid, visit www.groovypyramid.com