Diabetes WATCH

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THE FILIPINO PYRAMID ACTIVITY GUIDE

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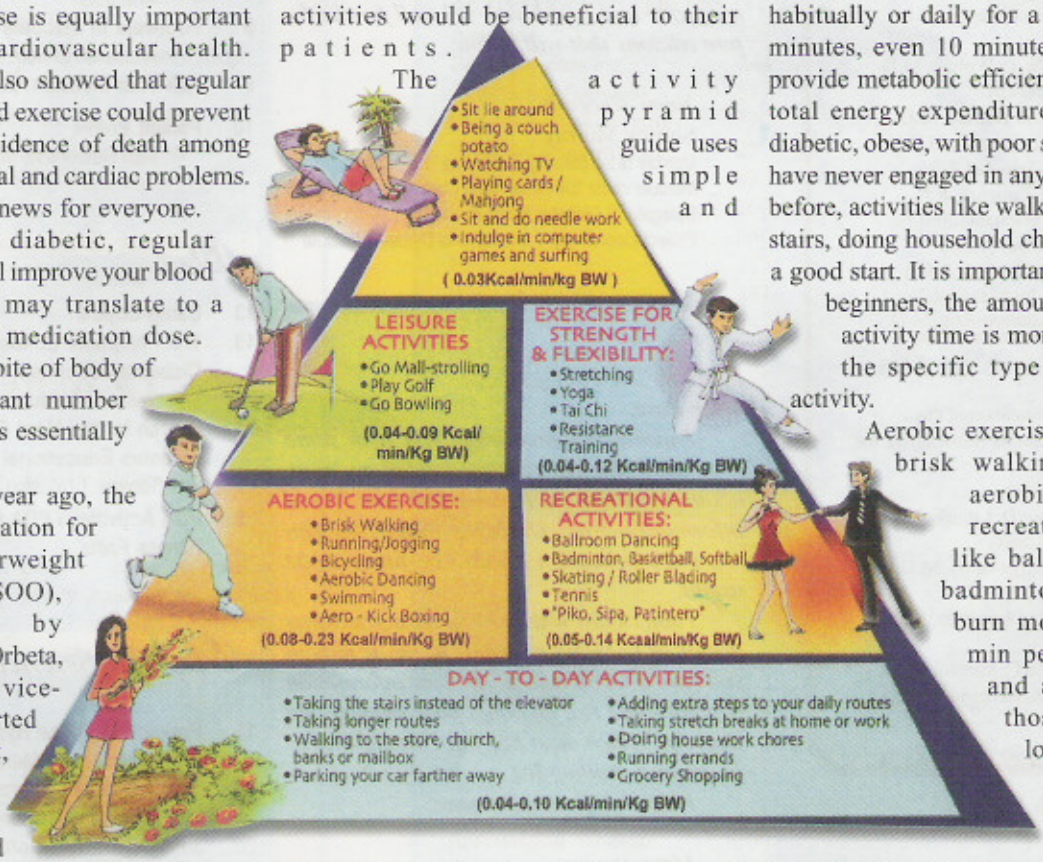
The development of the different food pyramids worldwide have proven to be an important educational tools for health care professionals while counseling patients on healthy eating habits. The illustrations of the pyramid guides help patients to vividly visualize the right proportion and amount of food needed to maintain health. Scientific findings show that regular exercise is equally important in maintaining cardiovascular health. Recently, a study also showed that regular physical activity and exercise could prevent or decrease the incidence of death among patients with medical and cardiac problems. These findings are news for everyone.

If you are a diabetic, regular physical activity will improve your blood sugar level. This may translate to a reduction in your medication dose. Unfortunately, in spite of body of evidence, a significant number of Filipino diabetics essentially remain sedentary.

Just under a year ago, the Philippines Association for the Study of Overweight and Obesity (PASOO), spearheaded by Mrs. Sanirose S. Orbeta, MS, RD, FADA, vice-president --supported by the president, Dr. Augusto D. Litonjua and the other officers and members of the board of directors--conceptualized the **FILIPINO PYRAMID ACTIVITY GUIDE**. Similar to the food pyramid guide, it is intended to help diabetes educators illustrate more clearly which activities would be beneficial to their patients.



The activity pyramid guide uses simple and easy action words or instructions like *Habitually, Often, Regularly* and *Minimal* to indicate activities that would provide the most benefit in terms of cardiovascular and metabolic health. Included in the guide is the number of calories burned per minute per kilogram of body weight of the person performing the activity.

The base of the pyramid includes activities that are easy, convenient and accessible to everyone. These activities, part of our daily routines, when performed habitually or daily for a minimum of 30 minutes, even 10 minutes at a time will provide metabolic efficiency by increasing total energy expenditure. So if you are diabetic, obese, with poor sugar control and have never engaged in any form of exercise before, activities like walking, climbing the stairs, doing household chores etc., may be a good start. It is important to note that for beginners, the amount of cumulative activity time is more important than the specific type and manner of activity.

Aerobic exercises like jogging, brisk walking, swimming, aerobic dancing and recreational activities like ballroom dancing, badminton, tennis etc., burn more calories per min per body weight; and are advised for those who want to lose more weight. To get the most benefit from the activity, it has to be done 3-5 times a week for at least 30-45 minutes. These activities will also

(Continue on page 4)

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LETTERS TO THE EDITOR

January 17,2001
Dear Rosa,

Diabetes Watch is a very informative and well written magazine. However if its main readership is the person with diabetes, it may be too scientific for the average person with diabetes to understand all of its content. They require more practical advice on how to manage their disease. On the other hand, if it is written for the allied health professional person (Diabetes Nurse Educator, Dietician, General Medical Doctor) then it is excellent, they would learn a lot from reading the magazine.

The articles cover a number of important issues which are of importance to the reader. They are varied and relate to both type 1 and type 2 diabetes. They promote activities of the association giving dates and location for readers to participate.

Thank you for giving me the opportunity to look at your magazine and allowing me to comment on its style and content. Please pass on my congratulations to you and your colleagues for producing such an informative magazine and I wish you all well for the future editions that will follow.

Yours sincerely,
Shirley Murray
Member of the Steering Committee - IDF-ICDM
Member of the IDF-Nominating Committee - 2000-2003
Delegate of DiabetesAustralia to IDF
Project Coordinator / International Diabetes Institute

February 20, 2001
Dear Rosa,

I wanted to encourage you with some comments. Firstly, when I started my mag, about 6 years ago, I remember how I used information from Diabetes Watch! As you know a publication needn't be fancy to be useful.

I don't know whether you are a practising doctor or not - but it sounds to me as though you have a lot on your plate. Your information is great - and I've no doubt your readers find Diabetes Watch most helpful. I would love to be on your mailing list.

Please send me your mag!

Many thanks,
Sue Leuner
Editor Diabetes Focus, South Africa

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Your President Speaks...

RUBY T. GO, MD
PDA PRESIDENT & CHAIRMAN

PDA..... on with the challenge.

