New Options for Wellness news

Stanford Linear Accelerator Center

Published by the SLAC Medical Department November/December 2006

What's Inside…

Wellness Activities

- ***Volley Ball:*** Nicolas Berger sets up the volleyball net on front lawn Tues. & Wed. 12-1:00 PM & Thurs. 5-6:00 PM. Call Nicolas Ext.3434 for more info.
- ***Healthy Back Cross Training***: Taught by HIP instructor on site. 3/30-6/3/05 Wed. & Fri. 11-11:55 AM in Bldg. 27. STAP fund: Yes
- ***Smoking Cessation:*** A free consult by P. L. Sachs,M.D. Questions? Dr. Gherman Ext. 4382.
- ***Body Sculpting & Step Aerobics:*** Taught by Ziba Mahdavi, this stretching class is offered on Tues. & Thurs. 12-1PM in Bldg. 27. Questions? Please call Ext.4458 or 2281.
- ***Ballet/Lyrical Jazz:*** Taught by Vicky Brey, Friday 5:15-6:30 PM in Bldg. 27. Questions? olga@SLAC.Stanford.EDU
- ***Aerobics:*** Taught by Cecilia Glower, Mon. & Wed. 12-1PM, Tues. & Thurs. 5-6 PM in Bldg. 27. Questions? Michelle Steger @ x.3011 or Bette Ferandin @ x 2601.
- ***Stress Counseling:*** Rosan Gomperts & Kevin Carr, Stanford Help Center counselors at SLAC on Tues. 10 -4 PM, Thurs. 8-11AM in the Medical Dept. Call Ext.2281for an apt. at SLAC, or (650) 723-4577 for an apt. at the Stanford campus office.
- ***Massage:*** Mer Baldoza, CMT, is at SLAC medicalTues., Wed, Thurs., and Fri., 3:30 PM. Call Ext. 2009 to schedule an appointment.
- ***Gym:*** weights & equipment in NW corner of Bldg. 34. Call Diane Jenkins to join or for more info Ext. 2215.
- ***Soccer:*** On the front lawn Mon. & Thurs. at noonCall Rafael Miranda x 4471 or Tu Ly x 4442

Osteoporosis and Arthritis: Two Common but Different Conditions

Many people confuse osteoporosis and some types of arthritis. We will discuss the similarities and differences between these conditions.

Osteoporosis

Osteoporosis is a major health threat for 44 million Americans, 68 percent of whom are women. In osteoporosis, there is a loss of bone tissue that leaves bones less dense and more prone to fracture. It can result in a loss of height, severe back pain, and a change in one's posture. Osteoporosis can impair a person's ability to walk and can cause prolonged or permanent disability.

Risk factors for developing osteoporosis include:

- thinness or small frame
- family history of osteoporosis
- being postmenopausal, and particularly having had early menopause
- abnormal absence of menstrual periods
- prolonged use of certain medications, such as those used to treat diseases like systemic lupus erythematosus, asthma, thyroid deficiencies, and seizures
- low calcium intake
- physical inactivity
- smoking
- excessive alcohol intake.

Osteoporosis is a silent disease that often can be prevented. However, if undetected, it can progress for many years without symptoms until a fracture occurs. Osteoporosis is diagnosed by a bone mineral density (BMD) test, which is a safe and painless way to detect low bone density.

Although there is no cure for the disease, several medications have been approved by the Food and Drug Administration to prevent and treat osteoporosis. In addition, a diet rich in calcium and vitamin D, regular weight-bearing exercise, and a healthy lifestyle can prevent or lessen the effects of the disease.

Arthritis

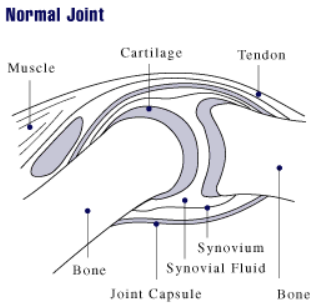
Arthritis is a general term for conditions that affect the joints and surrounding tissues. Joints are places in the body where bones come together, such as the knees, wrists, fingers, toes, and hips. The two most common types of arthritis are osteoarthritis and rheumatoid arthritis.