How time passes! It seems only a while ago when preparations were underway to welcome the new millennium. Now, it has been over a year since the grand celebration... things have changed, we have a new President for the country after another Edsa revolution. We have a new set of PDA officers for the next couple of years. We all look forward to this challenge, to carry on the successful work of our predecessors - Lina Lantion-Ang, Mary Anne Lim-Abrahan, Augusto Litonjua, etc. We will strive to continue the programs they have started to increase the awareness, education and services for our diabetic patients.

Beginning this year, special councils have been created to help achieve specific objectives in each special area -- Pregnancy council, Childhood Diabetes council, Education council, Nutrition council, Complications council in addition to the already existing Foot council. The on-going diabetes workshop will take on a new format with updates and clinical interactive sessions, the first to be held in Baguio on May 26-27 with Dr. Roberto Mirasol as the coordinator.

Obviously, the Diabetes Watch also has been upgraded, under the able editorial work of Dr. Rosa Allyn Sy and Dr. Patricia Gatbonton. New sections are devoted to lay members, again in line with the objective of the PDA to increase the understanding of our patients and update their knowledge on any new developments in diabetes and diabetes care.

Indeed, it's going to be a big challenge for the new board!

Meanderings...

AUGUSTO D. LITONJUA, MD
EDITOR EMERITUS

ADA: No evidence that treating PPG improves outcomes!

In a past issue, we dwelt on a new drug that might possibly be helpful in combatting the vascular complications of diabetes. In the recently concluded annual convention of the Philippine College of Physicians, a symposium on Sulodexide was well received by an overflow audience.

This issue, we take up what to me is a breaking item in the Winter 2001 issue of Professional Section Quarterly of the American Diabetes Association (ADA). A January 2001 consensus development conference on postprandial glucose (PPG) concentrations and diabetes outcomes concluded that "gestational diabetes is the only clinical setting where evidence has shown that PPG monitoring improves outcomes!" Glucose monitoring is a significant financial and personal burden for the diabetic patient - especially when physicians request that the PPG is monitored together with the fasting glucose levels. In the light of these conclusions, arrived at after hearing selected abstracts and presentations, the question now arises - is it necessary to examine the PPG in the adult nonpregnant patient with type 2 diabetes melltus? The panel of ADA experts recommends the monitoring of PPG only in the following situations:

1. when the postprandial blood glucose is suspected to be high

2. when treatment is aimed specifically at lowering the PPG (as when the patient is using rapid acting insulin secretagogues and rapid acting insulin analogs), and

3. when postprandial hypoglycemia is a concern.

The panel of ADA experts does not totally close the doors on the significance of the PPG. They claim that despite 'logic that links PPG excursions to hyperglycemia and therefore to HbA1c and the development of diabetes complications, evidence from well-designed, randomized, controlled clinical trials is missing.' They are therefore calling for such studies that would address the following questions:

1. how best to assess the postprandial hyperglycemia and its relationship to the fasting blood glucose and HbA1c.

2. what is the clinical utility of using measurements of PPG to improve glycemic control, and

3. in the presence of equivalent HbA1c values, does an excessive rise in PPG uniquely affect chronic diabetic complications?

Watch for the consensus statement in the April issue of Diabetes Care, which at the time of this writing is not yet available to us.

Feature

Everything you always wanted to know about DIABETES...

(BUT WERE AFRAID TO ASK!)

ROBERTO C. MIRASOL, MD
ST. LUKE'S MEDICAL CENTER

Everyday we juggle a lot of resposibilities- working to try to make ends meet, nuturing our relationships and balancing commitments. In trying to care for your diabetes you also need to juggle a lot of responsibilities - eating properly, taking your medicines or insulin shots, and exercising to maintain that good blood glucose. Ah - exercise, that which makes our body healthy, that which makes us fit and strong, that which makes us feel good about ourselves! Today we answer your questions on exercise.

I have Type I diabetes and I really love sports. Do I need to stop? Absolutely not! Exercising is great especially for diabetics. It will keep your sugars in good control and make you stronger. You need to plan for how to take care of yourselves when you exercise. Make sure you have provisions for low blood sugars. Proper footwear is a must. Check sugars as often as necessary.

What happens to my blood sugar when I exercise? Most of the time your blood sugar goes down when you exercise. This means that you have to eat or drink to drive that sugar to your exercising muscles. It is important to eat when you exercise. If you are exercising hard, make sure you get about 15 grams of carbohydrates for every 30 minutes of exercise. If you exercise a little, stop halfway during your exercise and test your blood sugars. testing is important to know which direction your blood sugar is going.

I want to start exercising, but I feel tired I haven't started. What should I do? Don't force yourself to exercise. Check your blood sugar, it might be high. If it is 300 mg/dl, then you shouldn't exercise. Be motivated by the benefits you will acquire when you exercise. Set small achievable goals. Start slowly and gradually increase from there. In this way, you do not get frustrated. Allow for backsliding. Go ahead and take that first step. Exercise will give you the power to control your sugar.

I am overweight, it prevents me from exercising. How do I make myself exercise? Physical activity or exercise is recommended as part of weight loss therapy because it contributes to weight loss in overweight and obese diabetics. It may decrease your abdominal fat and more important, increase your cardiorespiratory fitness. With all these benefits in mind who wouldn't exercise? If you're too heavy to indulge in hard exercise you may try walking for a few minutes and gradually work your way up. The most important thing is to take that first step. Feel the difference.

I get bored doing the same exercise routine. What should I do? You may want to cross train. If you have been walking for several months, you may want to shift gears and go swimming. You may even try ballroom dancing, aerobics or tae-bo. There are endless possibilities and you can find ways to be creative and not get bored. Exercise with a friend. It is a good way to keep yourself motivated. You may want to explore activities, which you haven't tried before. Extreme sports? Have yourself cleared by your physician before doing these.

I really am not an exercise person. I know I should but I am just lazy to exercise. Help! Walk rather than ride your car or the tricylcle. Walk fast instead of walking slowly to your destination. If you are caught in traffic, walk to where you are going. Do housework - clean your room, scrub your bathroom, and wash some clothes. Clean your car. These could easily convert to calories burned. Inside the office you may want to do some armchair exercises which could also be done at home. Remember exercise helps control your sugar.

I'm sure you have a lot of other questions. You are most welcome to send them in by fax- 531-1278 or e-mail me at mbmirasol@yahoo.com. Keep exercising!

Filipino pyramid...

(From page 1)

improve your cardiovascular endurance.

Leisure activities like bowling and playing golf burn approximately 0.04-0.09 kcal/min/kg BW. Though these activities are enjoyable and are associated with energy expenditure, they are not recommended as part of our daily activities. This is because cardiovascular benefit is **achieved only** if we can sustain our heart rates at 60-75% of our target heart rate.

Strengthening and Flexibility exercises are intended to improve bone and muscle strength and improve resilience of our connective tissue. Although you may do it everyday, performing it 2-3 times per week may be enough to provide you with its maximum benefits.

Activities that burn the least calories should be avoided. The top of the pyramid refers to activities that are frequently performed by most children and adults who are overweight. These activities are believed to be responsible for the progressive rise in obesity and diabetes in the country.

Regular activity is no doubt beneficial to everyone. No one is too old to enjoy the benefits of regular physical activity. To maintain health, one would need to burn 700-1000 kcal per week. For a 60 kg female walking briskly for 30 minutes (150 kcal) 5 days a week will burn 900 kcal. To lose weight, one has to burn 2000-3000 kcal per week so that a 75 kg male walking briskly for 45 minutes (338 kcal) 6 days a week will burn 2,028 kcal and is expected to lose 0.5 lbs a week if he keeps his food intake within the recommended range.

The **FILIPINO PYRAMID ACTIVITY GUIDE** is intented to be a guide that should help everyone select an activity that best fits his lifestyle and health needs. Just 30 minutes of the different activities over the course of a day is healthy and rewarding! Start getting your rewards, start your EXERCISE NOW!

Diabetes and the New Exercise Trends

TINA ABOITIZ-JUAN,
FITNESS GURU WHO HAS A WEEKLY COLUMN IN THE PHILIPPINE DAILY INQUIRER

As a diabetic, you already know that exercising regularly is an important part of keeping your special lifestyle. There are many new and exciting exercise trends for you to choose from. The question is: which exercise program is appropriate for you? Exercise can be harmful if you don't modify the workout to suit your needs. Here are some guidelines for the newest trends.

Tae Bo

Also called "aerobic kickboxing," Tae Bo is not a wise choice if you have never exercised before. And even if you are relatively fit, you need to join a beginner class. Kickboxing uses explosive movements that can be injurious to joints and muscles that are not used to it. Gradual progression is very important if you want to stay injury-free. If you can't find a beginner class, do only fifteen minutes for the first week, then add five minutes each week until you can do the whole class. Be aware that kickboxing involves the abdominal muscles as well as arms and legs, so discuss where you can safely inject insulin with your doctor if you are a Type I diabetic.

Equipment-based kickboxing

This is real kickboxing using gloves, punching/kicking bags or even sparring partners. If you have peripheral neuropathy, this type of exercise may not be appropriate for you because even if you are wearing gloves, and the bags and your sparring partner are padded, your hands and feet still take a beating.

Pilates

This floor or machine-based exercise program develops the trunk and leg muscles in a gentle, non-impact but challenging manner. You won't get any cardiovascular benefits but you will gain in strength and flexibility. A good teacher will offer modifications for beginners. The arms are probably the best place to inject since they are not used as much as the abdominals or legs. Watch out for inverted positions where the legs are higher than the head if you have retinopathy.

Tai Chi

This is an all-around, gentle form of exercise that is suitable for almost everyone. It can lower blood pressure, improve balance and coordination, increase muscular endurance in the legs and relieve stress. Even though it is not stressful on the feet, you should still check for blisters and small cuts as a standard procedure.

Yoga

It can be either gentle or strenuous depending on the kind of yoga you take. Some positions put pressure on hands and feet, so always do a thorough check-up after your workout. There are many inverted positions that have to be held for thirty to sixty seconds, so protect your eyes and avoid them if you have retinopathy.

Exercise Guidelines for Diabetics

WRITING FOR PREVENTION MAGAZINE, DR. CHRISTOPHER SAUDEK VICE-PRESIDENT OF THE AMERICAN DIABETES ASSOCIATION, SHARES SEVEN STEPS FOR A SAFER WORKOUT.

- Check blood sugar before exercising. If under 100 milligrams per deciliter (mg/dl), eat a carbohydrate snack like a banana or whole wheat bread. If more than 300 mg/dl, do not exercise. If between 250 and 300 mg/dl, test for ketones. If positive, don't exercise.
- Inject in the abdomen instead of your arm or thigh to prevent absorption difficulties.
- Recognize warning signs. If you feel faint, dizzy or confused, stop immediately and take some orange juice, soft drinks, or glucose tablets.
- Drink water. Dehydration can raise blood sugar.
- Identify yourself. A diabetes identification bracelet or shoe tag should be clearly visible, especially if you're exercising alone.
- Do a post-workout foot check. Impaired sensation in your feet may prevent you from feeling an injury, and left untreated, it could cause serious problems. If you have peripheral neuropathy, avoid exercises that are hard on your feet, such as running and tennis.
- Protect your eyes. If you have retinopathy, avoid exercises that significantly raise heart rate and blood pressure (such as heavy weight lifting and jogging) or that put you in an upside-down position (such as some yoga moves).

The American Council on Exercise gives additional tips for exercisers with diabetes:

- Always carry a quick and rapid source of carbohydrate (juice or candy) in case you develop hypoglycemia. If you are working out in a gym, do not leave it in your locker. Carry it with you at all times.
- Avoid exercising during periods of peak insulin activity.
- Exercise one to two hours after a meal and before peak insulin activity.
- Consume a carbohydrate snack before and during prolonged exercise.
- Be aware of exercising in extreme weather conditions. Hot weather can speed up insulin absorption, while cold weather can slow down insulin absorption.

Feature

Footwear in Diabetes

ARCHIE U. ENTIENZA, RN, DNE
INSTITUTE FOR STUDY OF DIABETES FOUNDATION INC.

Despite modern advances in the management of diabetes, foot complications leading to a major leg amputation is still a significant problem today. The American Diabetes Association reported that 20% of all diabetic admissions are problems that are foot related. Some 50% to 70% of non-traumatic amputations in the US are performed on diabetic patients. About 25% of diabetics will eventually develop foot ulcers that become infected and lead to amputation. Most diabetes-related foot or leg amputations are PREVENTABLE. Preventing these tragedies from happening requires the patient take responsibility through education and understanding the disease process of the diabetic foot. In this issue of Diabetes Watch, we will focus on footwear for diabetics.

A person without diabetes wearing poorly fitting shoes will be uncomfortable and change the way they walk to minimize pain and discomfort. Many will take off their shoes at any given opportunity. Diabetics with numb or insensate feet may continue to wear these poorly fitting shoes without realizing the discomfort and damage done to the foot and the skin. This scenario may seem so trivial, but badly fitted shoes are the cause of many diabetic foot infections.

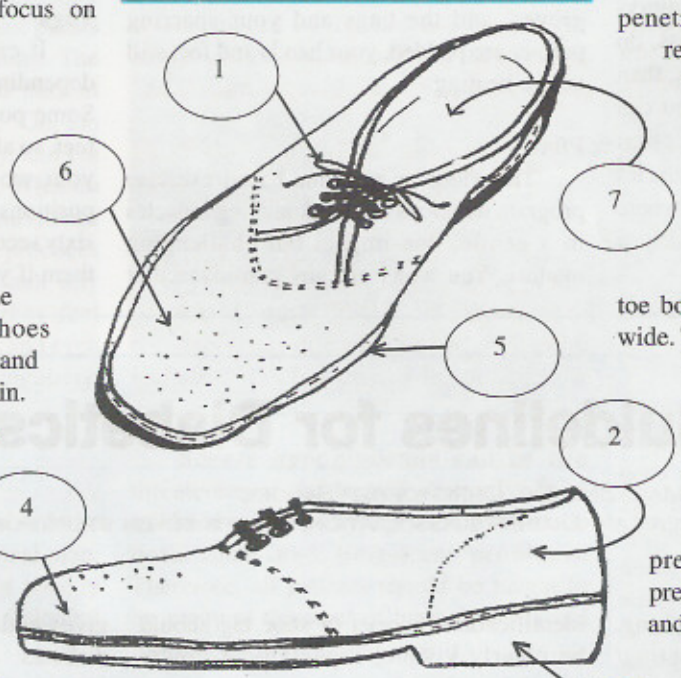
Shoes that bend only at the ball of the foot, where your toes attach to the foot is the ideal footwear for walking or exercise. Anything else is setting you up for injury. Don't wear shoes that bend in the center of the arch or behind the ball of the foot. That is not enough support and your plantar fascia will be stressed. Remember, a shoe shouldn't bend where the human foot doesn't.