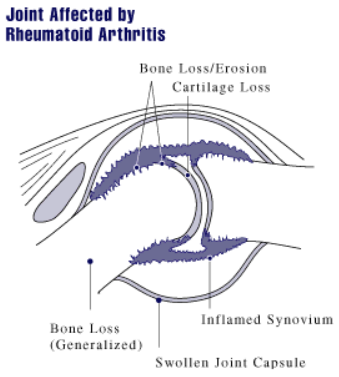
- **Osteoarthritis** (OA) is a painful, degenerative joint disease that often involves the hips, knees, neck, lower back, or the small joints of the hands. OA usually develops in joints that are injured by repeated overuse from performing a particular task or playing a favorite sport, or from carrying around excess body weight. Eventually this injury or repeated impact thins or wears away the cartilage that cushions the ends of the bones in the joint. As a result, the bones rub together, causing a grating sensation. Joint flexibility is reduced, bony spurs develop, and the joint swells. Usually, the first symptom of OA is pain that worsens following exercise or immobility. Treatment usually includes analgesics, topical creams, or nonsteroidal anti-inflammatory medications (known as NSAIDs); appropriate exercises or physical therapy; joint splinting; or joint replacement surgery for seriously damaged larger joints, such as the knee or hip.

- **Rheumatoid arthritis** (RA) is an autoimmune inflammatory disease that usually involves various joints in the fingers, thumbs, wrists, elbows, shoulders, knees, feet, and ankles. An autoimmune disease is one in which the body releases enzymes that attack its own healthy tissues. In RA, these enzymes destroy the linings of joints. This causes pain, swelling, stiffness, malformation, and reduced movement and function. People with RA also may have systemic symptoms, such as fatigue, fever, weight loss, eye inflammation, anemia, or subcutaneous nodules

While osteoporosis and OA are two very different medical conditions with little in common, the similarity of their names causes great confusion. These conditions develop differently, have different symptoms, are diagnosed differently, and are treated differently. While it is possible to have both osteoporosis and arthritis, studies show that people with OA are *less likely* to develop osteoporosis. On the other hand, people with RA may be *more likely than average* to develop osteoporosis. This is especially true because some medications used to treat RA can contribute to osteoporosis.

Osteoporosis and arthritis do share many coping strategies. With either or both of these conditions, many people benefit from exercise programs that may include physical therapy and rehabilitation. In general, exercises that emphasize stretching, strengthening, posture, and range of motion are appropriate. Examples include low-impact aerobics, swimming, tai chi, and low-stress yoga. However, people with osteoporosis must take care to avoid activities that include bending forward from the waist, twisting the spine, or lifting heavy weights. People with arthritis must compensate for limited movement in affected joints. Always check with your doctor to determine if a certain exercise or exercise program is safe for your specific medical situation.





Most people with arthritis will use pain management strategies at some time. This is not always true for people with osteoporosis. Usually, people with osteoporosis need pain relief when they are recovering from a fracture. In cases of severe osteoporosis with multiple spine fractures, pain control also may become part of daily life. Regardless of the cause, pain management strategies are similar for people with osteoporosis, OA, and RA.

http://health.nih.gov/

New Options for Wellness (NOW) News is published quarterly by the SLAC Medical Department to give you recent medical and wellness information, plus SLAC health-related seminars, workshops, and events. We continuously strive to improve and deliver pertinent programs to the SLAC community. *Your feedback and suggestions on our newsletter are welcome at MS 25 or email* *mhipol@slac.stanford.edu* Written and edited: M. Gherman, M.D, MPH; Manuel Hipol, PA-C; S. Aguilar M.A.; D. Sanchez M.A.