The importance of the proper footwear in the prevention of diabetic foot amputation has been overlooked by many doctors. Well constructed shoes for diabetics can be cost effective in the prevention of diabetic foot related skin damage, which lead to hospitalization and amputation.

Regular monitoring of the diabetic foot by a foot specialist/podiatrist is a must in order to maintain optimum foot health and prevent complications.

General Guidelines:
Shoes for Diabetic Feet

1. You should not buy shoes by merely asking for a particular size. Have your feet measured while you are standing everytime you buy shoes. Remember that our feet may change in shape and size. Any existing deformity may worsen with the progression of motor neuropathy.
2. Once you have bought the shoes, let your foot specialist or podiatrist examine the shoes for approval.
3. The shoe should be 1/4 inch longer than your longest toe. A larger shoe may cause your foot to slide back and forth while walking and cause blisters and calluses at the bottom of the foot.
4. Wear heels only 1 inch high. If the heel is more than one inch, there is increased pressure at the ball of the foot where ulcers develop most frequently.
5. The inside lining of the shoe should be made of soft material, free from inseam lines which can be abrasive and cause blisters.
6. Use only leather shoes because it breathes better than any other material. Leather absorbs moisture from perspiration and allows the moisture to evaporate, but kept inside the shoe, the skin can macerate. Maceration between the toes can be especially dangerous because the bacteria count is high and when the bacteria penetrate the macerated skin, infection results.
7. Rocker bottom shoes are most frequently recommended to diabetic patients. A rocker sole shoe is the most effective way of relieving pressure from the ball of the foot where most ulcers occur.
8. The front of the shoe is called a toe box. The toe box should be high and wide. The toes should not be squeezed from the sides nor pressed down from the roof of the shoe. The benefits of the high and wide toe box outweigh the cosmetic aspect of the shoes. If you have hammertoes, bunions or calluses on your feet, the shoe pressure on these bony prominences prevent blood from entering the vessels and cause necrosis.



Good footwear should have -
1. laces or other retaining strap (eg. buckle, velcro)
2. Firm heel cup
3. Low, broad heel (< 1 inch)
4. Wide, deep toe box
5. Firm sole, but flexible across ball of foot
6. Leather upper, although a rubber out-sole is best
7. removeable insole (not essential)

Who should use Prescription Custom-made Orthotics?
Diabetics with:
1. Altered sensation (neuropathy)
2. Circulation problem in the leg and the foot
3. Altered foot shape due to motor neuropathy
4. Foot deformities such as bunion, hammertoes, callus at the bottom of the foot
5. Charcot's foot
6. Flatfeet
7. Old age
8. Long duration of diabetes
9. Previous ulcer and or amputation and or infection
10. Diabetic foot pain

Kitchen Corner

GRANOLA BITES

Ingredients:
2 cups cornflakes cereal
2/3 cup quick cooking oats
1/4 cup 100% bran cereal
1/2 cup raisins
1/2 cup reduced-fat crunchy peanut butter
4 eggwhites
16 packets Equal
2 tsp. vanilla

1.Combine cornflakes, oats, bran cereal in a large bowl.
2. Mix peanut butter, eggwhites, Equal and vanilla in a small bowl; pour over cereal mixture and stir until all ingredients are coated.
3. Shape mixture into-inch mounds; place on lightly greased cookie sheets.
4. Bake in preheated 350°F oven until cookies are set and browned, 8 to 10 minutes.
5. Cool on wire racks.

Yield: Makes about 2 dozen

Nutrition Information per serving (1 cookie):
67 cal, 3g pro, 9g carb, 3g fat, o mg. Chol, 61 mg. Sodium, 1g fiber

Food Exchanges: 1/2 bread, 1/2 fat
36% calorie reduction from traditional recipe

CINNAMON BREAD PUDDING

Ingredients:
2 cups skim milk
1/4 cup margarine
1 egg
2 eggwhites
16 packets Equal
1 1/2 tsp. ground cinnamon
1/8 tsp. ground cloves
3 dashes mace (optional)
1/4 tsp. salt
4 cups cubed day old bread

1. Heat milk and margarine to simmering in medium sauce pan; remove from heat and stir until margarine is melted. Cool 10 minutes.
2. Beat egg and egg whites in a large bowl until foamy; mix in Equal, spices and salt.
3. Mix milk mixture into egg mixture, mix in bread.
4. Scoop mixture into ungreased 1 1/2 quart casserole. Place casserole in roasting pan on oven rack; add 1 inch hot water.
5. Bake uncovered, in preheated oven 350°F oven until pudding is set and sharp knife inserted comes out clean, 40 to 45 minutes.

Yield: 6 servings

Nutrition information per serving:
202 cal, 8g pro, 21g carb, 10 fat, 37mg. Chol, 422mg. Sodium

Food Exchanges: 1/2 milk, 1 bread, 2 fat
34% calorie reduction from traditional recipe

Contributed by:
VIRGITH BUENA, RD, RN-D
NUTRITIONIST CONSULTANT AT THE CARDINAL SANTOS MEDICAL CENTER
Recipes from EQUAL Testing Kitchen

If you have any original recipes that you wish to share with our diabetic patients, you may e-mail it to phildiab@pworld.net.ph
Recipes published will receive P500.00 from DiabetesWatch

Ask Your Dietician

SANIROSE S. ORBETA, MS. RD. FADA

1. Are power drinks useful during exercise or is water enough?

Water is still the best hydrating fluid for any sport. However, during exercise recovery, meaning the time immediately after a game or exercise, sports drinks or regular full-strength juices might be better especially for those who need to replenish glucose quickly lost during game/exercise time.

2. Is it okay to take ice cream, cakes, and softdrinks after I exercise?

If you are underweight or at normal body weight, by all means, enjoy the ice cream, cakes, and softdrinks after exercise. But if you have a weight problem, it's better to eat sherbet, jello, fresh fruits and plain or simple cookies.

3. I have a good appetite. Will exercise decrease my appetite?

Exercise has different effects on people's appetite. Some say they tend to eat more. However, the majority of serious exercisers have better food control because psychologically and physically, exercise has taken the place of food and uncontrolled eating binges.

4. Do I need to take special diet/food if I exercise?

Yes. If you are a confirmed diabetic and you intend to exercise for 30 minutes only, I usually advise 1 slice of bread or 1 pack of crackers and diluted juice (1 part water and 1 part juice) 1 1/2 hours before you exercise.

If you intend to exercise for 45-60 minutes, then you need 2 slices of bread or 1 pack crackers with a light spread like soft cheese (not jam or jelly) and diluted juice (1 part water and 1 part juice) OR just 1 glass of non-fat milk 1 1/2 hours before you walk. But you don't really need to take any special diet when you exercise.

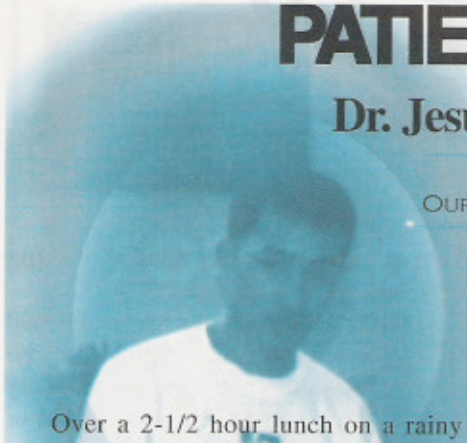
SHE IS A CONSULTING CLINICAL AND SPORTS NUTRITIONIST
HEAD, NUTRITION UNIT OF PHIL. SPORTS COMMISSION AND A COLUMNIST OF FOOD MAGAZINE

Submit your questions to:
phildiab@pworld.net.ph

PATIENT PROFILE:

Dr. Jesus Julio "Jay" Ancheta

TISH GATBONTON, MD
OUR LADY OF LOURDES HOSPITAL



Over a 2-1/2 hour lunch on a rainy Saturday afternoon, I got to know Jesus Julio Ancheta, a type 1 diabetes patient who also happens to be a doctor. Jay, a mild-mannered and bespectacled 28-year-old, has just finished his senior internship year, and is currently pouring all his energy into reviewing for his board examinations. We were at a Korean restaurant (the reason for his choice would only later become apparent) and over tuna sashimi, spinach, bean sprouts, tofu, squid and spring onion pancake and chicken pulgogi, he vividly recalled when he was first diagnosed as diabetic.

An energetic and athletic 11-year-old, Jay began to experience sudden weight loss, weakness and difficulty breathing. "Classic DKA, " he says. His urine glucose and ketones were plus 4, and before he knew it, the scared boy found himself in the ICU, attached to plenty of tubes and bottles, with frequent blood extractions. He received hourly glucose monitoring and heard the words "diabetes" and "insulin" for the first time.

Adjusting to his new lifestyle was difficult. Taunted by his classmates about his sickly condition, he frequently feigned illness to avoid school. When he transferred to a new school, he withheld the truth about his physical condition until one day when a hyperglycemic episode landed him in the clinic. Confined almost yearly in the first few years after diagnosis for uncontrolled sugars, Jay admits to rebelling against his diet and his insulin regimen. On the sly he continued to eat chocolate and other forbidden food.

Jay recalls his siblings (he is the eldest of 6 children) hiding in their rooms to eat food he was not allowed. He felt no rancor toward them, because it would be unfair to deprive them of the pleasure of having sweets. Jay said it would also be harder for him to adjust from a controlled environment at home to one outside, which was more realistic. His parents would supervise and inquire about his regimen, asking whether he had already tested or injected but did not nag him when he did not. "My parents brought me up to learn to do things for myself." This philosophy he has recently learned to appreciate and apply.

Glucose control was hard; sometimes check strips were difficult to come by financially. This lead his parents, along with other families, to start up DIACARE, to ensure that their son, and other children like him, would have a continuous and sustainable source of medicines and testing strips at affordable prices.

Jay's attitude toward his illness underwent a turning point when he attended his first diabetes camp. He was 18, and came together with fellow diabetics to be educated about their illness and have fun at the same time. He finally realized that he was not alone and a message from the popular singer, Gary Valenciano, himself a Type 1 diabetic, helped put his diabetes in perspective.

"If Gary can achieve what he has with diabetes, then why can't I?" he asked himself. A second cousin with diabetes who was at camp and in medical school at the time also inspired him. Taking stock of his academic performance--in high school, he was voted most likely to remain in college longest by his *barkada*--he buckled down and graduated with honors as a respiratory therapist from Emilio Aguinaldo College Manila, surprising everyone, his parents included.

When he declared his intention to take up medicine, his father told him they could not fund him through medical school. Jay then applied to teach biochemistry at Perpetual Help Medical School in Biñan, Laguna, instead. During the interview, he was encouraged to try for a full scholarship to the medical school and was one of two entrance scholars that year.

Jay worked hard to maintain his grades and became interested in research on topics on what else-- diabetes! One group project was on the knowledge, attitudes and practices of diabetic patients seen at the out patient clinic. The other was a survey of diabetic complications seen in newly admitted patients in the institution. The latter won him an award for the best paper in a postgraduate intern research forum. The last paper he authored studied the impact of diabetes education on glycosylated hemoglobin. His prolific research paid off: he presented the paper at the Asian Medical Students conference in Seoul, Korea, in August of last year. (Now I know why he wanted to eat Korean food). It was his first trip out of the country, and he relished the opportunity to travel with other Filipinos and interact with students from around Asia.

Jay continued to attend camp as a counselor while in school, except in his clinical clerkship year. He has since encouraged two Type 1 diabetics patients from Biñan to join him at the camp. "Kuya Jay" also collects unconsumed insulin from the ward nurses to help his young charges. He feels responsible for them and knows they look upon him in turn as a role model. His greatest lament is that "the kids know what to do because we teach them, but many are unable to maintain their insulin because of poverty."

In the hospital, Jay found himself the anointed diabetes expert. "Dr. Sugar" to his colleagues and teachers, he frequently presented diabetic patients for grand rounds. Nudged during ward rounds if a question was on diabetes, he sometimes felt overwhelmed by their high expectations. Irregular mealtimes made it difficult to adjust his insulin, and he had hypoglycemic attacks 2 to 3 times a week. His worst episode ever: after a TAHBSO, he made his way to the emergency room, mumbling and incoherent, his blood sugar was 11 mg %. Afterward, he made it a point to carry around hard candy and sweets in his blazer or scrubs.

Jay counts his graduation from medical school his greatest accomplishment so far. His father, his greatest cynic, ironically diagnosed a Type 2 diabetic two years ago, could not have been prouder. Future plans include general practice in Tarlac or teaching biochemistry or physiology at Perpetual. "I need to give back to the school what they have invested in me," he says. A residency in pediatrics or internal medicine

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News

CAMP COPE 6

Never running out of things to do.

JOEY MIRANDA, MD
CAMP COPE ADMINISTRATOR, DIABETES CENTER

May 17-20, 2001, Los Baños Forest Club, Bgy. Masaya, Puypuy, Laguna. It's nice to be back at our "home " for the annual Camp Cope - camping for the diabetic children. It's our 6th year and we seem to never run out of things to do. Yes, it was a very busy, yet very informative and fun-filled camp. So what happened? Let me tell you on a day-to-day basis.

Day 1

Assembly at Makati Medical Center and as soon as we were complete, off we went. First stop was the Terumo plant at Sta. Rosa, Laguna. The kids had a wonderful time looking at how syringes and needles are made and assembled. Our sponsors were accommodating and enthusiastic. They even provided us lunch and prizes such as a jarful of syringes, an electronic thermometer, and caps. Thank you very much! After this we proceeded to our camp. We had the orientation, rap sessions on blood glucose monitoring and the nature of diabetes. Fishing came next. This year we had a fairly good catch courtesy of our camper John King Maandal. After dinner, we had a campfire. It was during this time that all of us got to know each other better and surely we did! 10:30 PM, lights out.