Diabetes and Basic Healthy Diet Guidelines

Contrary to what you may have heard, there is no "diabetes diet." The foods that are good for controlling your blood glucose are good for everyone. But, for people with diabetes, total amounts of carbohydrates consumed must be monitored carefully. Of the different components of nutrition -- carbohydrates, fats and proteins -- carbohydrates have the most effect on blood sugar levels. Still, for most people with diabetes, total fat consumption and protein intake must be monitored as well. Please see: http://www.diabetes.com/ap010001.html

To keep your blood glucose levels in check, you need to make healthy food choices, exercise regularly, and take the medicines your health care provider prescribes. A dietitian can provide in-depth nutrition education to help you develop a personalized meal plan that fits your lifestyle and activity level, and meets your medical needs.

The ABCs of Diabetes

The goals of nutrition for people with diabetes are to attain the ABC's of diabetes. The A stands for the A1C or hemoglobin A1C test, which measures average blood glucose (sugar) over the previous 3 months. B is for blood pressure, and C is for cholesterol. People with diabetes should attain as near as normal blood glucose control (HbA1c), blood pressure, and healthy cholesterol level.

Dietary Tips

- Eat a wide variety of foods. Having a colorful plate is the best way to ensure that you are eating plenty of fruits, vegetables, meats, and other forms of protein such as nuts, dairy products, and grains/cereals.
- Maintain a healthy weight.
- Choose foods high in fiber such as whole grain breads, fruit, and cereal. They contain important vitamins and minerals. You need 25 to 35 grams of fiber per day. Studies have shown that people with type 2 diabetes who eat a high fiber diet can improve their blood sugar and cholesterol levels. Similar results have been shown in some studies in people with type 1 diabetes.
- Watch your portions. Eat only the amount of food in your meal plan. Excess calories results in excess amounts of stored energy from food which results in excess fat and excess weight. In people with type 2 diabetes excess body fat means less sensitivity to insulin. The dietitian will help you determine what portion sizes you can eat. This will be determined based on many things such as whether you need to lose weight, maintain weight, have high sugars or suffer from low sugars.
- In women with gestational diabetes, eat multiple meals and snacks per day as recommended.
- Do not skip meals.
- Eat meals and snacks at regular times every day. If you are taking a diabetes medicine, eat your meals and take your medicine at the same times each day.

Protein Intake

In people with diabetes, protein intake should not exceed 15%-20% of the total daily calories. Since the effects of high amounts of protein and low amounts carbohydrates on the development of kidney disease has not been established, experts do not recommend diets high in proteins and low in carbohydrates (for example, Atkins Diet) in people with diabetes as a way to loss weight and control blood glucose levels.

Fat Intake

People with diabetes have higher than normal risk for heart disease, stroke and disease of the small vessels in the body. Controlling blood pressure and limiting the amounts of fats in the diet will help lower the risk of these complications.

Limiting the amounts of saturated fats, increasing the amount of regular exercise and receiving medical therapy can lower bad LDL cholesterol and increase good HDL cholesterol. This has been repeatedly shown in many studies to help people with diabetes reduce their risk of heart disease and reduce the risk of death if a heart attack does occurs in a diabetic person.

TLC Diet

People with diabetes who have abnormal cholesterol levels will likely be placed on a diet known as a "TLC" diet. This diet will help reduce the intake of cholesterol raising nutrients. As part of this diet you may be asked to lose weight and increase physical activity levels -- all of these are components that will help lower bad LDL cholesterol. Looking at food labels will help you become more knowledgeable about your intake of fats and cholesterol.

Specifically the diet calls for:

- Total fat consumption should be 25%-35% or less of total calories eaten per day.
- Saturated fats should be less than 7% of total calories eaten in a day.

New Options for Wellness (NOW) News is published quarterly by the SLAC Medical Department to give you recent medical and wellness information, plus SLAC health-related seminars, workshops, and events. We continuously strive to improve and deliver pertinent programs to the SLAC community. *Your feedback and suggestions on our newsletter are welcome at MS 25 or email mhipol@slac.stanford.edu* Written and edited: M. Gherman, M.D, MPH; Manuel Hipol, PA-C; S. Aguilar M.A.; D. Sanchez M.A.