Day 2

After having exercised and had breakfast, we left the camp for Batangas. We went to Bluroze farm at Ludlud, Lipa, Batangas. There we went trekking and got to see animals such as sheep,turkey, geese, goats and some monkeys. After having lunch, we went to one of the pavilions where we held the diabetes dating game. Congratulations to the winning couple - Lia and Paul! After the dating game, we had a rap session on hypo and hyperglycemia using charades as the method of teaching. During their freetime, the kids practiced for the cheering competition. Late that afternoon, we went back to the camp. That night was swimming time. The cheering competion was held beside the pool. All of the kids gave their all. Group 4 won this one.

Day 3

This morning started with an exercise contest. Each group had their own version but it was group 3 who won. After breakfast, rap sessions on insulin injection, nutrition, and diabetes complications were held. A diabetes Bingo game was also held and our lucky winner was Tito Micosa (inaantok pa nga siya nung nanalo, suwerte talaga!). After lunch, the kids had arts and crafts where they learned how to make cards using dried flowers and leaves (Ate Rose, thank you again). Land olympics was held later that afternoon. It was all fun. In the tug-o-war, it was campers - counselors vs staff. Who won? The campers and counselors! (Malakas pa rin kahit 3rd day na.) Rap sessions on female development, sex, drugs and other things were held. Of course, the boys were separated from the girls. Then at night, it was party time! All of us had our face painted. It was a contest and group 3 won again. After the party, we were all tired but we still had one more day to go.

Day 4

After breakfast, we all prepared for the cooking demo. This time the kids prepared desserts. The best tasting was the "Choicecolate Mousse" of group 4 - they won. A mini-santacruzan was also held. We had 4 "Reynas" - Hiringgilya, Tableta, Insulina, and Tamang Diyeta. Congratulations to Cathlyn nad Bachi! A mass was held afterwards followed by the awarding ceremonies. Again, congratulations to the winners.

At last CAMP COPE 6 has ended.

We are looking forward to next year's camp - our 7th year. We will be busy again - busy learning and busy having FUN!

News

THE PHILIPPINE COLLEGE FOR DIABETES EDUCATORS, INC.

SUSAN TRINIDAD, RN
MAKATI MEDICAL CENTER

Why a Certification Program ?

The Philippine College for Diabetes Educators Inc. is pleased to announce that the first certification exam for diabetes educators will be given on December 2, 2001. This exam is meant for healthcare professionals who already have a certain amount of experience in diabetes education and whose experience and knowledge extend to a wider base than just their own area of professional practice. These criteria exist because the questions are multidisciplinary to reflect the nature of the questions and concerns presented to educators.

Getting involved in a refresher course is a bonus all on its own. Attending the National Assembly for Diabetes Educators which is held annually is the best step one can do to help him in the exam.

Preparing for an exam (written and oral) gives you real incentive to keep up with the current trends in diabetes education. Recognition in this very specialized area is considered an achievement a diabetes educator should strive for. It is a must that all diabetes educators are consistent in the information that they share with people who have diabetes. And certainly, certification promotes that standard-ization we are aiming for.

With the continuing support and feedback from Diabetes Educators nationwide, our faculty strives to meet and exceed our mandate.

Join your colleagues to celebrate achievement, learn, share and commit yourself in the fight against diabetes.

Let's all take the challenge and GET CERTIFIED! ! !

For details, please contact : **THE DIABETES CENTER** at tel # 893-6070, or visit us at Rm.366 Diabetes Educational Clinic, Makati Medical Center.

SEARCH FOR THE MOST OUTSTANDING DIABETES EDUCATIONAL CLINIC

DR. TOMMY TY WILLING
SPECIAL PROJECT COORDINATOR
PHIL. CENTER FOR DIABETES
EDUCATION FOUNDATION INC.

The Philippine Center for Diabetes Education Foundation, Inc. (Diabetes Center) and Servier Philippines launched the Search for the Most Outstanding Diabetes Clinic during the Servier lecture last December 4, 2000.

The Most Outstanding Diabetes Educational Clinic Award will be given to the Diabetes Clinic trained by the Diabetes Center which has shown exemplary performance by providing quality healthcare and education to diabetic patients.

Eligible diabetes clinic must submit their intention to the Philippine Center for Diabetes Education Foundation, Rm. 366 Makati Medical Center, Amorsolo St., Makati City.

The award will be presented during the Servier Lecture in December 2001.

For more information write or call the Diabetes Center Tel./Fax 02-893-6070.

Patient ... *(From page 10)*

or a degree in public health is also on the cards.

Fresh from a 40 day live-in review course in Tagaytay, Jay, at the moment, is looking only to July. Sleeping by day and studying by night is now an established routine. Deeply religious--his mother would have been happier if he was a priest--he went to mass everyday and even played some basketball while he was away. To relax, this self-confessed computer nerd surfs the web and plays computer games. He has yet to drop into a chat room with fellow diabetics. He will take a couple of days off for the diabetes camp on the May 18 weekend. He certainly finds time to increase his physical activity to improve his sugar control.

I asked Jay to grade himself as a patient. He gave himself a 4-5 out of 10 for exercise, and 5-6 out of l0 on diet. He has read the Diabetes Control and Complications trial and knows how important it is to maintain glucose control. Jay uses multiple daily doses of insulin and checks his sugar frequently. He has been on an ACE inhibitor for over 2 years for microalbuminuria. He hedged when I asked about his latest glycosylated hemoglobin but claims fair control.

As a parting word, Jay had this to say "I used to question God, why me? Now I see a purpose, to give kids hope to do something with your life in spite of diabetes. Don't make diabetes an excuse not to do something with your life."

I can see that Jay practices what he now preaches. I grade him a 10 out of 10 for a great attitude. Good luck from all of us at Diabetes Watch!

Medical Sciences

Preventing those Terrible Hypo's....

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ASSOCIATE PROFESSOR
UP COLLEGE OF MEDICINE

You feel strangely weak, even a little dizzy. Your head aches. Your head starts to pound. Pretty soon, you break into a cold sweat and your hands start trembling uncomfortably....That's right-you're experiencing a hypoglycemic reaction.

If you are one of the million of diabetics on oral medications or insulin, you must have experienced at least one episode of hypoglycemia in your lifetime.

Hypoglycemia is defined as blood glucose less than 50-60 mg/dl. It occurs when there is an imbalance between the rate of glucose removal from the circulation (e.g., uptake into muscle) and the rate of glucose entry into the circulation (e.g., release of glucose from the liver or ingestion of food).

What causes hypoglycemia and how can it be prevented?

Skipping or delaying planned meals or snacks

The risk of hypoglycemia related to delayed or skipped meals is nonexistent in patients treated by diet alone. The risk of hypoglycemia is lowest for patients treated on some oral agents like metformin, rosiglitazone or an alpha-glucosidase inhibitor; higher for those on sulfonylureas, particularly the longer acting ones like glibenclamide; and highest in those who use insulin therapy.

Individuals whose work or schedule make it difficult to control meal times, like ER workers and travelling salespersons, will have fewer hypoglycemic problems if they are placed on regimens that allow more flexibility in meal times. For example, repaglinide or a short-acting sulfonylurea given before meals for type 2 diabetics, or premeal regular or lispro insulin (as part of a basal-bolus regimen) for type 1 diabetics may be ideal in these cases.

All patients should be educated regarding the importance of meal timing in their particular regimen. Also, carrying a source of carbohydrate is a vital part of behavior management for patients and they should be taught to use that carbohydrate to prevent hypoglycemia when meals are unavoidably delayed.

Inappropriate timing of insulin relative to meals

A patient takes his pre-meal injection of regular insulin *immediately* before eating. This can result in elevated blood glucose values immediately after the meal, with a propensity to develop hypoglycemia 2 to 3 hours later, when the insulin peaks. Introducing a delay of 30 to 40 minutes between injection of insulin and the start of the meal will produce a better match between insulin effect and glucose levels. A similar benefit may be gained from appropriate timing of the lunch meal relative to the NPH injected in the morning.

Imbalance between food and meal-related insulin dose

This becomes an issue for the patients on Multiple Daily Injections (MDI) who adjust their pre-meal insulins relative to their anticipated carbohydrate intake ("Carbohydrate counting"). If the patient plans to eat a smaller-than-normal meal, he decreases his regular insulin by 2-3 units. If he plans to eat a larger meal, he injects more regular insulin before the meal. Hypoglycemia will result when th insulin dose is too large for the actual amount of food eaten.

Inadequate food supplementation for exercise

Exercise is central to the overall management of all diabetic patients, especially to those attempting to reach reasonable body weight. In the overweight type 2 diabetic, in whom it is better to avoid increasing food intake to cover exercise, it is preferred to schedule the exercise after meals, because blood glucose tends to be higher at that time. Medication doses may also be adjusted downward to allow exercise to proceed without having to take a snack.

However, for all patients on insulin, it is preferable to plan exercise in advance in order to adjust the insulin acting during the period of physical activity. For example, for a patient on a combination of NPH and regular insulin before breakfast and supper: If exercise is planned in the morning after breakfast, the prebreakfast regular insulin should be decreased by 2-3 units. On the other hand, if exercise is planned in the late afternoon, NPH insulin injected before breakfast should be decreased instead.

If the patient is not able to modify the insulin dose before exercise or if the exercise is not planned, he may take a carbohydrate supplement before, during and/or after the activity, depending on the duration and intensity of the exercise. For example, moderate exercise for less than 30 minutes may not require an adjustment in insulin, but the patient should take a small snack just before the exercise. Longer periods of exercise almost always require snacks every 30-60 minutes. Examples of carbohydrate snacks that may be taken include: one small apple or banana, 1/2 cup low fat ice cream, 4 oz. regular soft drink, 1 slice bread, 1/2 bagel, 3/4 cup cereal (cheerios or cornflakes).

Consuming alcohol on an empty stomach

Alcohol can not be converted to glucose, inhibits glucose production by the liver and interferes with the counterregulatory response to hypoglycemia. For these reasons, a diabetic should never take alcohol on an empty stomach.

If your doctor allows you 1-2 alcoholic drinks per day, it is preferable that you choose dry wines, light beers and drinks made with noncaloric mixers, to prevent any adverse effects on blood glucose. If you are limiting caloric intake to promote weight

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Medical Sciences

The Benefits of Exercise

ALLAN S. HERNANDEZ, MD,FPCP
DE LA SALLE MEDICAL CENTER

A nicely sculpted muscular body or a fabulously curved body that displays well in a two-piece swimsuit. Who wouldn't want to have that? Tell you what – EXERCISE can provide that and much more! For our diabetic patients, it is the much more we are interested in. Although it wouldn't be so bad if you could have much more and a great body, too, right?

Exercise is one of the important pillars in the management of diabetes mellitus. The others are diet, medication and patient education. Some patients will say, "Oh, I'm already watching my diet carefully, and I'm taking my medications religiously. What do I need exercise for?" In normal individuals who do not have diabetes, exercise produces profound health benefits. Just ask any athlete. They will tell you that they feel much better, sleep better, eat better, and even think better when they exercise regularly. In diabetics, the benefits are even more important.

Take for example the heart or the cardiovascular system. Doctors have learned from studies that heart disease, particularly coronary artery disease is the most common cause of death in Type 2 diabetes mellitus. Coronary artery disease is the condition whereby the blood supply to the heart itself is obstructed by fat-laden plaques. An increase in the concentration of the so called "bad" cholesterol in the blood is an important factor in the development of coronary artery disease. This bad cholesterol includes "very low density lipoproteins" or VLDL, and "low density lipoproteins" or LDL. The good news is that exercise has been shown to decrease the concentration of the "bad" cholesterol, particularly VLDL. Another important factor which contributes to the development of heart disease is hypertension, or elevated blood pressure. Again, exercise has been shown to significantly reduce blood pressure.

What more can exercise do for diabetics? Let's ask this question, "What is the biggest problem among diabetics?" The answer is not getting good blood sugar control. Regular exercise has been shown to improve blood sugar control. One way your doctors can find out is to measure "glycosylated hemoglobin." This test averages patient's blood sugar control over a period of 6 to 8 weeks. Studies have shown a significant reduction of glycosylated hemoglobin in patients who exercise regularly. Of interest to researchers now is not only how to improve blood sugar control, but potentially prevent diabetes from occuring in predisposed individuals through exercise and other modalities.

What is another BIG (literally) problem among diabetics? Obesity. It is seen in a majority of diabetics. Regular exercise has been shown to decrease a patient's weight and to maintain it. A major problem in weight reduction is keeping the weight down. More than 80% of patients who lose weight tend to regain it almost as soon as they lose it. The exercise program has to be maintained even after the weight has been reduced to acceptable levels. Otherwise the problem simply recurs. One other important benefit is the reduction in the so called "intra-abdominal fat." This intra-abdominal fat is a factor in a lot of the problems associated with diabetes.

In summary, what does all this information tell us? That exercise provides many health benefits for diabetics, and that it should be part of the patient's armamentarium against the disease. And if it can also provide that well-sculpted body that looks fabulous on a beach, that's a bonus!

(Pictures from Diabetes Focus Autumn 2000 pp. 21-22)

Preventing... *(From page 15)*

loss, then any alcohol consumed should be substituted for fat in your usual meal plan. Patients with abnormal lipids, most notably hypertriglyceridemia, should avoid alcohol completely.

Severe hypoglycemia can be life threatening if not treated promptly. Even mild and moderate hypoglycemia can cause both short and long-term problems. Therefore, all patients should be taught to be aware of the signs of hypoglycemia and measure to prevent and treat it.