- Polyunsaturated fats (from liquid vegetable oils and margarines low in transfats) should be up to 10% of the total calories per day consumed.
- Monounsaturated fats (derived from vegetable sources like plant oils and nuts) should be up to 20% of total calories per day eaten.
- Carbohydrates should be 50%-60% of total calories per day eaten
- We should eat 20-30 grams of fiber per day. These can be derived from oats, barley, psyllium and beans.
- The amounts of protein in the diet should equal about 15%-20% of total calories eaten per day.
- Cholesterol content of the diet should be less than 200mg/day.

Can I Eat Sugar?

You might have heard that, as a person with diabetes, you shouldn't have any table sugar. While some health care providers continue to promote this, many -- realizing that the average person lives in the real world and will probably indulge in a bit of sugar every now and then -- have adopted a more forgiving view. Most experts now say that small amounts of sugar are fine, as long as they are part of an overall healthy meal plan. Table sugars do not raise your blood sugar any more than similar amounts of calories from starches which is found in many foods that we consume. It is important to remember that sugar is just one type of carbohydrate.

When eating sugar, keep these tips in mind:

- Read food labels. Learn how to determine how much sugar or carbohydrates are in the foods that you eat.
- Substitute, don't add. When you eat a sugary food, such as cookies, cakes, or candies, substitute them for another carbohydrate or starch (for example, potatoes) that you would have eaten that day. Make sure that you account for this in your carbohydrate budget for the day. If it is added to your meal for the day, then remember to adjust your insulin dose for the added carbohydrates, this way you will continue to maintain glucose control as much as possible. In other words readjust your medications if you do add sugars to you meals.
- Sugary foods are fattening. Many foods that have a lot of table sugar are very high in calories and fat. If you are watching your weight (and many people with diabetes must), you need to eat these foods in moderation!
- Check your blood glucose after eating sugary foods and talk to your health care provider about how to adjust your insulin if needed when eating sugars.

Ultimately the total grams of carbohydrates -- rather than what the source of the sugar is -- is what needs to be accounted for in the nutritional management of the person with diabetes.

Should I Use Artificial Sweeteners?

Artificial sweeteners can be added to a variety of foods and beverages without adding more carbohydrates to your diet. Using non-caloric artificial sweeteners instead of sugar also greatly reduces calories in your favorite foods.

Keep in mind that foods with artificial sweeteners are not necessarily 'no' carbohydrates foods. Many have carbohydrates; therefore, you must read the food labels to determine the gram amounts per serving that these have in order to take into account the effect that these carbohydrates have on your glycemic control. Foods labeled with artificial sweeteners can affect your blood sugars.

As long as you are aware of the content of carbohydrates you can adjust your meal or medication to maintain blood glucose control. Sugar free means -- no sugar has been added but you must remember these foods still contain carbohydrates which does affect your blood sugars.

Examples of artificial sweeteners you can use include:

- Aspartame
- Acesulfame-k
- Saccharine
- Sucralose
- Other non-nutritive sweeteners

Pregnant or breastfeeding women should avoid saccharine, and people who suffer from phenylketonuria should not use aspartame. People with phenylketonuria are unable to metabolize phenylalanine, an amino acid that's a common part of many proteins.

Some artificial sweeteners -- such as xylitol, mannitol, and sorbitol -- have some calories and do slightly increase blood glucose level. The American Diabetes Association cautions that eating too much of any artificial sweetener can cause gas and diarrhea.

http://www.webmd.com/solutions/eating-well-with-diabetes/diet

New Options for Wellness (NOW) News is published quarterly by the SLAC Medical Department to give you recent medical and wellness information, plus SLAC health-related seminars, workshops, and events. We continuously strive to improve and deliver pertinent programs to the SLAC community. *Your feedback and suggestions on our newsletter are welcome at MS 25 or email mhipol@slac.stanford.edu* Written and edited: M. Gherman, M.D, MPH; Manuel Hipol, PA-C; S. Aguilar M.A.; D. Sanchez M.A.