Sample Patient Guidelines for Treating Mild Hypoglycemia: 15/15 Rule

If blood glucose falls below 70 mg/dl:

- Eat 15 g carbohydrate
- Wait 15 minutes - retest, and if blood glucose remains < 70 mg/dl, treat with another 15 g carbohydrate
- Repeat testing and treating until blood glucose returns to normal range
- If > 1 hr to next meal, add additional 15 g carbohydrate to maintain blood glucose in normal range

Sources of carbohydrate - 15 g portions

Glucose tablet	3 tablets
Lifesavers	5
Jelly beans	6
Raisins	2 Tbsp
Sugar or honey	1 Tbsp
Juice (apple/range)	1/2 cup
Soft drink (regular)	1/2 cup
Skim milk	1 cup

Medical Management of Insulin-Dependent (Type 1 Diabetes) American Diabetes Association

Just Do It... *(From page 20)*

them

Commitment separates doers from dreamers no matter what you embark on in your life, sustaining your goals entails commitment. And to improve commitment, here are some to-do's:

-MEASURE IT. Figure out how much time you actually set aside for your physical exercise. Indeed, if it's not planned, it won't be done! Determine, for example, on which days (M-W-F or T-Th-S) and which hours (after 6 pm? lunch break? 7-8 am, before work?) you will devote for exercise. Figure out how much money you spend for health and activities to see if you're investing in these areas. All these things are true measures of your commitment. You may be surprised by what you find.

-KNOW WHAT YOU'RE DOING IT FOR. Each of us has his/her own reasons for doing physical exercise--some for health, others for vanity. Some initial motives are transformed to maintaining factors. For example, one may be "forced" to go into an exercise program to cure hypertension or diabetes but in the course of the program develops friendship. The best motivations are those that which emanate from within: the so-called INTERNAL CONTROL. "I do, therefore I am." So rather than being or feeling coerced by external forces (your boyfriend, mom, or your illness), *you* take control and say, "I'm exercising because I know and I feel good about it."

-TRY THE "EDISON METHOD". If taking the first step is a problem, try doing what Thomas Edison did. When he had a good idea for an invention, he would call a press conference to announce it. Then he'd go into his lab and invent it. Make your plans of embarking on an exercise program public, and enlist you closest friends to support you and you might be more motivated and committed to following through them.

PDA ACTIVITIES

May 26-27, 2001
Cooyeesan Hotel Plaza
Baguio City
21st Diabetes Workshop

October 13-14, 2001
(to be confirmed)
Iloilo City
22nd Diabetes Workshop

December 4-5, 2001
Annual Convention
Century Park Hotel

December 8, 2001
Lay Convention
Century Park Hotel

PDA COUNCILS:

Foot Care
Chairperson: Dr. Teresa Plata-Que

Diabetes in Pregnancy
Chairpersons: Dr. Lina C. Lantion-Ang
Dr. Mary Anne Lim-Abrahan

Childhood Diabetes
Chairperson: Dr. Rosa Allyn G. Sy

Complications
Chairperson: Dr. Tommy S. Ty Willing

Nutrition:
Chairperson: Dr. Edith Arceo-Dalisay

Education
Chairperson: Mrs. Susan B. Trinidad

FITNESS FACTS

For those of you who cannot find the time to exercise, check out these numbers for calories burned doing common household activities and exercise for one hour (except when otherwise specified). Couch potatoes take note, watching TV and kissing your significant other expend the same amount of calories. What would you rather be doing?

ACTIVITY	120 LBS (54.5 KG)	150 LBS (70 KG)
Aerobics	323	403
Ballroom dancing	244	306
Badminton (singles)	511	638
Bicycling (flat terrain)	352	439
Brisk walking with dog	237	296
Playing Cards	93	116
Golfing	208	259
Jogging	540	675
Ping Pong	215	268
Rollerbladding	381	476
Jumping Rope	547	683
Climbing Stairs	489	611
Swimming	482	602
Tai Chi	215	268
Tennis (singles)	439	548
Tennis (doubles)	273	341
Volleyball (casual)	165	207
Working out at a gym	302	377
Yoga	215	268

ACTIVITY	120 LBS (54.5 KG)	150 LBS (70 KG)
Brushing teeth (5 mins)	11	13
Gardening (moderate)	259	323
Grocery Shopping	194	242
House cleaning	345	431
Ironing	122	152
Kissing	57	71
Playing the piano	151	188
Rearranging furniture	360	450
Washing Car	244	304
Washing Dishes	122	154
Watching TV	57	71

JUST DO IT!... THE MOTIVATED WORKOUT

EDGARDO L. TOLENTINO, JR., MD, FPPA
PSYCHIATRY CONSULTANT, MAKATI MEDICAL CENTER

Regular physical exercise is destined to take a lasting place in the pantheon of stress management interventions. Only 25 years ago, jogging was a lonely pursuit, an activity that sometimes even aroused police suspicions. In the 70's, jogging not only became a mass movement, but a movement that has endured. Participation has remained at surprisingly high levels. For example, in Boulder, Colorado, a town of 80,000, the Memorial Day 10-kilometer footrace attracts more than 30,000 contestants annually. We have our local counterpart in the Annual Alay-Lakad.

Overall, it is fair to say that over the past couple of decades, millions of people have discovered the stress-reducing properties of regular physical exercise. By now, a formidable body of evidence underscoring the long-term benefits of exercise has accumulated. Here are some important breakthroughs:

1. In their Alameda County 5 1/2-year prospective study of 1,000 individuals, Bellos and Breslow (1972) found out that people with lowest levels of physical activity experienced twice the mortality of those with the highest activity, an effect more pronounced in those under fifty.

2. In an 8-year prospective study at the Cooper Aerobic Institute in Dallas, Blair and Colleagues (Blair et al) found out that:

-sedentary individuals showed far higher mortality rates than those who exercised regularly

-mortality levels for women in the least physically active group were 4.6 times higher than those in the most active group

-For men, there were 3.4 times more deaths in the least physically active group than in the most active group.

-sedentary individuals showed far higher mortality rates than those who exercised regularly
-mortality levels for women in the least physically active group were 4.6 times higher than those in the most active group
-For men, there were 3.4 times more deaths in the least physically active group than in the most active group.

-Interestingly, the reduced mortality levels in the physically fit groups were all primarily to their lower rate of cardiovascular disease and cancer.

This study brought encouraging news to those not especially attracted to the more fanatical aspects of athletics. It was found that the greatest increment in fitness came from being sedentary to doing 30 to 60 minutes of brisk walking each day. This long-term study shows that an impressive improvement in the health status of the Philippine population could be effected by simply encouraging sedentary individuals (about 30% of adults) to indulge regularly in a moderate amount of brisk walking or its equivalent.

The results could be extended to the realm of mental health. In a secondary analysis of the resuls of 4 surveys in the US, Canada, which Stephens (1988) conducted across a 10-year period found a positive relationship between physical activity (eg. swimming, jogging, biking, etc.) and six (6) measures of mental health: general well-being, positive and negative effects, and several measures of anxiety and depression.

Ok, all this is great to know, but how do I get motivated to do a regular physical exercise program?

They say there are four types of people:

1. The COP-OUTS - people who have no goals and do not commit
2. The HOLD-OUTS - people who don't know if they can reach their goals, so they're afraid to commit
3. The DROPOUTS - people who start toward a goal but quit when the going gets tough
4. The ALL-OUTS - people who set goals, commit to them and pay the price to reach

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The Lighter Side of Diabetes

by: Dr. Allan S. Hernandez